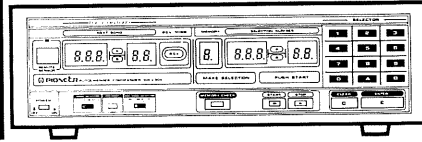


384

Service Manual



ORDER NO.
ARP1851

AUTO CHANGER COMMANDER

CO-V300

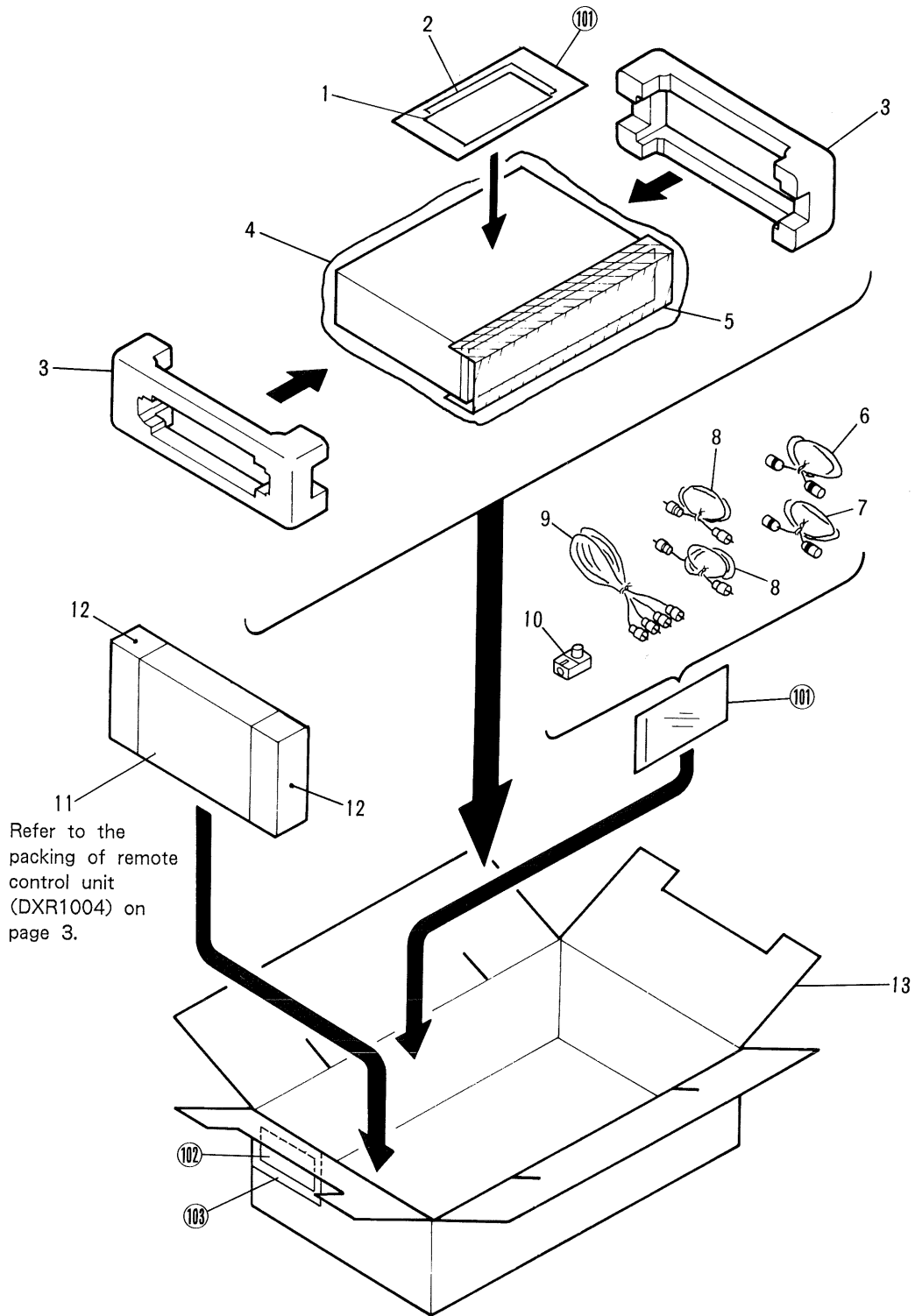
- This manual is applicable to the KU/CA type.
- Automatic play is possible with the integrated LC-V300 video disc auto changer.
- Up to four LC-V300 video disc auto changer can be played alternately by using CO-V300.

CONTENTS

1. PACKING	2
2. EXPLODED VIEWS AND PARTS LIST	4
3. SCHEMATIC AND P.C. BOARDS	
CONNECTION DIAGRAM	8
4. ELECTRICAL PARTS LIST	21
5. SYSTEM COMBINATION EXAMPLE	25
6. SYSTEM CONNECTION EXAMPLE	26
7. OPERATION OF THE LC-V300	27
8. PANEL FACILITIES	30
9. SPECIFICATIONS	35

1. PACKING

Main unit



NOTES :

- Parts without part number cannot be supplied.
- The Δ 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.

Parts List of Packing

Main unit packing

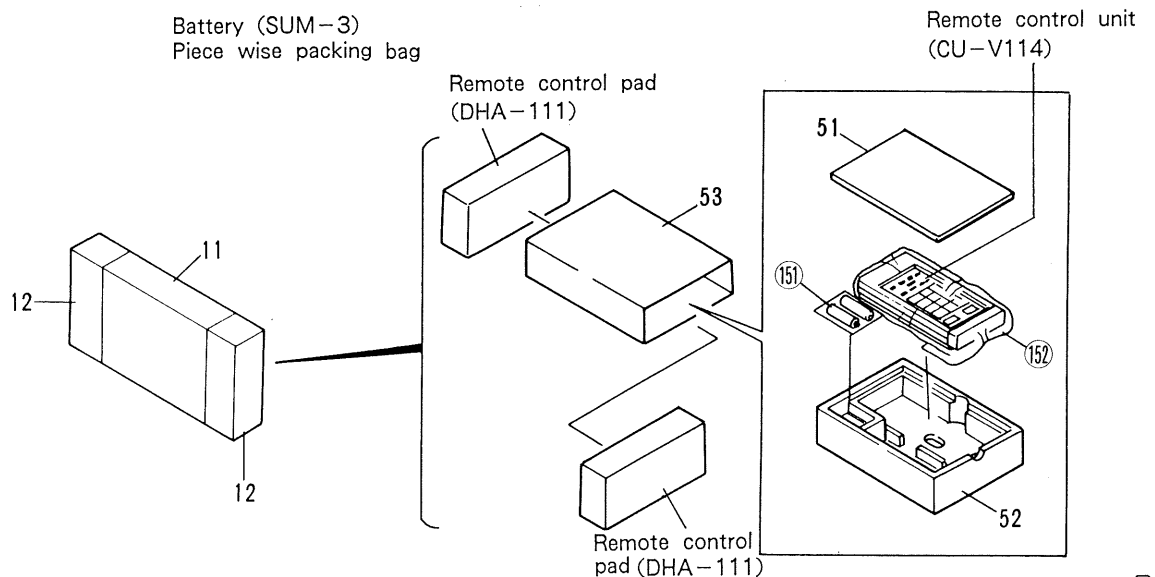
Mark	No.	Part No.	Description
	1	DRB1018	Operating instructions A
	2	DRB1019	Operating instructions B
	3	DHA-107	Side pad
	4	RHX-030	Sheet B
	5	RHC-144	Styren paper
	6	VDE-039	RF antenna cable
	7	DDE-113	13-pin DIN cord
	8	DDE1013	Connection cord (video cord)
	9	DEE1015	Connection cord (audio cord)
	10	VKX-019	Antenna adapter
	11	DXR1004	Remote control unit (CU-V114)
	12	DHA-111	Remote control pad
	13	DHG1118	Packing case
	101		Plastic bag
	102		Follow-up card
	103		Follow-up card bag

Remote Control Unit (DXR1004)

Note: The serial No. of the remote control unit is CU-V114.
The parts No. of the packed unit is DXR1004.

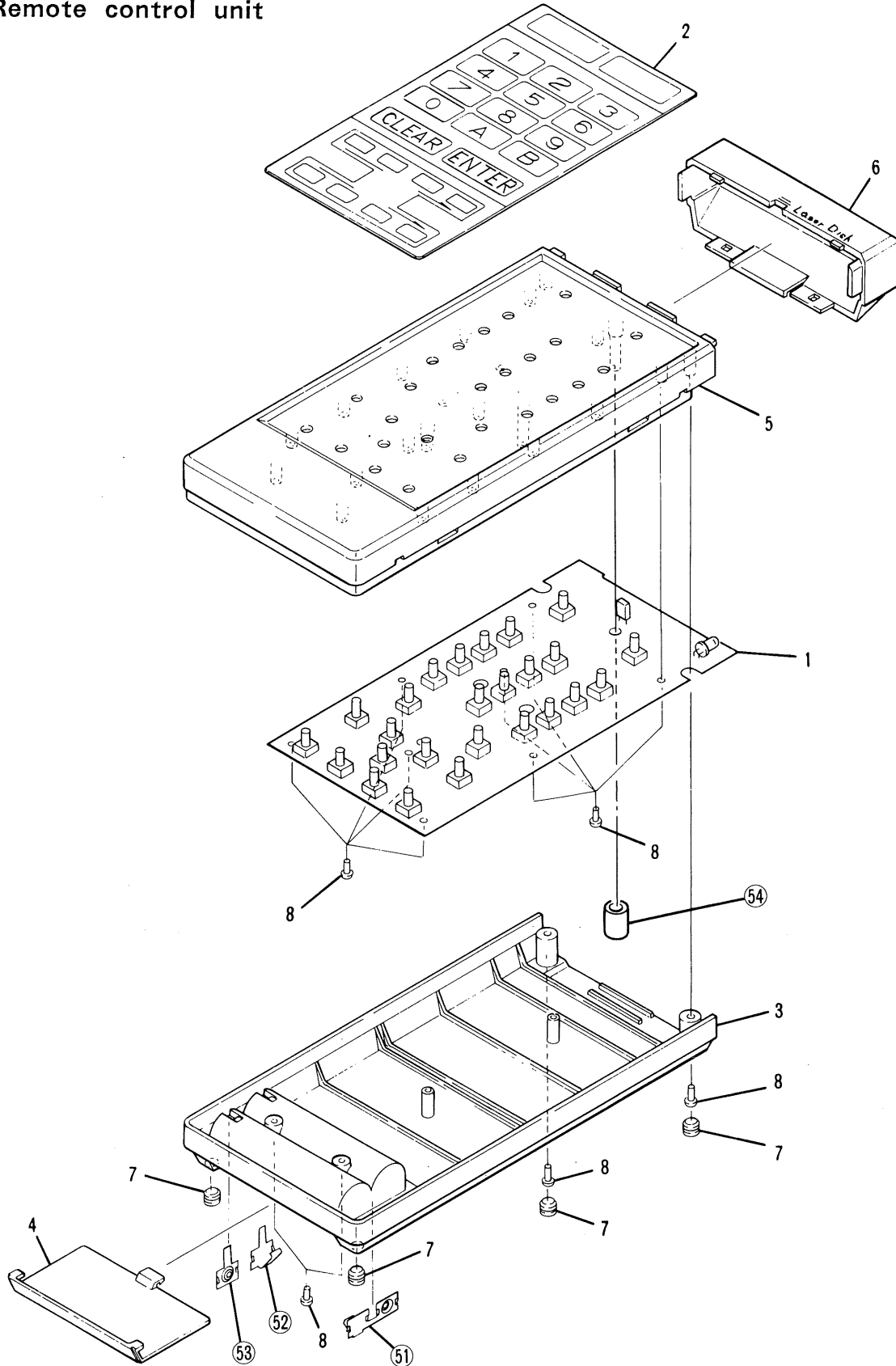
Parts List of Remote control unit (DXR1004)

Mark	No.	Part No.	Description
	51	VHA-096	Pad (B)
	52	VHA-095	Pad (A)
	53	DHG1121	Packing case
	151		Battery (SUM-3)
	152		Piece wise packing bag



2. EXPLODED VIEWS AND PARTS LIST

Remote control unit



NOTES :

- Parts without part number cannot be supplied.
- The Δ 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.

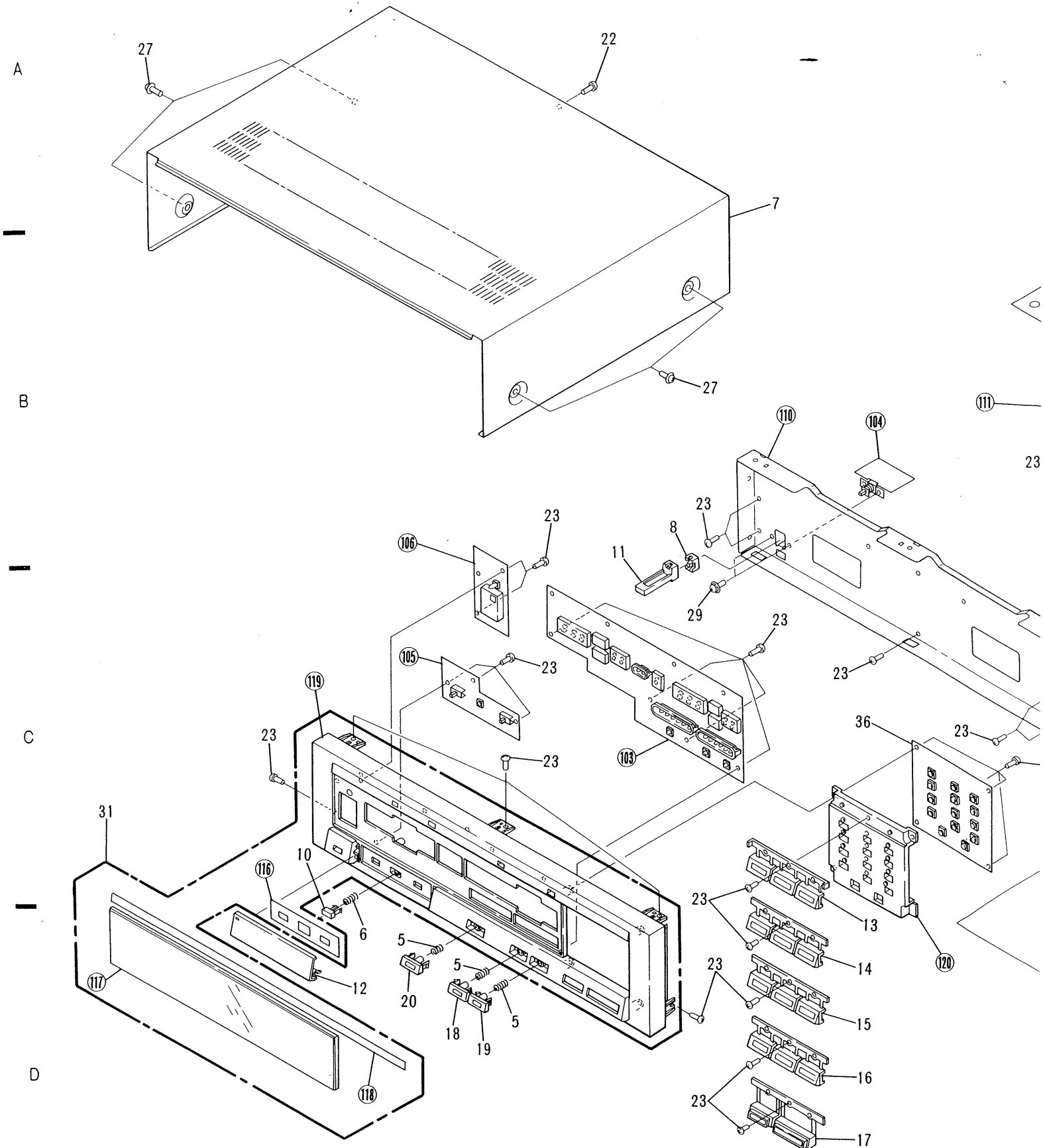
Parts List of Remote Control Unit (DXR1004)

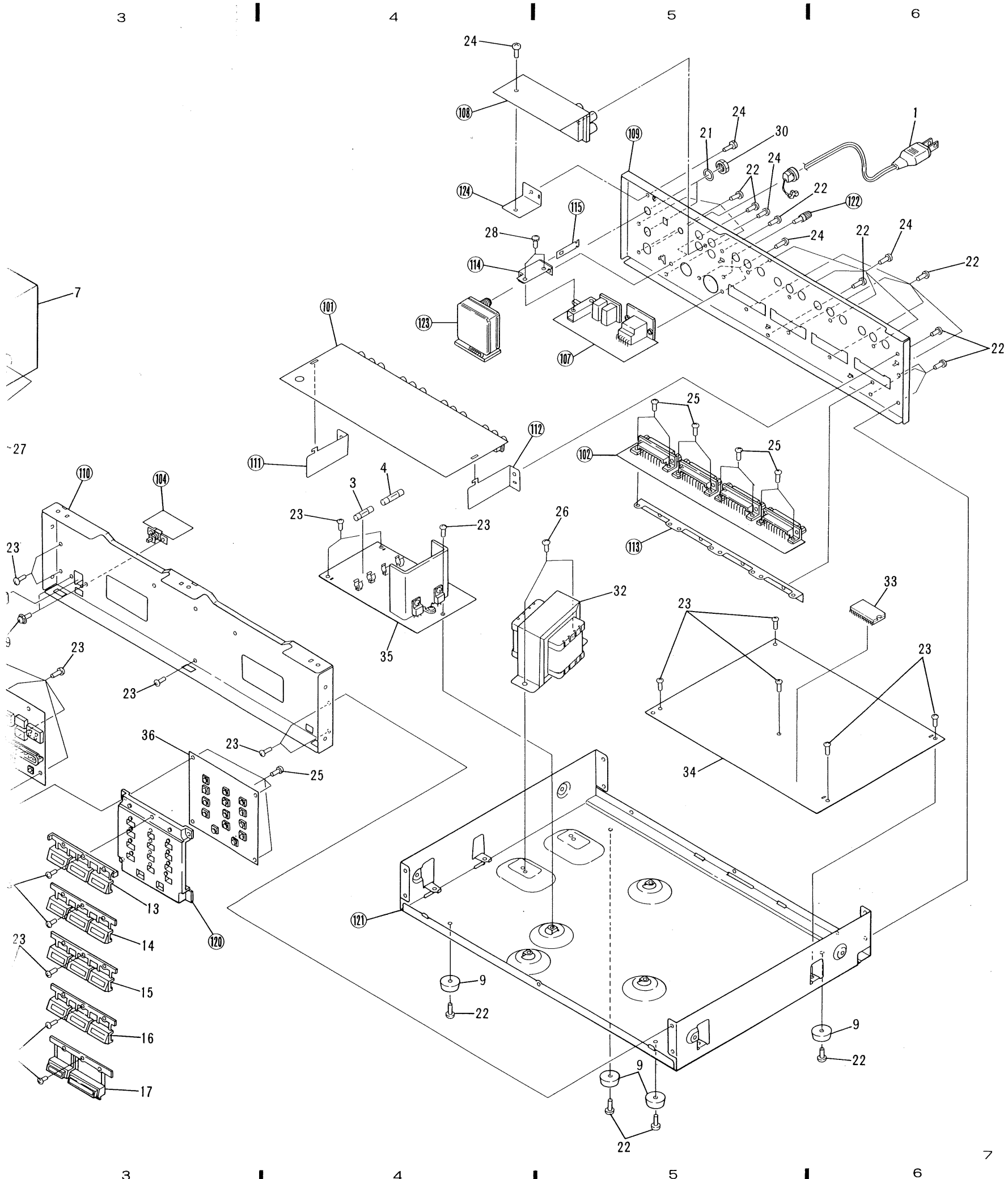
Mark	No.	Part No.	Description
	1	DWY1004	RMTC unit
	2	DAH1329	Operation sheet
	3	DMA-148	Under case
	4	DMA-149	Battery cover
	5	DNK1488	Upper case
	6	DNK1047	IR filter
	7	VEB-074	Rubber foot
	8	PPZ20P060FMC	Screw (2×6)
	51		Terminal
	52		Terminal
	53		Terminal
	54		spacer

Parts List of Exterior

Mark	No.	Part No.	Description	Mark	No.	Part No.	Description
Δ	1	DDG1016	AC power cord	⊙	36	DWS1007	KEYB unit
Δ	2			101		AVIN unit
Δ	3	DEK1007	FU1 Fuse (400mA)		102		DSUB unit
	4	DEK1013	FU2 Fuse (1.25A)		103		DISP unit
	5	DBH1002	Spring A		104		PWSW unit
	6	DBH1003	Spring B		105		MODE unit
	7	DNE-108	Bonnet		106		IRAB unit
	8	VEC-151	Flexible ring		107		DINB unit
	9	VEC-119	Leg cap		108		AVOT unit
	10	DAC1009	Select knob		109		Rear panel
	11	DAC1010	Power knob		110		Panel stay
	12	DNK1012	Sealing panel		111		PCB holder
	13	DXA1063	Numeric key 1 assembly		112		PCB holder (L)
	14	DXA1064	Numeric key 4 assembly		113		D sub holder
	15	DXA1065	Numeric key 7 assembly		114		Switch holder
	16	DXA1066	Numeric key 0 assembly		115		Switch lever
	17	DXA1129	EC key assembly		116		Display panel A
	18	DXA1014	Start knob assembly		117		Display panel B
	19	DXA1015	Stop knob assembly		118		Display sash
	20	DXA1016	Check knob assembly		119		Front panel
	21	VNE-270	F-washer		120		Numeric keys holder
	22	BBZ30P060FZK	Screw		121		Chassis
	23	BBZ30P080FMC	Screw		122		Terminal (GND)
	24	BBZ30P080FZK	Screw		123		RFMB unit
	25	BBZ30P120FMC	Screw		124		PCB stopper
	26	BBZ40P080FMC	Screw				
	27	FBT40P080FZK	Screw				
	28	PMA26P050FMC	Screw				
	29	PMA30P060FMC	Screw				
	30	VLL-082	F-nut				
Δ	31	DXX1260	Front panel assembly				
	32	DTT1030	Power transformer (T1: 120V)				
⊙	33	DWY1009	IC22 (ROM)				
⊙	34	DWG1008	MAIN unit				
⊙	35	DWR1045	PWSP unit				

Exterior





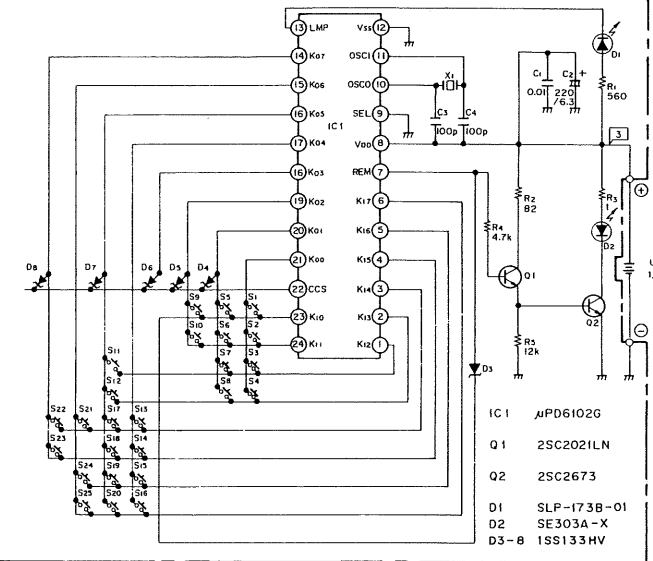
3. SCHEMATIC AND P.C. BOARDS CONNECTION DIAGRAM

3.1 SCHEMATIC DIAGRAM AND P.C. BOARD PATTERN OF REMOTE CONTROL UNIT

Schematic Diagram (DWY1004)

CUSTOM CODE	C0	C1	C2	C3	C4	C5	C6	C7
	0	1	1	1	0	1	0	1

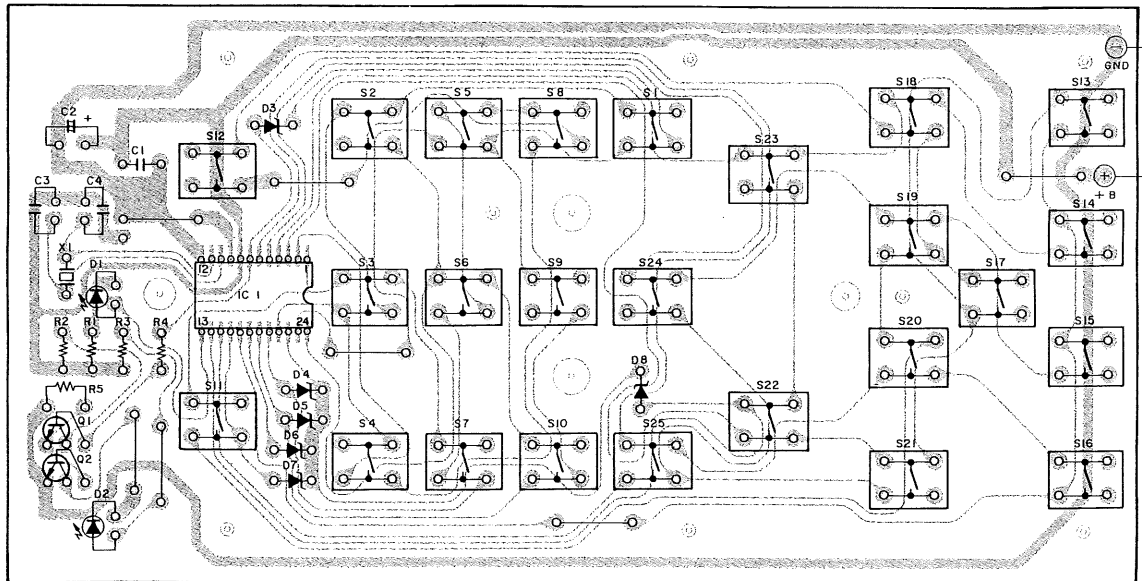
TRANSFER CODE	COMMAND NAME	D0	D1	D2	D3	D4	D5	D6	D7
S1	0	0	0	0	0	0	0	1	
S2	1	1	0	0	0	0	0	1	
S3	2	0	1	0	0	0	0	1	
S4	3	1	1	0	0	0	0	1	
S5	4	0	0	1	0	0	0	1	
S6	5	1	0	1	0	0	0	1	
S7	6	0	1	1	0	0	0	1	
S8	7	1	1	1	0	0	0	1	
S9	8	0	0	0	1	0	0	1	
S10	9	1	0	0	1	0	0	1	
S11	PLAY STOP	0	1	1	0	1	0	0	1
S12	PLAY START	1	1	1	0	1	0	0	1
S13	b4	0	0	0	0	1	0	1	1
S14	b3	1	0	0	0	1	0	1	1
S15	b2	0	1	0	0	1	0	1	1
S16	b1	1	1	0	0	1	0	1	1
S17	STANDARD KEY	0	0	1	0	1	0	1	1
S18	#1	1	0	1	0	1	0	1	1
S19	#2	0	1	1	0	1	0	1	1
S20	#3	1	1	1	0	1	0	1	1
S21	#4	0	0	1	1	0	1	0	1
S22	MEMORY	0	0	1	1	0	1	0	1
S23	CANCEL	1	0	1	1	0	1	0	1
S24	A	0	1	0	1	1	0	1	1
S25	B	1	1	0	1	1	0	1	1



- 1. RESISTORS: Indicated in Ω, 1/4W, 1/8W, ±5% tolerance unless otherwise noted. K: ±1%, M: ±1%, F: ±1%, (G): ±2%, (K): ±10%, (M): ±20% tolerance.
 - 2. CAPACITORS: Indicated in capacity (µF)/voltage (V) unless otherwise noted. p: pF. Indicated without voltage is 50V except electrolytic capacitor.
 - 3. OTHERS:
 - : Signal route
 - ⊙: Adjusting point
 - △: 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.
 - ⊗: marked capacitors and resistors have parts numbers
- This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

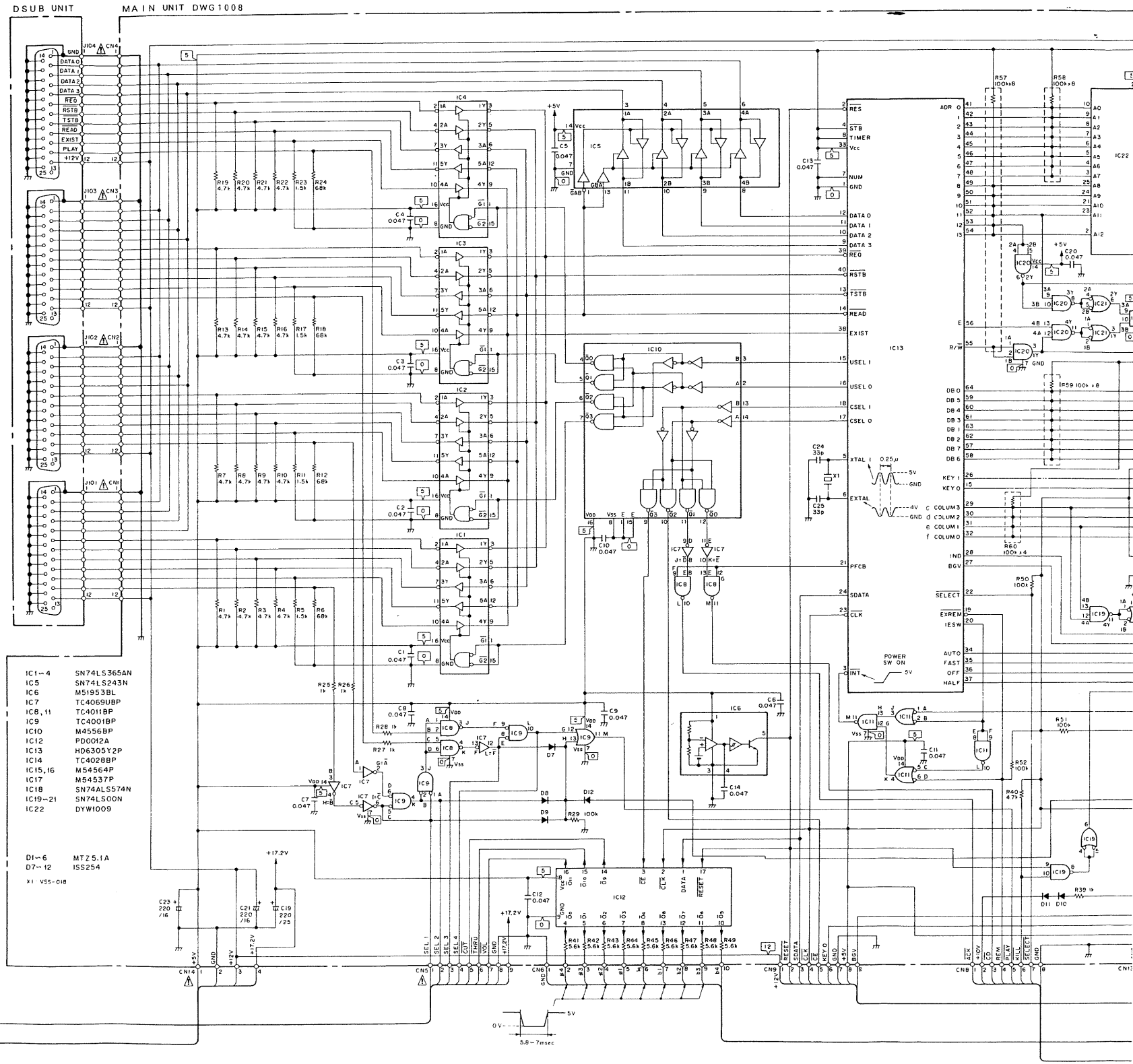
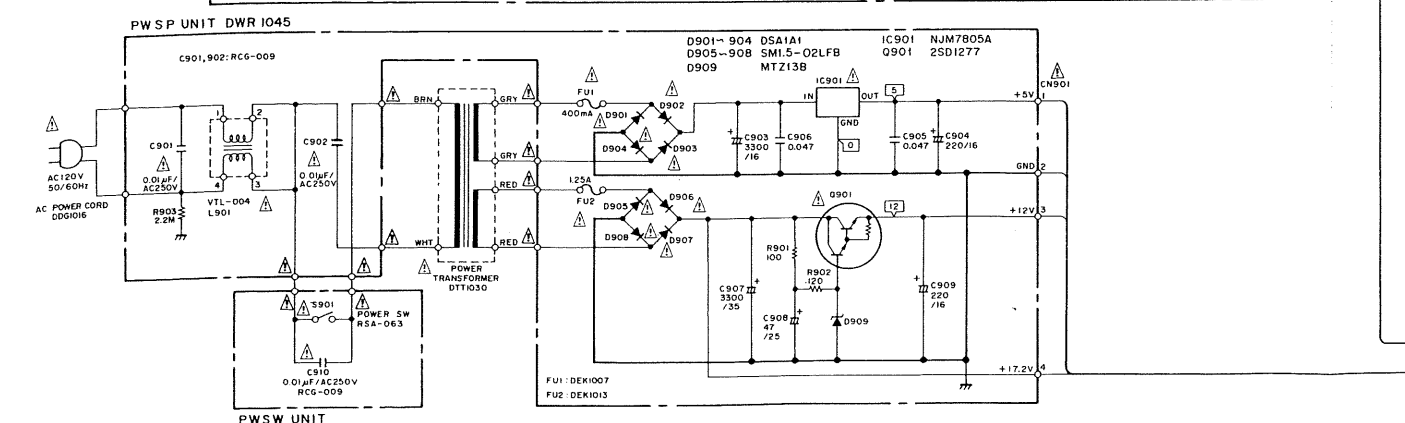
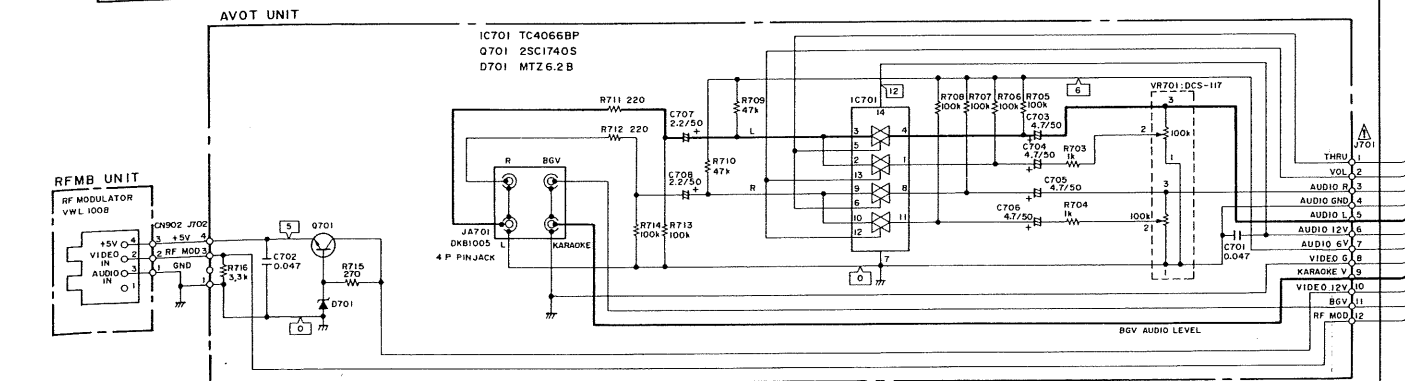
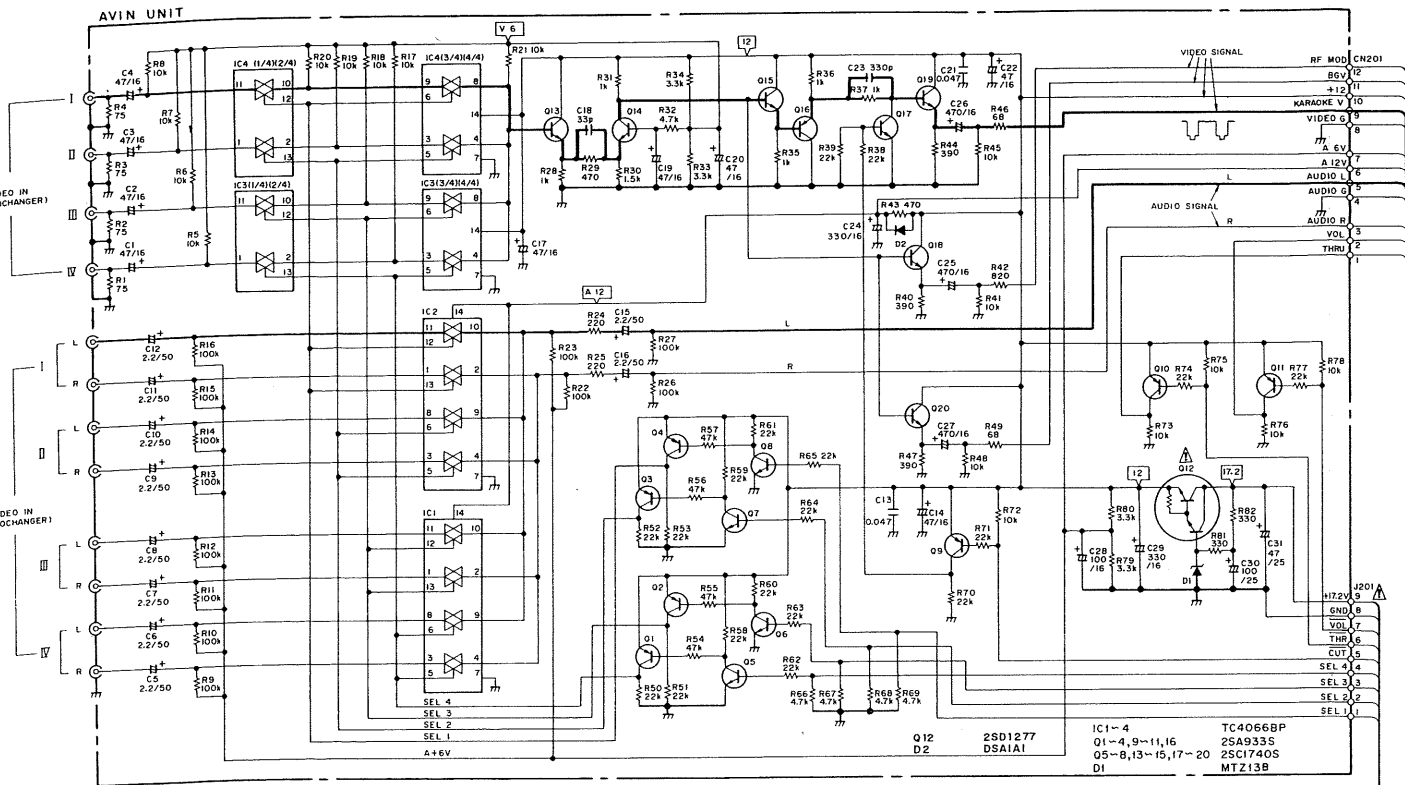
C0	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	D1	D2	D3	D4	D5	D6	D7
0	1	1	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0

P.C. Board Pattern (DWY1004)

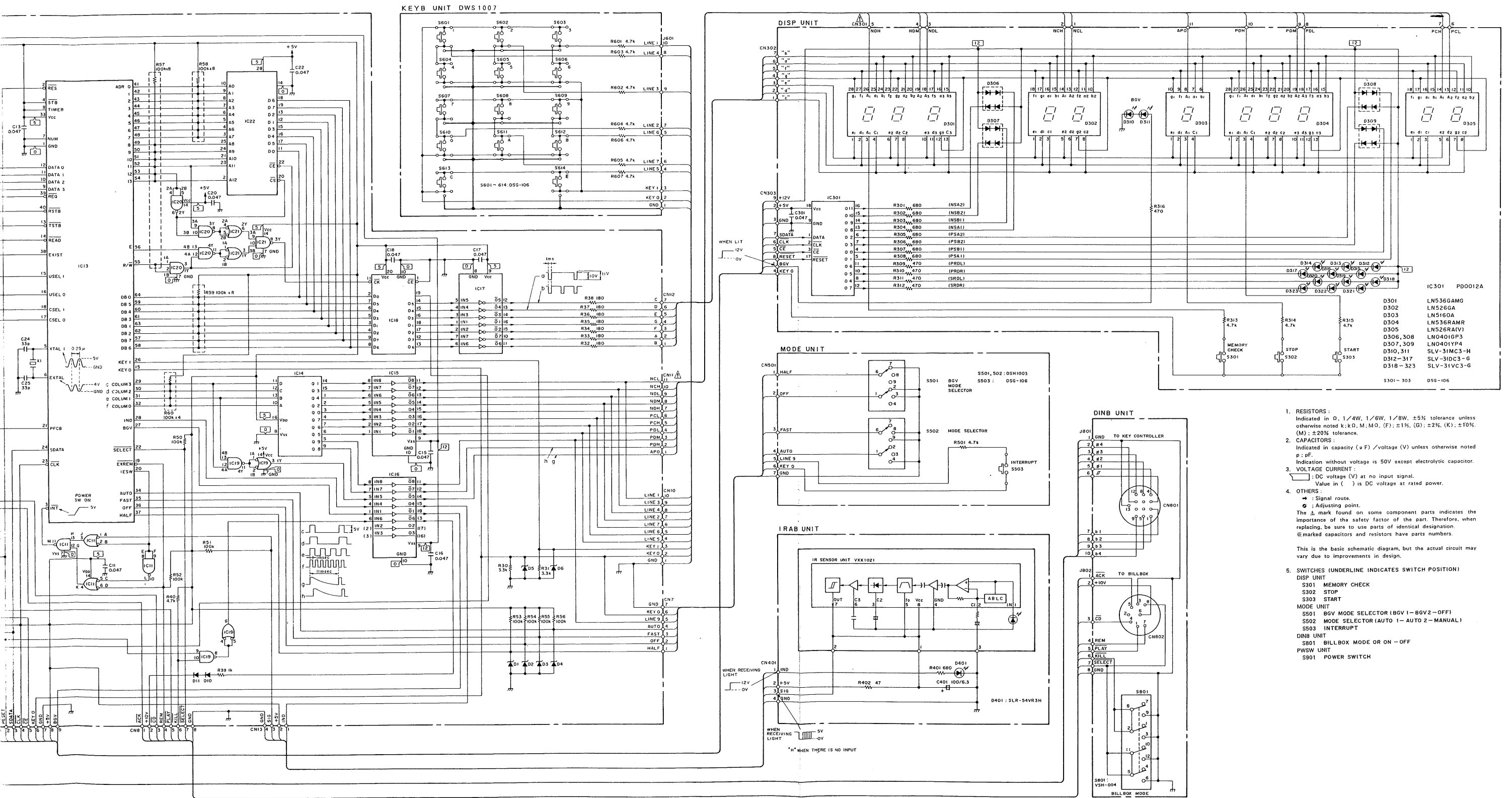


- IC1 : µPD6102G
- Q1 : 2SC2021LN
- Q2 : 2SC2673
- D1 : SLP-173B-01
- D2 : SEL303A-X
- D3~8 : ISS133HV

3.2 SCHEMATIC DIAGRAM OF MAIN UNIT



- IC1-4 SN74ALS365AN
- IC5 SN74ALS243N
- IC6 M51953BL
- IC7 TC4069UBP
- IC8, 11 TC4011BP
- IC9 TC4001BP
- IC10 M54566BP
- IC12 P00012A
- IC13 HD6305Y2P
- IC14 TC4028BP
- IC15, 16 M54564P
- IC17 M54537P
- IC18 SN74ALS574N
- IC19-21 SN74ALS00N
- IC22 DW1009
- DI-6 MTZ5.1A
- D7-12 ISS254
- X1 V55-C18



- RESISTORS:**
Indicated in Ω, 1/4W, 1/6W, 1/8W, ±5% tolerance unless otherwise noted k, Ω, M, MQ, (F), ±1%, (G), ±2%, (K), ±10%, (M); ±20% tolerance.
 - CAPACITORS:**
Indicated in capacity (μF) / voltage (V) unless otherwise noted p; pF.
Indication without voltage is 50V except electrolytic capacitor.
 - VOLTAGE CURRENT:**
: DC voltage (V) at no input signal.
Value in () is DC voltage at rated power.
 - OTHERS:**
—: Signal route.
⊙: Adjusting point.
The Δ 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.
⊕: marked capacitors and resistors have parts numbers.
- This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.
- SWITCHES (UNDERLINE INDICATES SWITCH POSITION)**
DISP UNIT
S301 MEMORY CHECK
S302 STOP
S303 START
MODE UNIT
S501 8GV MODE SELECTOR (8GV1-8GV2-OFF)
S502 MODE SELECTOR (AUTO 1-AUTO 2-MANUAL 1)
S503 INTERRUPT
DINB UNIT
S801 BILLBOX MODE OR ON-OFF
PWSW UNIT
S901 POWER SWITCH

A

B

C

D

3.3 P.C. BOARDS CONNECTION DIAGRAM OF MAIN UNIT

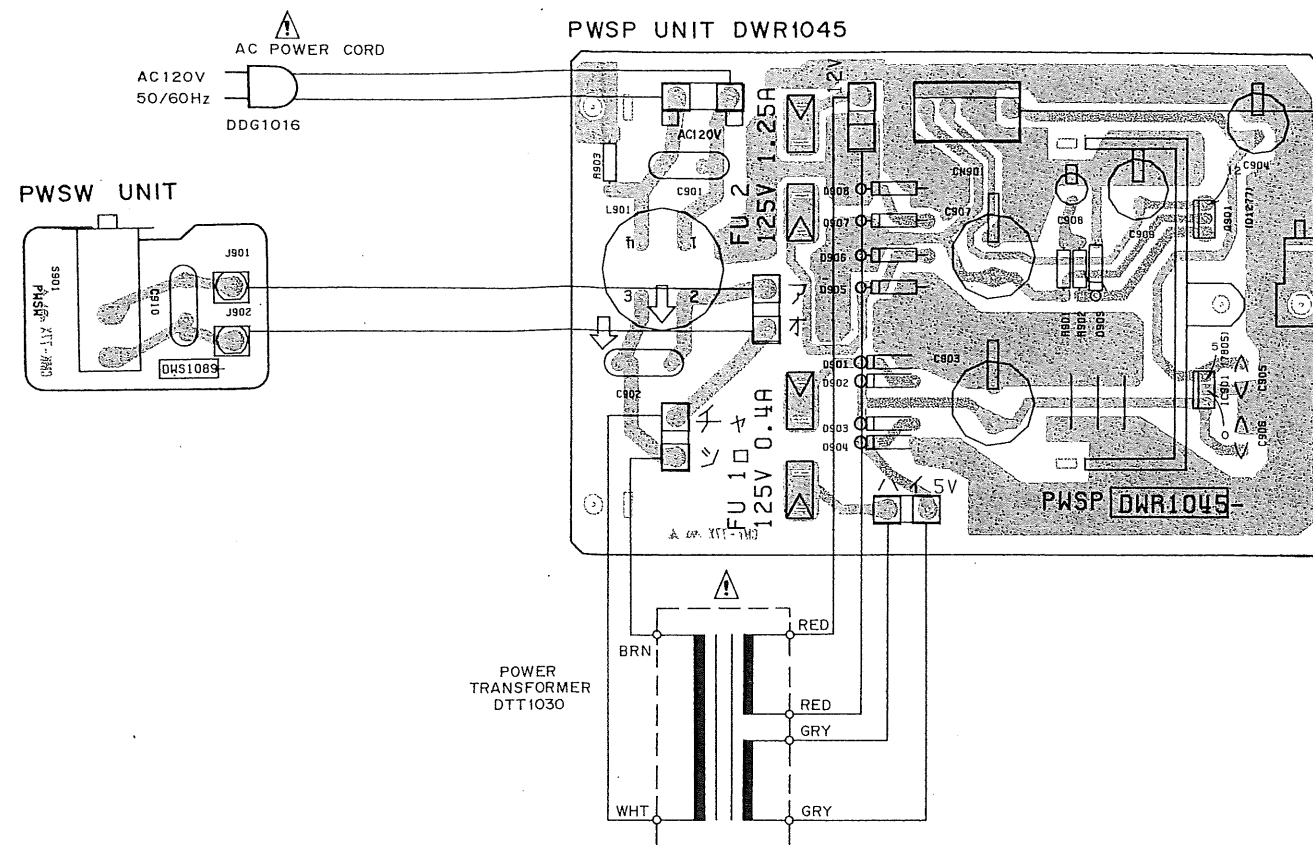
• View from component side

A

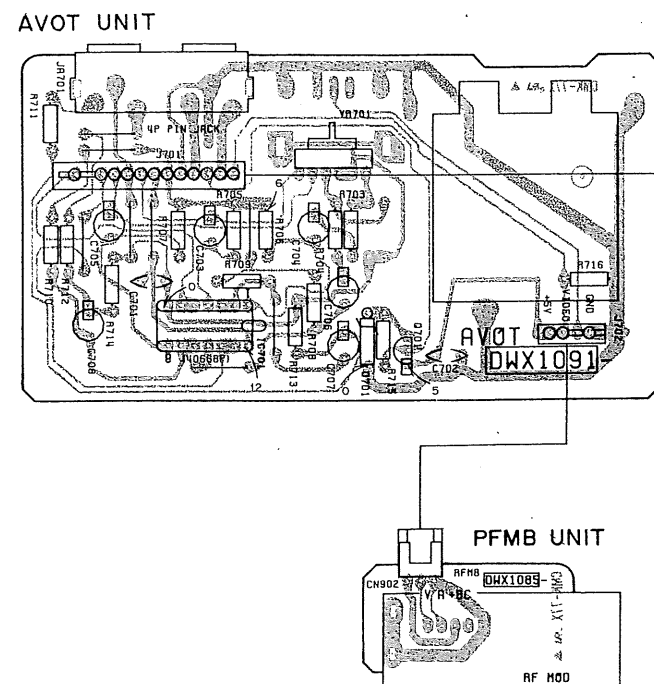
P.C.B. pattern diagram indication	Corresponding part symbol	Part name	P.C.B. pattern diagram indication	Corresponding part symbol	Part name
		Transistor			Ceramic capacitor
		FET			Mylar capacitor
		Diode			Styrol capacitor
		Zener diode			Electrolytic capacitor (Non polarized)
		LED			Electrolytic capacitor (Noiseless)
		Varactor			Electrolytic capacitor (Polarized)
		Resistor			Electrolytic capacitor (Polarized)
		Inductor			Power capacitor
		Coil			Semi-fixed resistor
		Transformer			Resistor array
		Filter			Resistor
					Resonator
					Thermistor

1. This P.C.B. connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the above Table.
3. The capacitor terminal marked with shows negative terminal.
4. The diode marked with shows cathode side.
5. The transistor terminal marked with shows emitter.

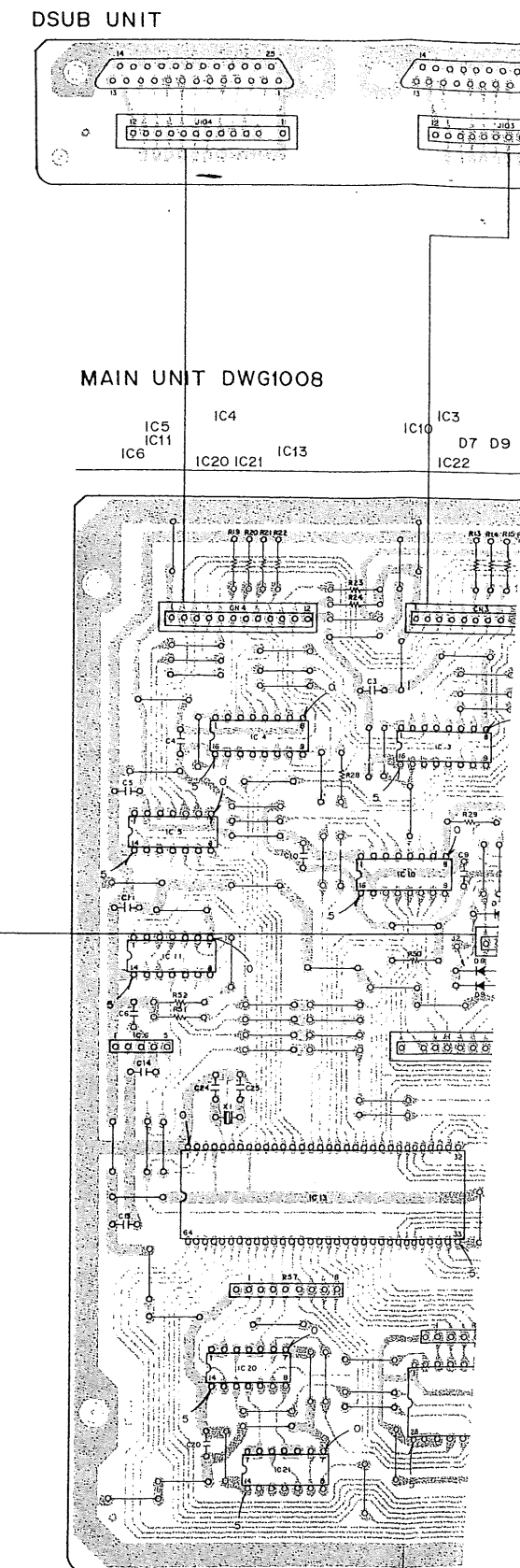
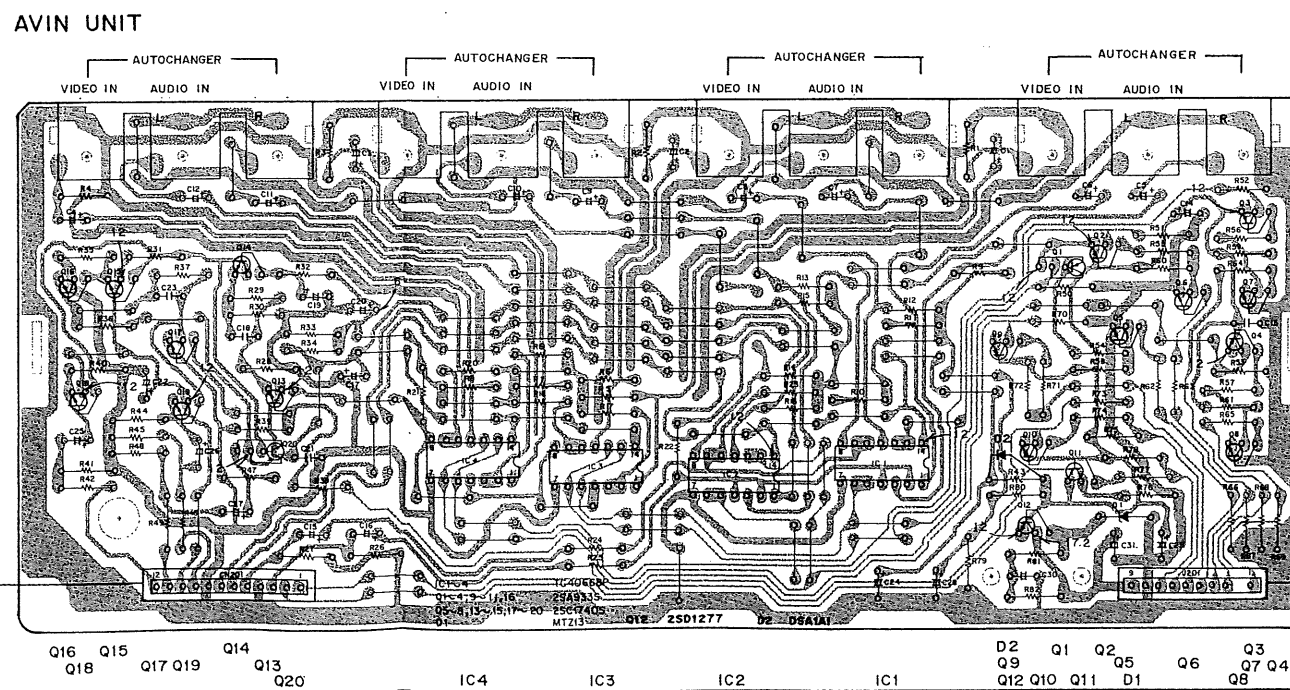
B

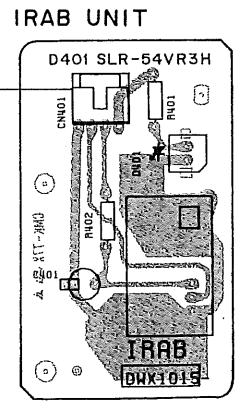
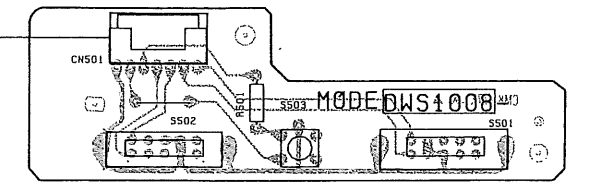
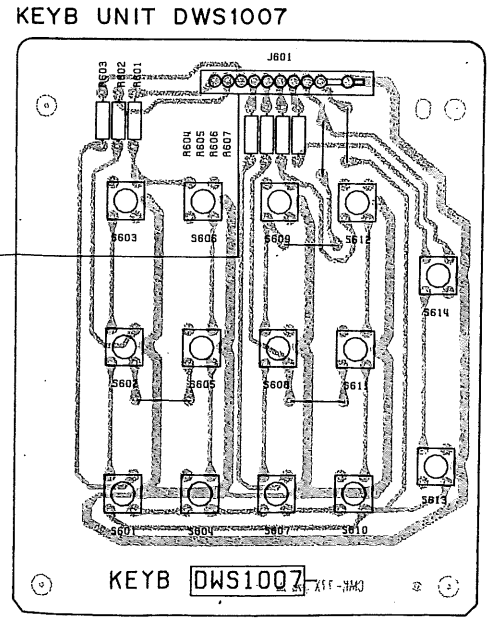
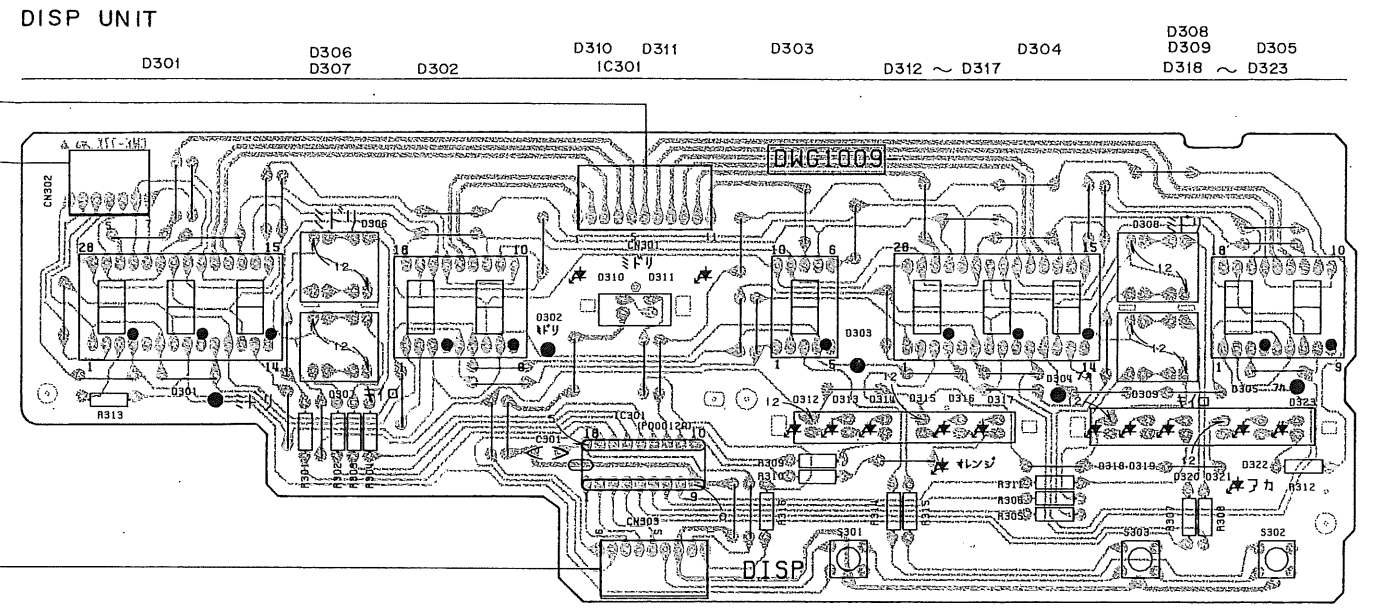
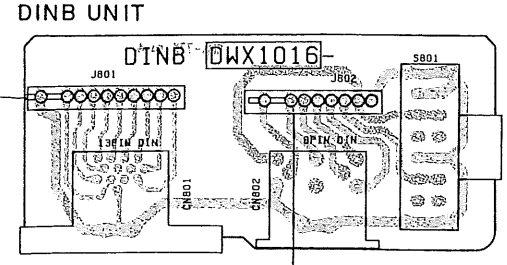
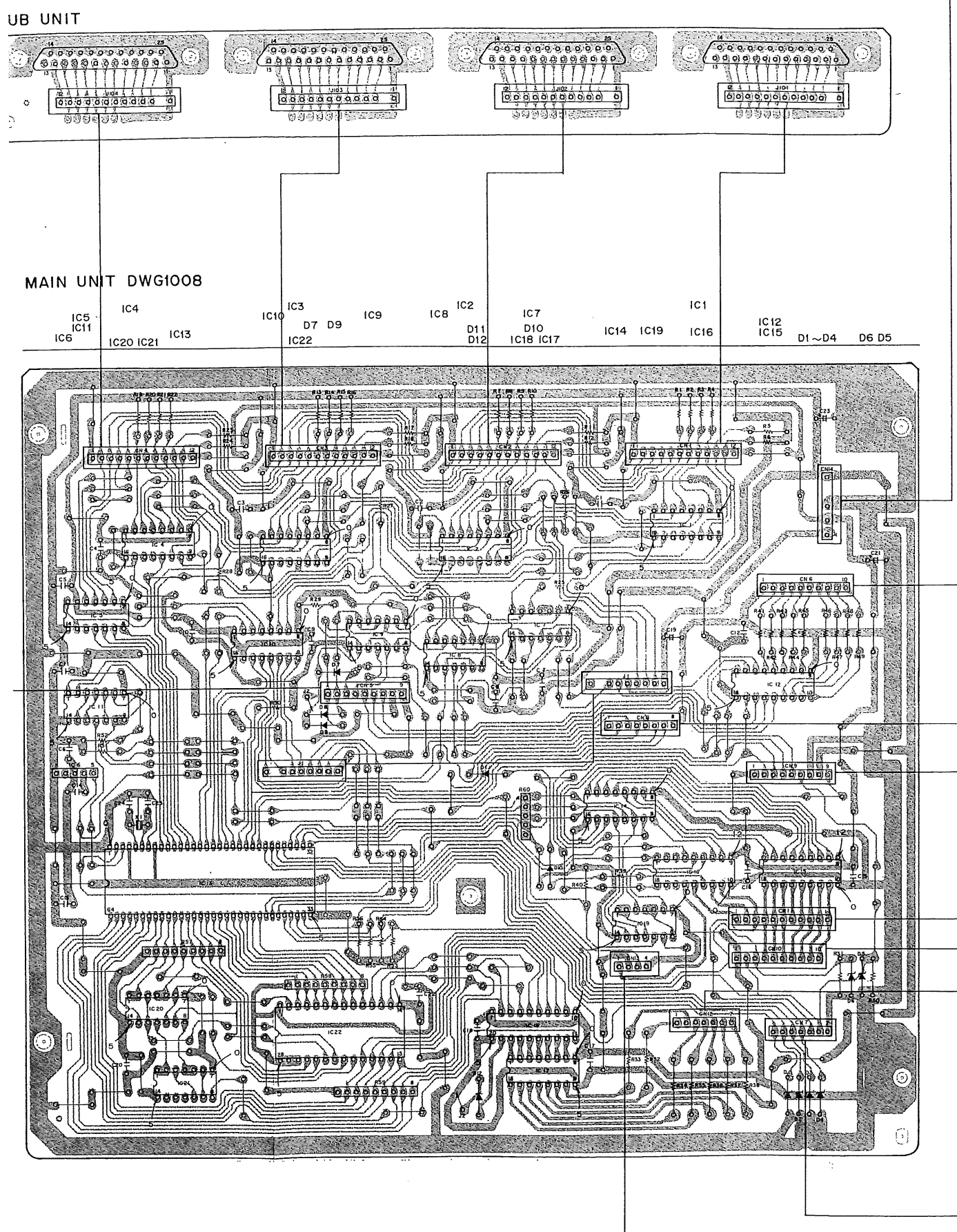


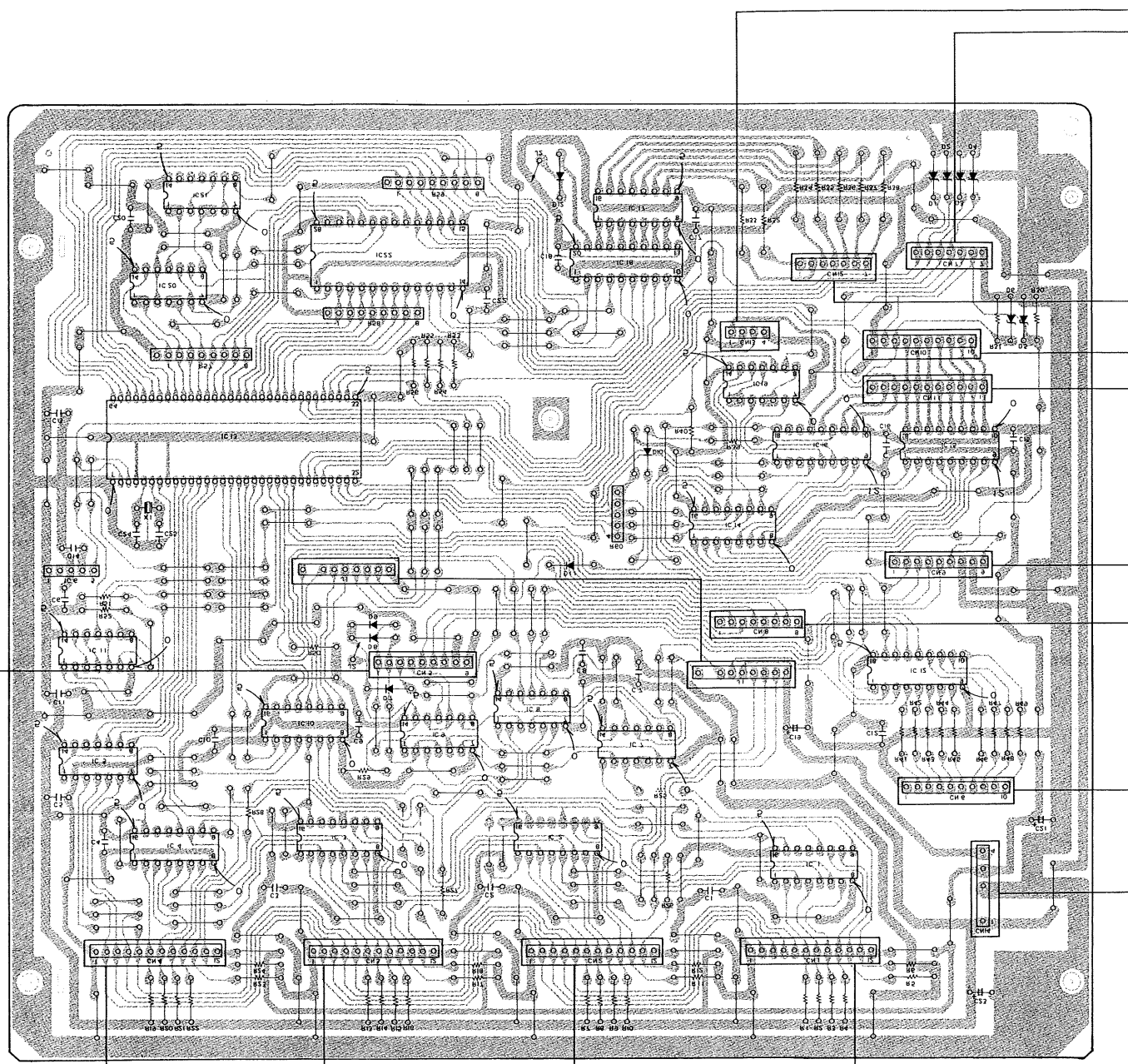
C



D





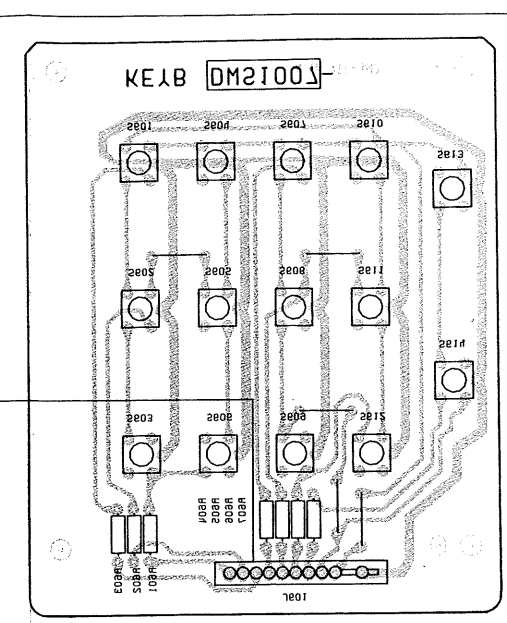


IC30 IC29 IC28 IC27 IC26 IC25 IC24 IC23 IC22 IC21 IC20 IC19 IC18 IC17 IC16 IC15 IC14 IC13 IC12 IC11 IC10 IC9 IC8 IC7 IC6 IC5 IC4 IC3 IC2 IC1 IC14 IC13 IC12 IC11 IC10 IC9 IC8 IC7 IC6 IC5 IC4 IC3 IC2 IC1

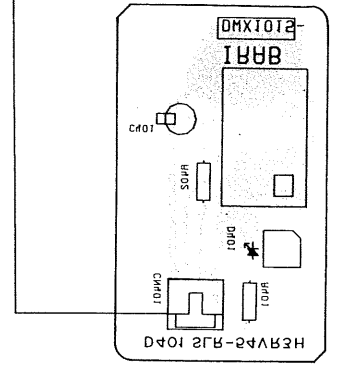
BOARDS IN UNIT



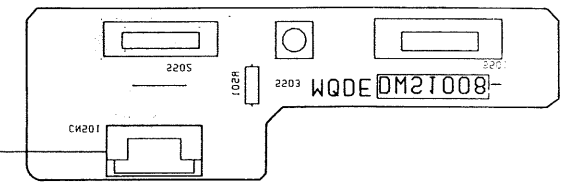
SUB UNIT



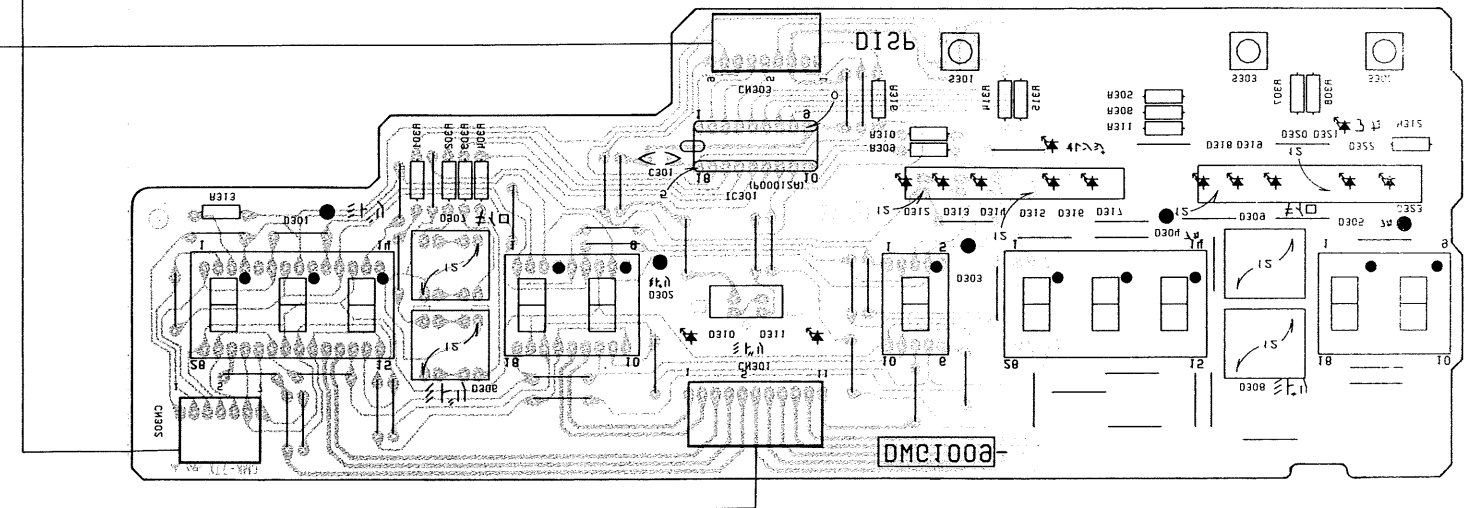
KEY UNIT



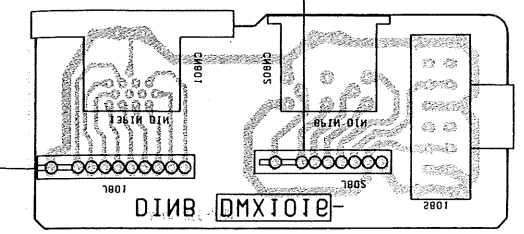
T1RB UNIT



D2008 UNIT



D126 UNIT

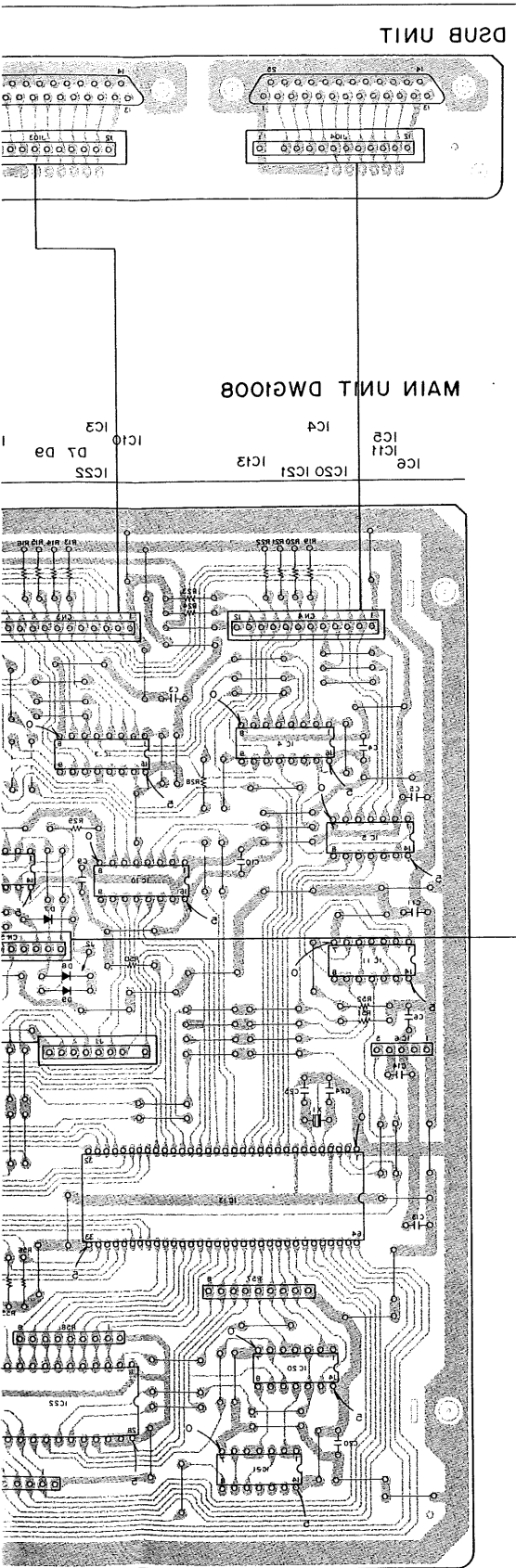
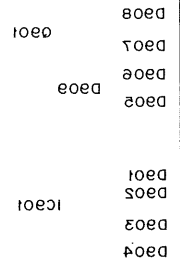
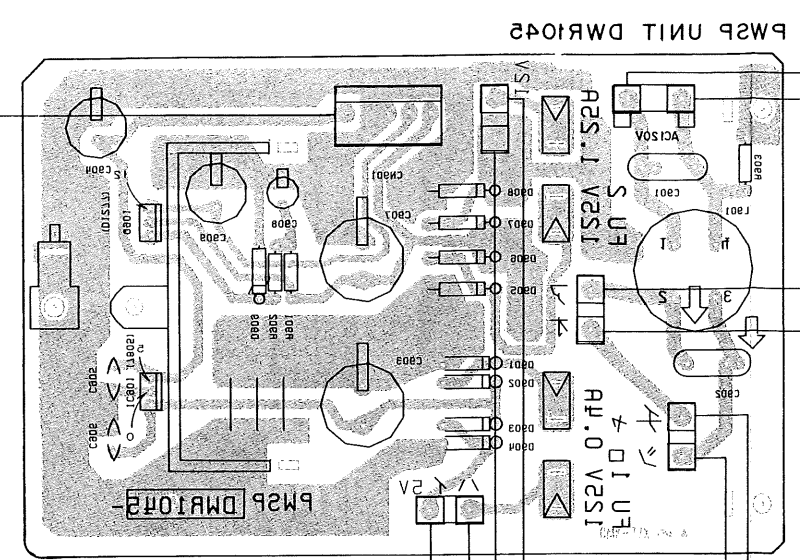
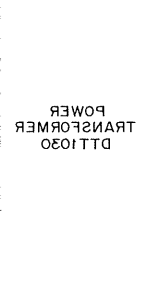
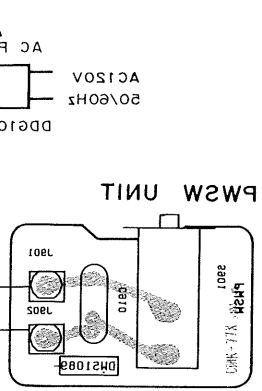
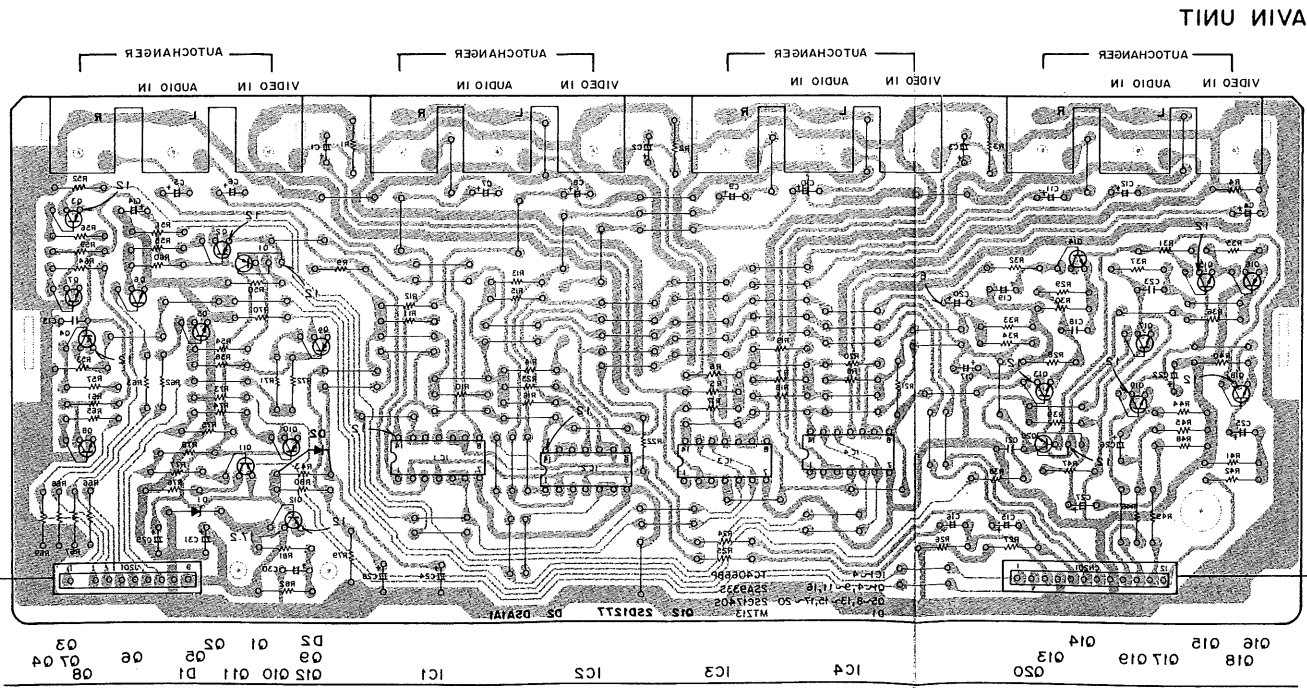
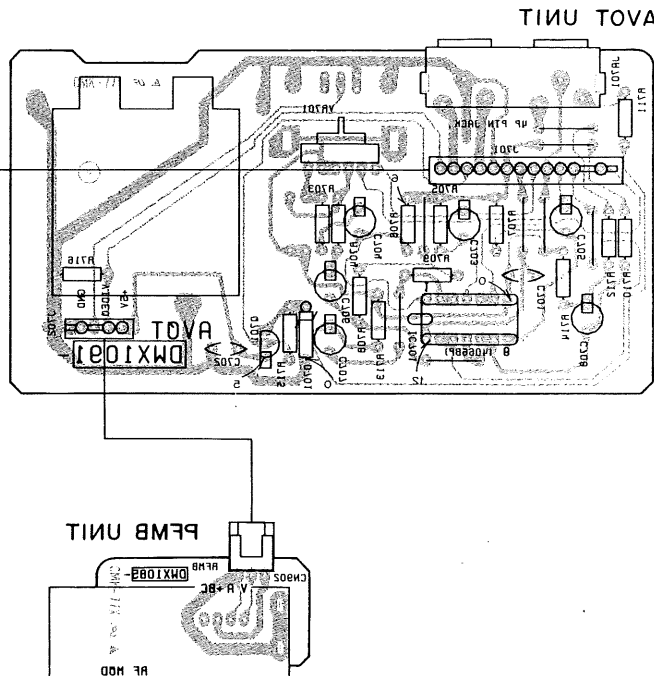


D1RB UNIT

3.3 P.C. BOARDS CONNECTION DIAGRAM OF MAIN UNIT

• View from soldering side

A
B
C
D



4. ELECTRICAL PARTS LIST

NOTES :

- Parts without part number cannot be supplied.
- Parts marked by "⊙" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- The Δ 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.
- 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 × 10 ¹	561	RD1/4PS	561J
47k Ω	47 × 10 ³	473	RD1/4PS	473J
0.5 Ω	0R5		RN2H	0R5K
1 Ω	010		RS1P	010K

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

5.62k Ω	562 × 10 ¹	5621	RN1/4SR	5621F
---------	-----------------------	------	---------	-------

Miscellaneous Parts

P.C. BOARD ASSEMBLY

Mark	Symbol & Description	Part No.
⊙	MAIN unit DSUB unit DISP unit	DWG1008
⊙	PWSP unit PWSP unit	DWR1045
⊙	KEYB unit MODE unit IRAB unit DINB unit AVOT unit	DWS1007
	RFMB unit AVIN unit RMTC unit	DWY1004

OTHERS

Mark	Symbol & Description	Part No.
Δ	AC power cord	DDG1016
Δ	FU1 Fuse (400mA)	DEK1007
Δ	FU2 Fuse (1.25A)	DEK1013
Δ	T1 Power transformer	DTT1030
	IC22	DWY1009

⊙ MAIN UNIT (DWG1008)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	IC13	HD6305Y2P
	IC10	M4556BP
	IC6	M51953BL
	IC17	M54537P
	IC15, IC16	M54564P
	IC12	PD0012A
	IC18	SN74ALS574N
	IC19-IC21	SN74LS00N
	IC5	SN74LS243N
	IC1-IC4	SN74LS365AN

Mark	Symbol & Description	Part No.
	IC9	TC4001BP
	IC8, IC11	TC4011BP
	IC14	TC4028BP
	IC7	TC4069UBP
	D1-D6	MTZ5.1A
	D7-D12	1SS254

CAPACITORS

Mark	Symbol & Description	Part No.
	C24, C25	CCCSL330J50
	C21, C23	CEAS221M16
	C19	CEAS221M25
	C1-C18, C20, C22	CKCYF473Z50
	C26	CKCYF103Z50

RESISTORS

Mark	Symbol & Description	Part No.
	R60	RA4S104J
	R57-R59	RA8S104J
	R32-R38	RS2LMF181J
	Other resistors	RD¼PM□□□J

OTHERS

Mark	Symbol & Description	Part No.
	IC socket 28P	VKH1001
	X1 Ceramic resonator (4.00MHz)	VSS-018

DSUB UNIT

OTHERS

Mark	Symbol & Description	Part No.
	D sub connector 25P	DKP-176

DISP UNIT

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	IC301	PD0012A
	D306, D308	LN0401GP3
	D307, D309	LN0401YP4
	D303	LN5160A
	D302	LN526GA
	D305	LN526RA (V)
	D301	LN536GAMG
	D304	LN536RAMR
	D312-D317	SLV-31DC3-G
	D310, D311	SLV-31MC3-H
	D318-D323	SLV-31VC3-G

SWITCHES

Mark	Symbol & Description	Part No.
	S301-S303 Push switch (MEMORY CHECK, START, STOP)	DSG-106

CAPACITOR

Mark	Symbol & Description	Part No.
	C301	CKCYF473Z50

RESISTORS

Mark	Symbol & Description	Part No.
	All resistors	RD $\frac{1}{4}$ PM□□□J

⊙ PWSP UNIT (DWR1045)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
⚠	IC901	NJM7805A
⚠	Q901	2SD1277
⚠	D905-D908	SM1.5-02LFB
⚠	D901-D904	DSA1A1
	D909	MTZ13B

COIL

Mark	Symbol & Description	Part No.
⚠	L901 Line filter	VTL-004

CAPACITORS

Mark	Symbol & Description	Part No.
	C904, C909	CEAS221M16
	C903	CEAS332M16
	C907	CEAS332M35
	C908	CEAS470M25
	C905, C906	CKCYF473Z50
⚠	C901, C902 (0.01 μ F/AC250V)	RCG-009

RESISTORS

Mark	Symbol & Description	Part No.
	R903	RD $\frac{1}{4}$ PM225J
	Other resistors	RD $\frac{1}{4}$ PM□□□J

PWSW UNIT

SWITCH

Mark	Symbol & Description	Part No.
⚠	S901 Power switch	RSA-063

CAPACITORS

Mark	Symbol & Description	Part No.
⚠	C910 (0.01 μ F/AC250V)	RCG-009

OTHERS

Mark	Symbol & Description	Part No.
	J901, J902 Connector	DKP1033

⊙ KEYB UNIT (DWS1007)

SWITCHES

Mark	Symbol & Description	Part No.
	S601-S614 Push switch (1-0, A-C, E)	DSG-106

RESISTORS

Mark	Symbol & Description	Part No.
	R601-R607	RD $\frac{1}{4}$ PM472J

MODE UNIT

SWITCHES

Mark	Symbol & Description	Part No.
	S503 Push switch (INTERRUPT)	DSG-106
	S501, S502 Slide switch (BGV MODE SELECTOR, MODE SELECTOR)	DSH1003

RESISTORS

Mark	Symbol & Description	Part No.
	R501	RD $\frac{1}{4}$ PM472J

OTHERS

Mark	Symbol & Description	Part No.
	CN501 LP connector	W-P5807

IRAB UNIT

SEMICONDUCTOR

Mark	Symbol & Description	Part No.
	D401	SLR-54VR3H

CAPACITOR

Mark	Symbol & Description	Part No.
	C401	CEJA101M6R3

RESISTORS

Mark	Symbol & Description	Part No.
	R402	RD $\frac{1}{4}$ PM470J
	R401	RD $\frac{1}{4}$ PM681J

OTHERS

Mark	Symbol & Description	Part No.
	IR sensor unit	VXX1021

DINB UNIT

SWITCH

Mark	Symbol & Description	Part No.
	S801 Slide switch (BILL BOX MODE)	VSH-004

OTHERS

Mark	Symbol & Description	Part No.
	CN802 DIN connector U 8P	DKP-118
	CN801 DIN socket 13P	DKP-121

AVOT UNIT

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	IC701	TC4066BP
	Q701	2SC1740S
	D701	MTZ6.2B

CAPACITORS

Mark	Symbol & Description	Part No.
	C703-C706	CEAS4R7M50
	C707, C708	CEAS2R2M50
	C701, C702	CKCYF473Z50

RESISTORS

Mark	Symbol & Description	Part No.
	VR701 Variable resistor	DCS-117
	Other resistors	RD $\frac{1}{4}$ PM□□□J

OTHERS

Mark	Symbol & Description	Part No.
	Pin jack 4P	DKB1005

RFMB UNIT

OTHERS

Mark	Symbol & Description	Part No.
	RFMD	VWL1008

AVIN UNIT

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	IC1-IC4	TC4066BP
	Q1-Q4, Q9-Q11, Q16	2SA933S
	Q5-Q8, Q13-Q15, Q17-Q20	2SC1740S
	Q12	2SD1277
	D1	MTZ13B
	D2	DSA1A1

CAPACITORS

Mark	Symbol & Description	Part No.
	C18	CCCCH330J50
	C28	CEAS101M16
	C30	CEAS101M25
	C5-C12, C15, C16	CEAS2R2M50
	C24, C29	CEAS331M16
	C1-C4, C14, C17, C19, C20, C22	CEAS470M16
	C31	CEAS470M25
	C25-C27	CEAS471M16
	C23	CKCYB331K50
	C13, C21	CKCYF473Z50

RESISTORS

Mark	Symbol & Description	Part No.
	R43	RD $\frac{1}{6}$ PM471J
	Other resistors	RD $\frac{1}{4}$ PM□□□J

OTHERS

Mark	Symbol & Description	Part No.
	Pin jack 3P	VKB-022

REMOTE CONTROL UNIT

RMTC UNIT (DWY1004)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	IC1	UPD6102G
	Q1	2SC2021LN
	Q2	2SC2673
	D1	SLP-173B
	D2	SE303A-X
	D3-D8	1SS133HV

SWITCHES

<u>Mark</u>	<u>Symbol & Description</u>	<u>Part No.</u>
	S1-S25 Tact switch (1-0, A-C, E, #1-#4, N, 64-61)	KHH10914

CAPACITORS

<u>Mark</u>	<u>Symbol & Description</u>	<u>Part No.</u>
	C1	CKCYF103Z50
	C2	CEA221M6R3
	C3, C4	CCDSL101J50

RESISTORS

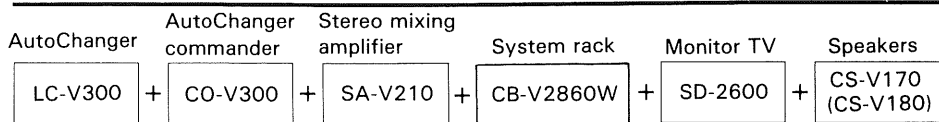
<u>Mark</u>	<u>Symbol & Description</u>	<u>Part No.</u>
	All resistors	RD 1/6 PM □□□ J

OTHERS

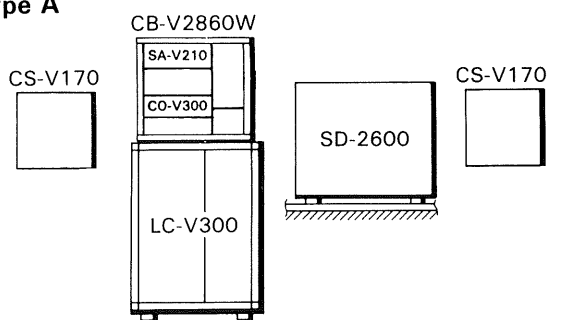
<u>Mark</u>	<u>Symbol & Description</u>	<u>Part No.</u>
	X1 Ceramic resonator	CSB480EB

5. SYSTEM COMBINATION EXAMPLE

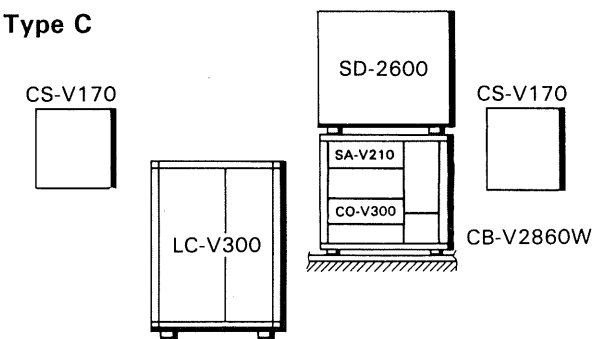
BASIC SYSTEM COMBINATION



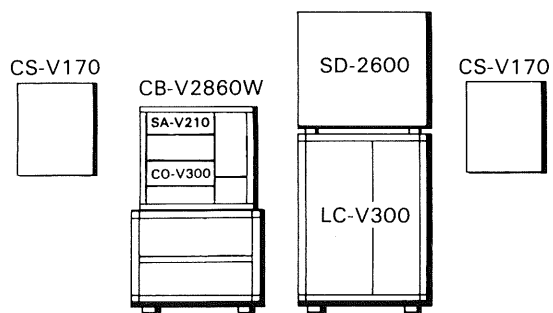
Type A



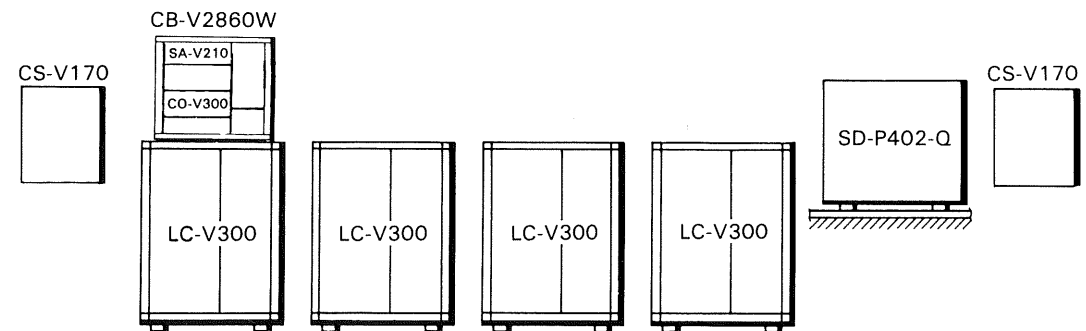
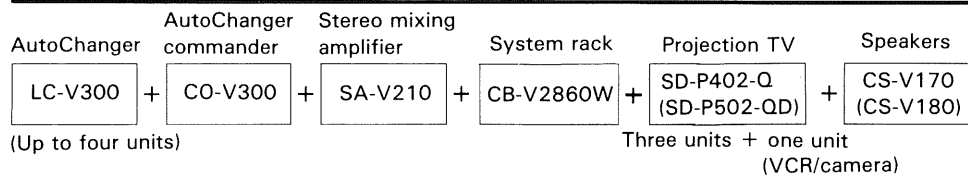
Type C



Type B

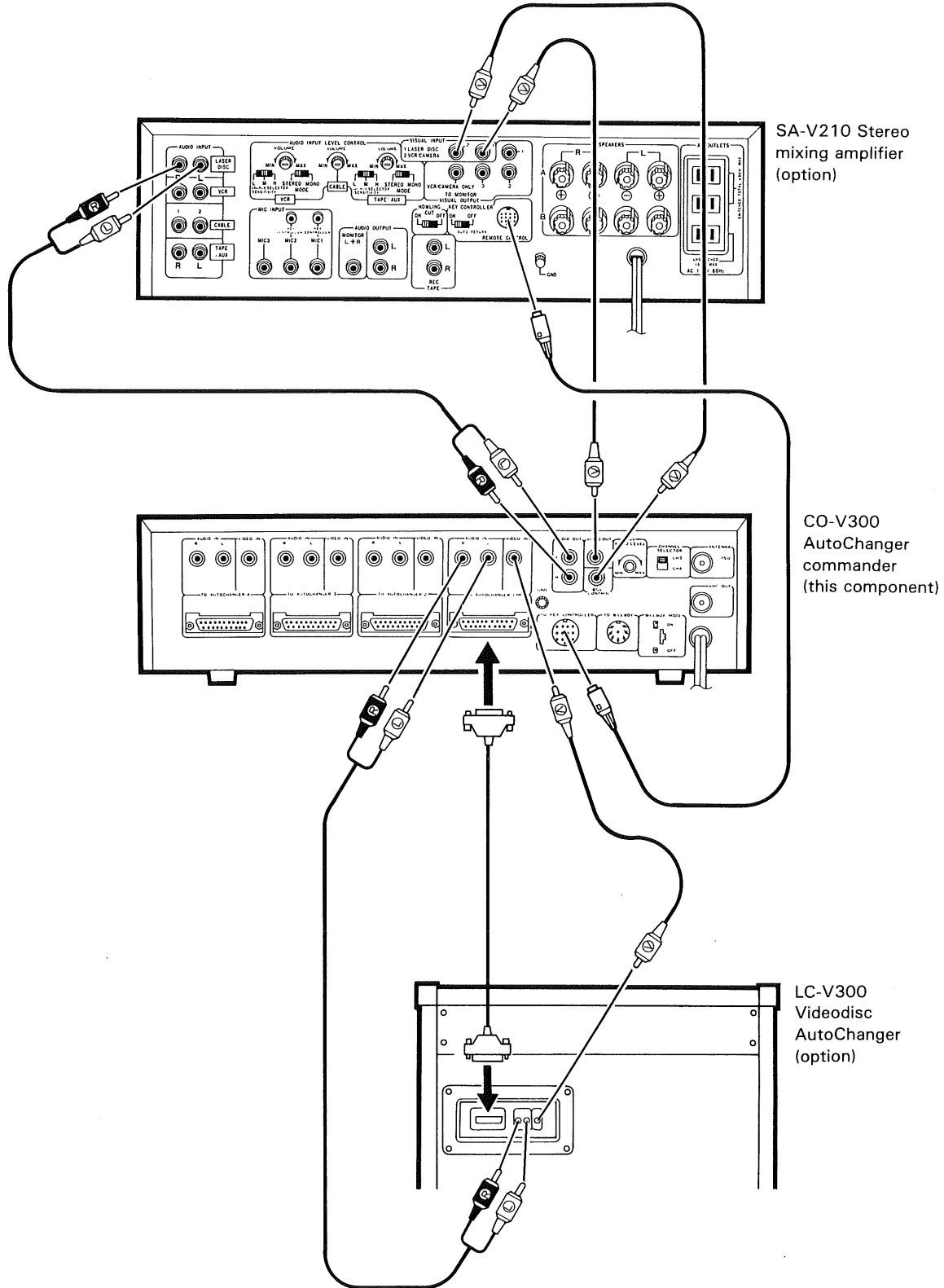


DEVELOPMENTAL SYSTEM COMBINATION



6. SYSTEM CONNECTION EXAMPLE

1. CONNECTING THE LC-V300 VIDEODISC AUTOCHANGER, CO-V300 AUTOCHANGER COMMANDER, AND SA-V210 STEREO MIXING AMPLIFIER

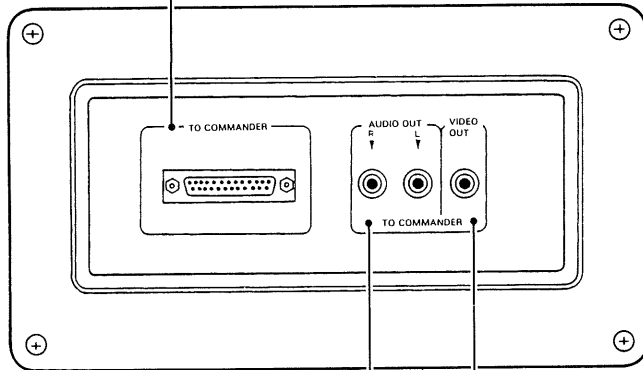


7. OPERATION OF THE LC-V300

REAR TERMINAL FACILITIES

Control terminal (25-pin D-sub connector)

Connected to the AutoChanger control of the CO-V300 (use the attached control cable).



VIDEO OUT terminal (RCA jack)

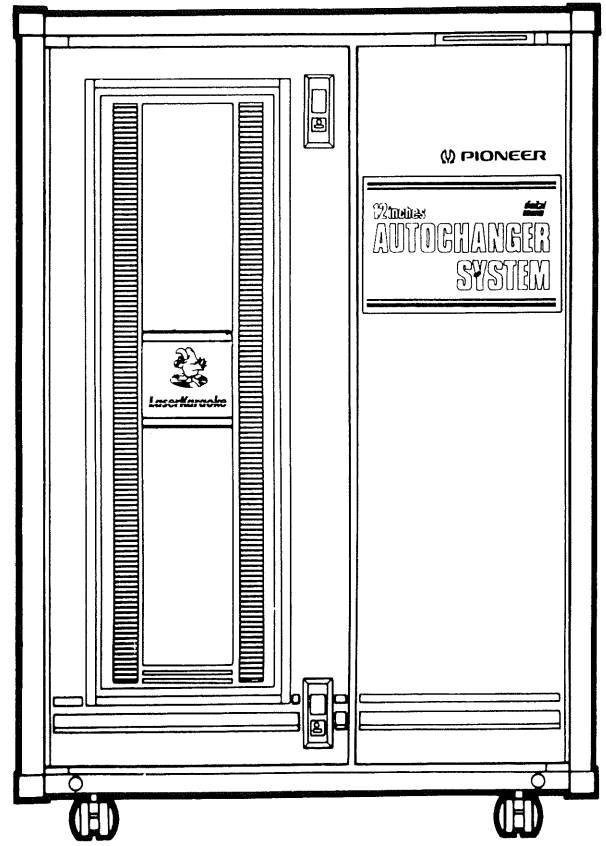
Connected to the AutoChanger VIDEO input of the CO-V300 (use the attached video cable).

AUDIO OUT terminals (RCA jack)

Connected to the AutoChanger AUDIO input of the CO-V300 (use the attached audio cable).

CASTER LOCK

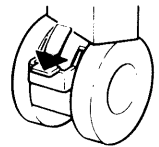
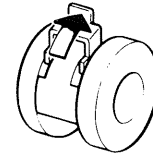
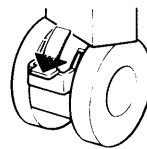
The front casters are provided with a locking mechanism. Lock as shown in the diagram.



Lock

① The lock will be released when the claw is pushed up.

② The lock will be secured when the claw is pushed down.

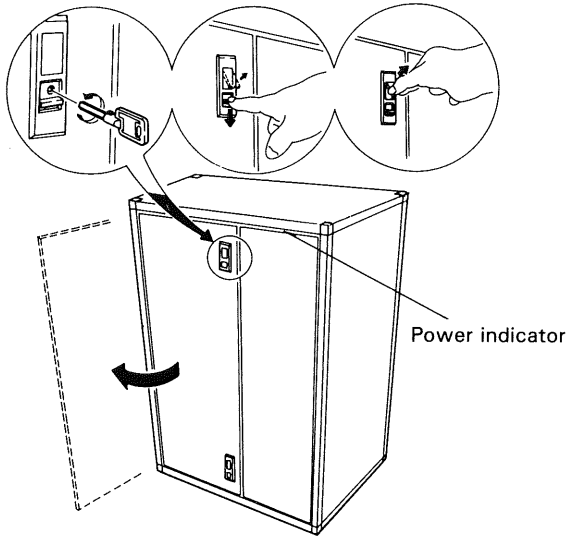


If it is difficult to lock, turn the caster slightly.

STORAGE OF DISC AND DISC TRAY

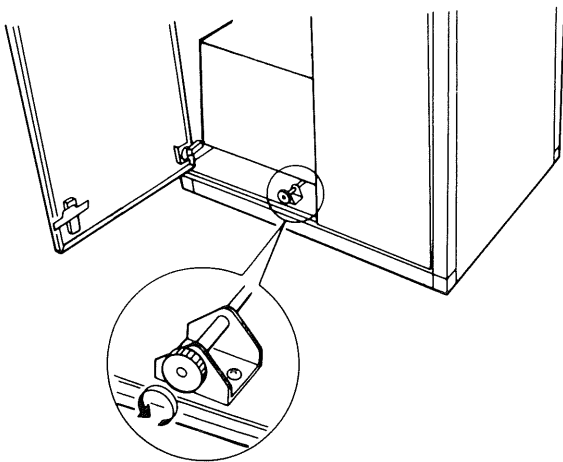
How to Open the Door

Release the door locks (at two places, top and bottom). To open the door by hand, release the locks with the key attached to the AutoChanger and press the places indicated by the arrow, then hold the knob up.



Released of Transport Screw

Loosen the screw sufficiently until there is no resistance. This screw will not come off when loosened.

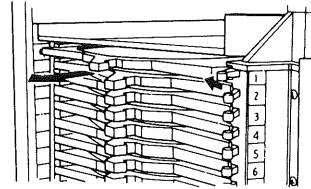


Storage of Disc

Insert the disc while confirming the disc address.

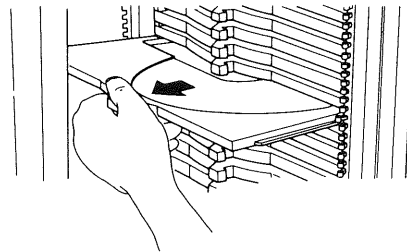
1. Press the stopper located next to the disc address.

- The disc tray corresponding to the address will eject to the specified position.



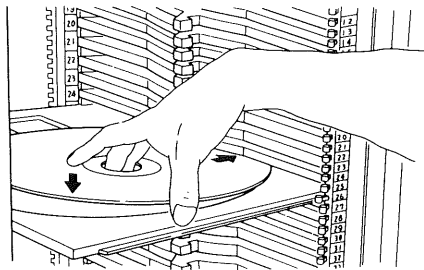
2. Remove the disc tray.

- Be careful not to take out the tray too far. The tray may dislocate from the groove. In the case of dislocation, insert the tray along the groove as before.



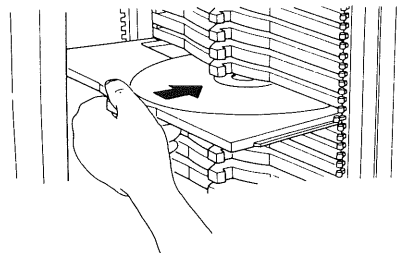
3. Insert the disc.

- Be sure that side A of the disc label faces up when inserting the disc. Insert carefully to avoid damaging the disc surface with the upper tray.



4. Push back the disc tray.

- Push the tray slowly until the stopper pushed in step 1. returns to its original position.



STORE ALL NECESSARY DISCS BY REPEATING THE SAME PROCEDURE.

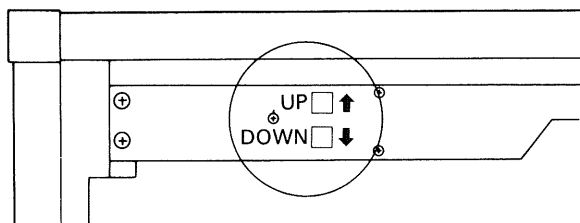
If the player unit prevents the insertion of the discs to the disc tray, turn the power ON and press the UP/DOWN button. Hold the button until the power indicator begins to blink slowly (1/sec.), then close the door of the AutoChanger. (Lock at top and bottom.) The player goes up to the upper limit when the UP button is pressed, and goes down to the lower limit when the DOWN button is pressed. The power indicator will blink slowly (1/sec.) when the player unit is moving.

When the power indicator stops blinking, the transfer is completed. Open the door and insert the discs. However, the player unit cannot be moved by the UP/DOWN button and the power indicator will blink rapidly (4/sec.) when the transport screw has not been loosened.

After moving of the player unit, the player will stop for approx. 20 sec.

After this period (if the door is closed), the BGV MODE SELECTOR switch is activated, and the player unit moves to BGV performance.

If the lock of the door is released while the player unit is moving, then the player will stop immediately.



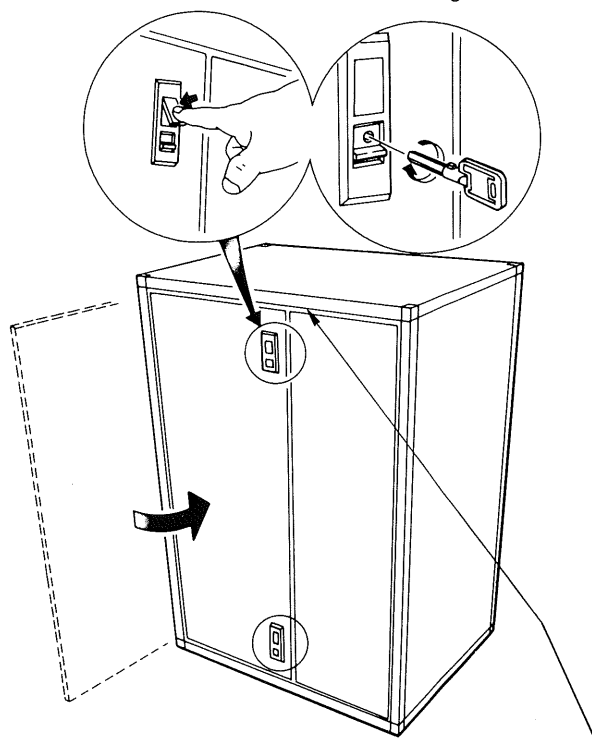
For BGV playback insert the BGV disc in the 71st and/or 72nd tray.

If BGV playback is not desired, Karaoke discs can be placed into the trays 1 - 72.

Please note that BGV playback cannot be carried out from discs in the second Autochanger.

How to Close the Door

- Lock by lever Close the door and lock it. (Be sure to lock at two places.)
- Lock by key Lock the door with the key attached to the AutoChanger.



The power indicator flashes when the door is closed with incorrect disc tray setting.

REPLACING THE DISC

Perform it with the same procedure as "Storage of the Disc." Be careful that the player stops playback when the door is opened during play.

TRANSPORTATION

1. Open the door of the AutoChanger.
2. Remove all discs and put them into their jackets.
 - Press the DOWN button to lower the player unit to the bottom after taking out all discs. The transport screw cannot be tightened if the player is not in bottom position.
3. Tighten the transport screw.
 - Transportation without the screw tightened may cause malfunction.
4. Close the door and lock it.
5. Turn the power OFF and disconnect all connection cords.
6. Move the machine carefully. In the case of shipping, pack it in its original box.

8. PANEL FACILITIES

FRONT PANEL

POWER switch (ON, OFF)

Pressing the switch turns the power on, and releasing the switch turns the power off.

REMOTE indicator

Lights up when the REMOTE SENSOR receives a signal from the remote control unit.

REMOTE SENSOR

Receives a signal from the remote control unit at a distance up to 5 m.

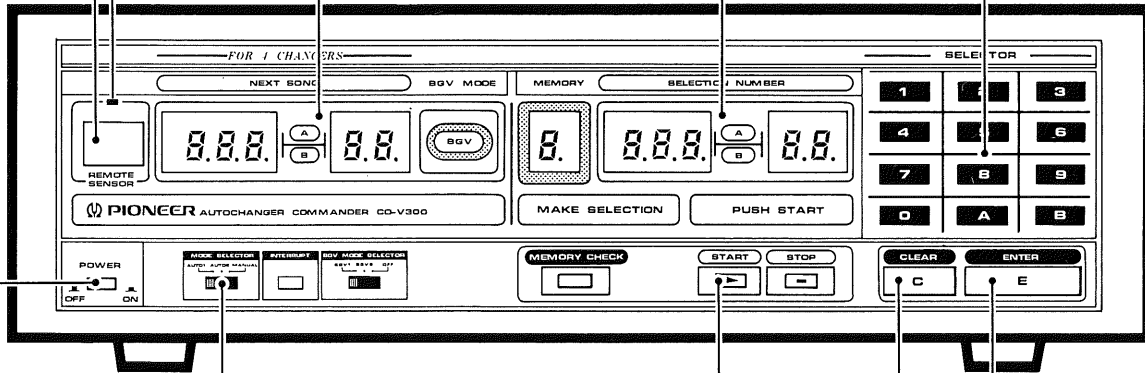
NEXT SONG indicator

Shows the song number to be played next. If the ENTER key is pressed when the first song is memorized (shown by the SELECTION NUMBER indicator), the number is shown on the indicator. When playing of the indicated song starts, the number of the next song to be played is shown.

SELECTION NUMBER indicator

Pressing a SELECTOR key shows the selected song number. In memory check mode, it indicates the memorized song numbers.

SELECTOR keys (0 to 9, A, B)



MODE SELECTOR switch

- **AUTO 1** — Automatically plays memorized songs at intervals of about 10 to 25 seconds.
- **AUTO 2** — Automatically plays memorized songs at intervals of 30 seconds.
- **MANUAL** — Requires pressing the START key to start playing the next song after playback of the prior song ends.

START key

Use to start playback when the MANUAL mode is specified by the MODE SELECTOR switch.

ENTER (E) key

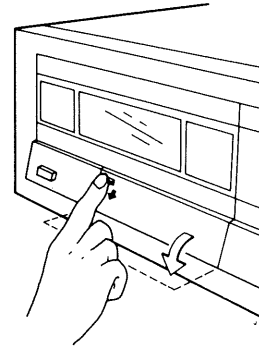
To memorize songs.

CLEAR (C) key

If this key is pressed prior to pressing the ENTER key after a song number has been selected, the song number can be canceled.

The song number blinking on the NEXT SONG indicator can be canceled in reselection mode.

[How to open]



Pull the tab labeled OPEN.

BGV MODE SELECTOR switch

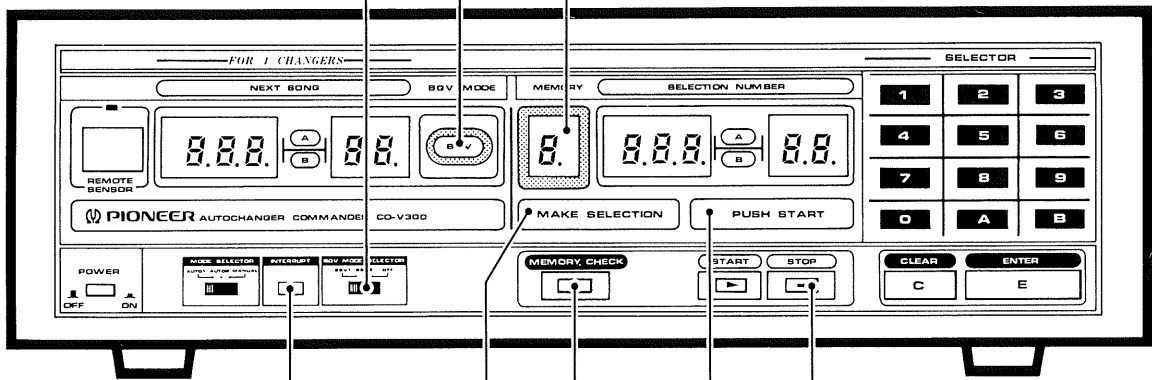
- BGV1 — Outputs both images and sound during BGV disc playback.
- BGV2 — Outputs only images during BGV disc playback.
- OFF — Does not play a BGV disc.

BGV indicator

Lights up during BGV disc playback.

MEMORY indicator

Displays the number of memorized songs. Up to eight songs can normally be memorized. However, up to nine songs are memorized if interrupt selection is executed. The memory sequence is shown in memory check mode.



INTERRUPT key

To interrupt the memorized song sequence and play another song before the next memorized song.

MAKE SELECTION indicator

Lights up when song selection can be operated.

MEMORY CHECK key

Each time this key is pressed, the memorized song number is shown by the SELECTION NUMBER indicator and the memory sequence is displayed by the MEMORY indicator.

STOP key

Press to stop a song during playback. The system enters reselection mode if the STOP key is pressed within 30 seconds of playback start.
 * If a BILL BOX is used, a song is assumed to have ended when 30 seconds or more have elapsed since the screen was displayed.

PUSH START indicator

Blinking when a song is ready to start in MANUAL mode.

REAR PANEL

TO AUTOCHANGER 1 connecting terminal

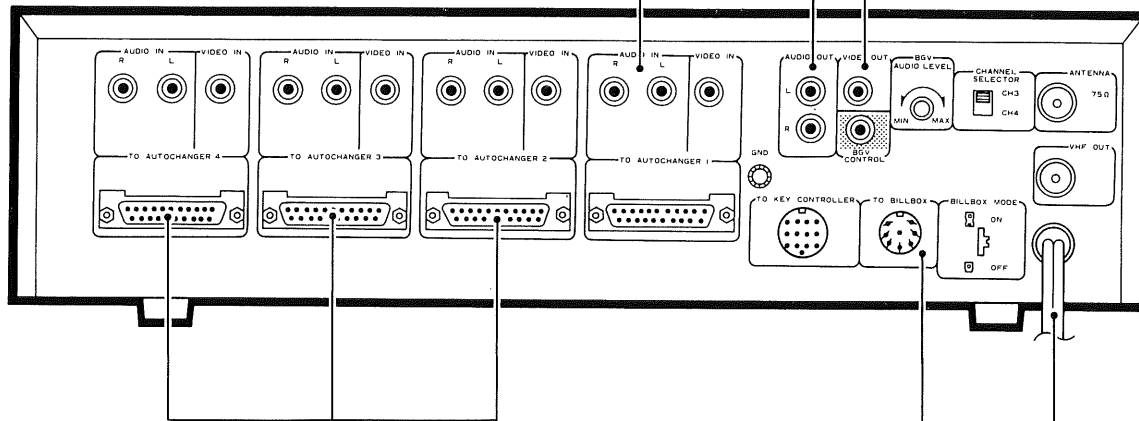
Connects the first Videodisc AutoChanger (first disc to 72nd disc).

- VIDEO IN (pin jack):
Connected to the VIDEO OUT terminal of the Videodisc AutoChanger (use the attached video cable).
- AUDIO IN (pin jack):
Connected to the AUDIO OUT terminal of the Videodisc AutoChanger (use the attached audio cable).
- Control (25-pin D-sub connector):
Connected to the TO COMMANDER terminal of the Videodisc AutoChanger (use the attached control cable).

VIDEO OUT, AUDIO OUT terminals

Output the image and sound signals input by the Videodisc AutoChanger. Connected to the stereo mixing amplifier.

- VIDEO OUT (RCA jack):
Connected to the **LASERDISC** image input of the mixing amplifier (use the attached video cable).
- BGV CONTROL (RCA jack):
Connected to the **VCR/CAMERA** image input of the mixing amplifier (use the attached video cable).
- AUDIO OUT (RCA jack):
Connected to the **LASERDISC** sound input of the mixing amplifier (use the attached audio cable).



TO AUTOCHANGER 2, 3, 4 connecting terminals

Connect the second to fourth Videodisc AutoChangers.

- 2 — For the second unit
- 3 — For the third unit
- 4 — For the fourth unit

Power cord

Insert into a wall outlet (120 V AC, 50/60 Hz) or the outlet of the SA-V210 stereo mixing amplifier (option).

TO BILL BOX terminal (8-pin DIN connector)

Connected to the control terminal of a BILL BOX (use the dedicated cable attached to the BILL BOX).

CHANNEL SELECTOR switch (CH3/CH4)

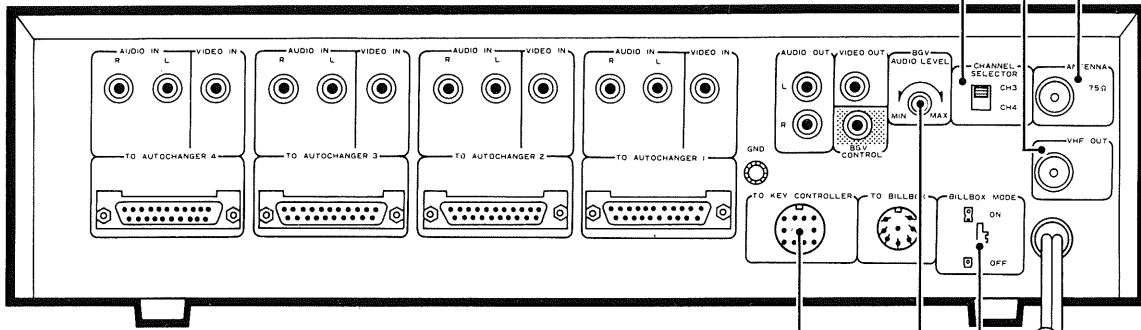
Changes the channel of the integral VHF converter; specify a channel not used for broadcasting in the area where this unit is used.

VHF OUT terminal (75 ohms F-type jack)

Connected to the VHF antenna terminal of a TV set (use the attached RF cable). Video only is output without sound during disc playback.

ANTENNA input terminal (75 ohms F-type jack)

Connected to a 75-ohm cable from the VHF TV antenna.





TO KEY CONTROLLER terminal (13-pin DIN connector)

Connected to the KEY CONTROLLER REMOTE CONTROL terminal of the SA-V210 stereo mixing amplifier (option) (use the attached key controller control cable). This connection enables the integral key controller in the amplifier to be operated from the attached remote control unit.

BILL BOX MODE switch

Sets BILL BOX MODE ON/OFF. (Press for OFF)

 Out (BILL BOX MODE: ON): The system operates only if connected to the BILL BOX.

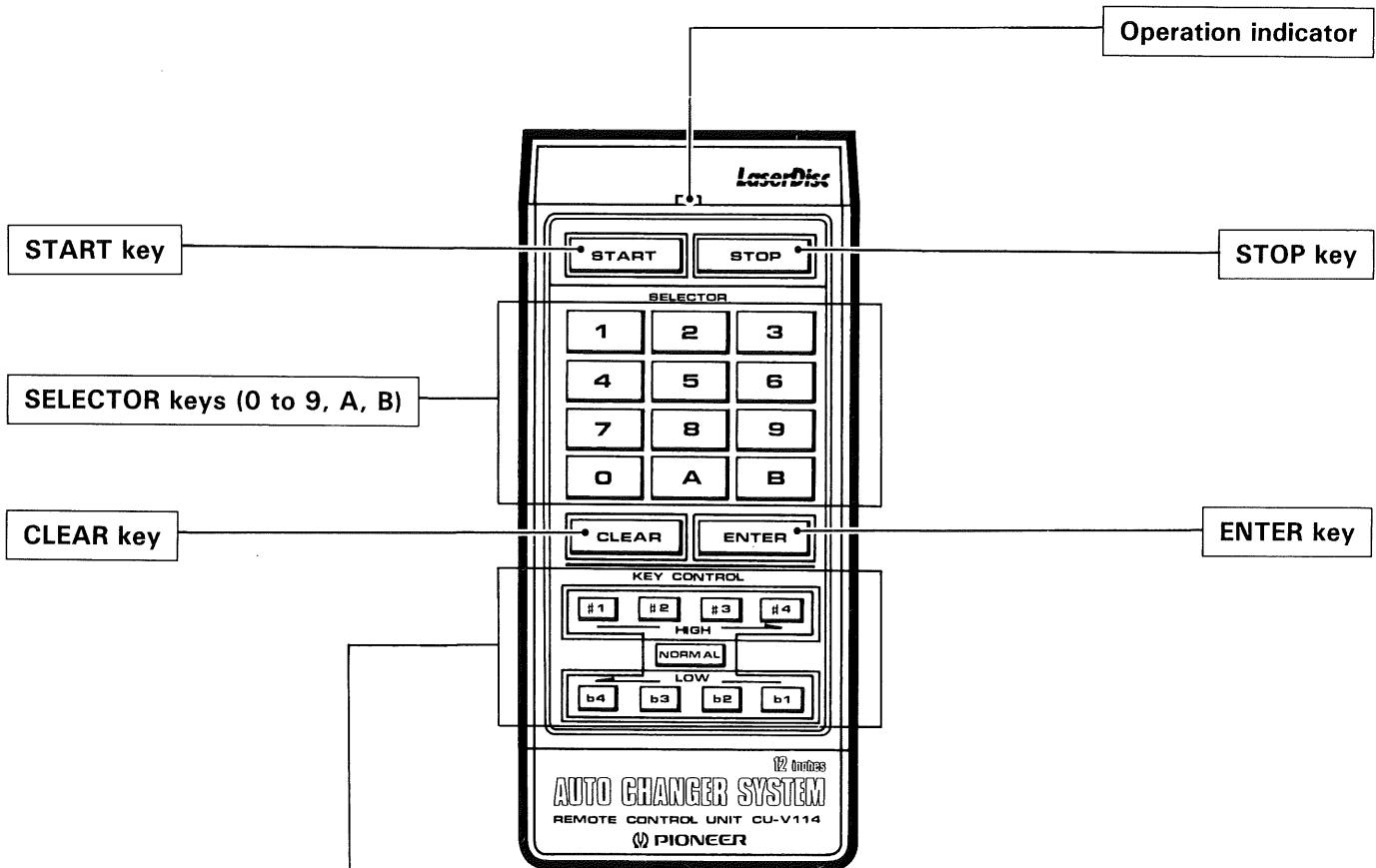
 Depressed (BILL BOX MODE: OFF): The system operates without the BILL BOX (if the BILL BOX is connected, connect the audio/video output directly to the amplifier).

BGV AUDIO LEVEL control

Controls the BGV sound volume when a BGV disc is played. Rotate to the left to reduce sound volume; rotate to the right to increase sound volume. This control is not related to the audio level of the karaoke playback.

REMOTE CONTROL UNIT

The functions of the keys, other than the KEY CONTROL keys, are the same as for the keys on the CO-V300 main unit.



KEY CONTROL keys

Operates the integral KEY CONTROLLER in the SA-V210 if the KEY CONTROLLER terminal of the CO-V300 Videodisc AutoChanger is connected to the KEY CONTROL REMOTE CONTROL terminal of the SA-V210 stereo mixing amplifier.

#1 to #4 — Increases the pitch up to the four steps by the semitone.

NORMAL — Sets the standard key.

b 1 to b 4 — Decreases the pitch up to the four steps by the semitone.

(Auto Return Function)

The SA-V210 Auto Return function returns the previous song key to standard key each time a song ends.

This function is activated when the AUTO RETURN switch on the SA-V210 rear panel is ON.

9. SPECIFICATIONS

General

Power requirements	120 V AC, 50/60 Hz
Power consumption	21W
Weight (without package)	5.3kg (11 lb 11 oz)
Dimensions	420(W) × 348(D) × 120(H) mm 16-9/16(W) × 13-11/16(D) × 4-3/4(H) in
Operating temperature	+5°C to +35°C
Operating humidity	5% to 90%

Video input/output

INPUT terminal	RCA jack
OUTPUT terminal	RCA jack

Audio input/output

INPUT terminals	RCA jack
OUTPUT terminals	RCA jack

Other terminals

TO BILL BOX	8-pin DIN
TO KEY CONTROLLER (To amplifier KEY CONTROLLER REMOTE CONTROL jack)	13-pin DIN
TO AUTOCHANGER	25-pin D-sub

Functions

- BILL BOX mode ON/OFF switchable
- Program selection Up to eight songs
- Program change and cancellation Within 30 seconds from playback start
- START mode AUTO/MANUAL switchable, INTERRUPTION play available
- BGV mode VIDEO-AUDIO/VIDEO ONLY/OFF switchable

Accessories

- Key controller control cable 1
- Video cable 2
- Audio cable 1
- Remote control unit (CU-V114) 1
- Size "AA" battery (R6/UM-3) 2
- Operating instructions 1
- RF cable 1
- Antenna adapter (75/300 ohms → 75 ohms) 1

NOTE:

- Specifications and design subject to possible modifications without notice, due to improvement.

