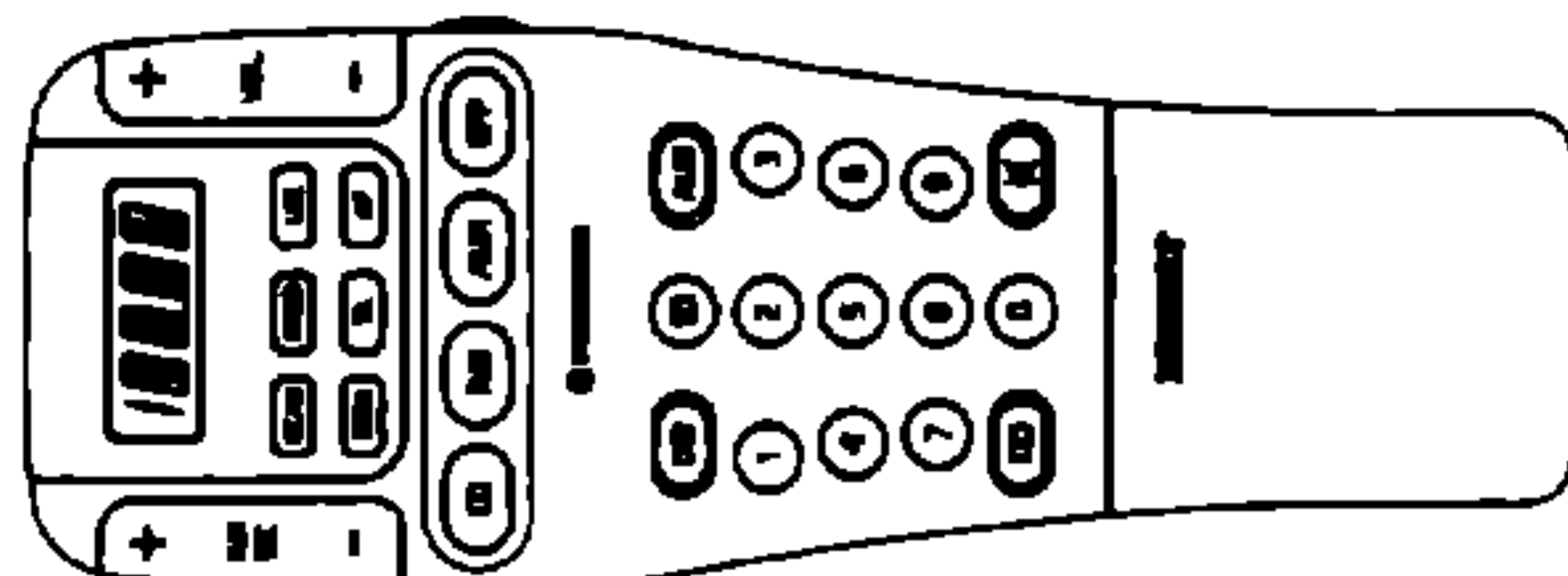


# Service Manual

**PIONEER**  
The Art of Entertainment  
**RENAULT**

CD-R151ZRN/X1B/WL



ORDER NO.  
**CRT1879**

REMOTE CONTROL UNIT

# CD-R151ZRN X1B/WL

# CD-R150ZRN X1B/WL

VEHICLE	DESTINATION	PRODUCED AFTER	RENAULT PART No.	ID No.	PIONEER MODEL No.
MATRA ESPACE	EUROPE	JULY 1996	6025 30 1089	—	CD-R151ZRN/X1B/WL
MATRA ESPACE	EUROPE	JULY 1996	6025 30 1086	—	CD-R150ZRN/X1B/WL

## CONTENTS

1. SPECIFICATIONS.....	2	5. ELECTRICAL PARTS LIST .....	5
2. CAR AUDIO SYSTEM.....	2	6. CIRCUIT DIAGRAM AND PATTERN .....	6
3. IC INFORMATION .....	3	7. EXPLODED VIEW AND PARTS LIST .....	12
4. LCD.....	4	8. PACKING METHOD .....	14

**PIONEER ELECTRONIC CORPORATION** 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan  
**PIONEER ELECTRONICS SERVICE INC.** P.O.Box 1760, Long Beach, CA 90801-1760 U.S.A.  
**PIONEER ELECTRONIC [EUROPE] N.V.** Haven 1087 Keetberglaan 1, 9120 Melsele, Belgium  
**PIONEER ELECTRONICS ASIACENTRE PTE.LTD.** 501 Orchard Road, #10-00, Lane Crawford Place, Singapore 0923

© PIONEER ELECTRONIC CORPORATION 1996

K-FFA. JULY 1996 Printed in Japan

# 1. SPECIFICATIONS

**General**

Power source.....3.0 V  
 Dimensions.....60 (W) x 169 (H) x 18 (D) mm  
 Weight.....150 g

# 2. CAR AUDIO SYSTEM

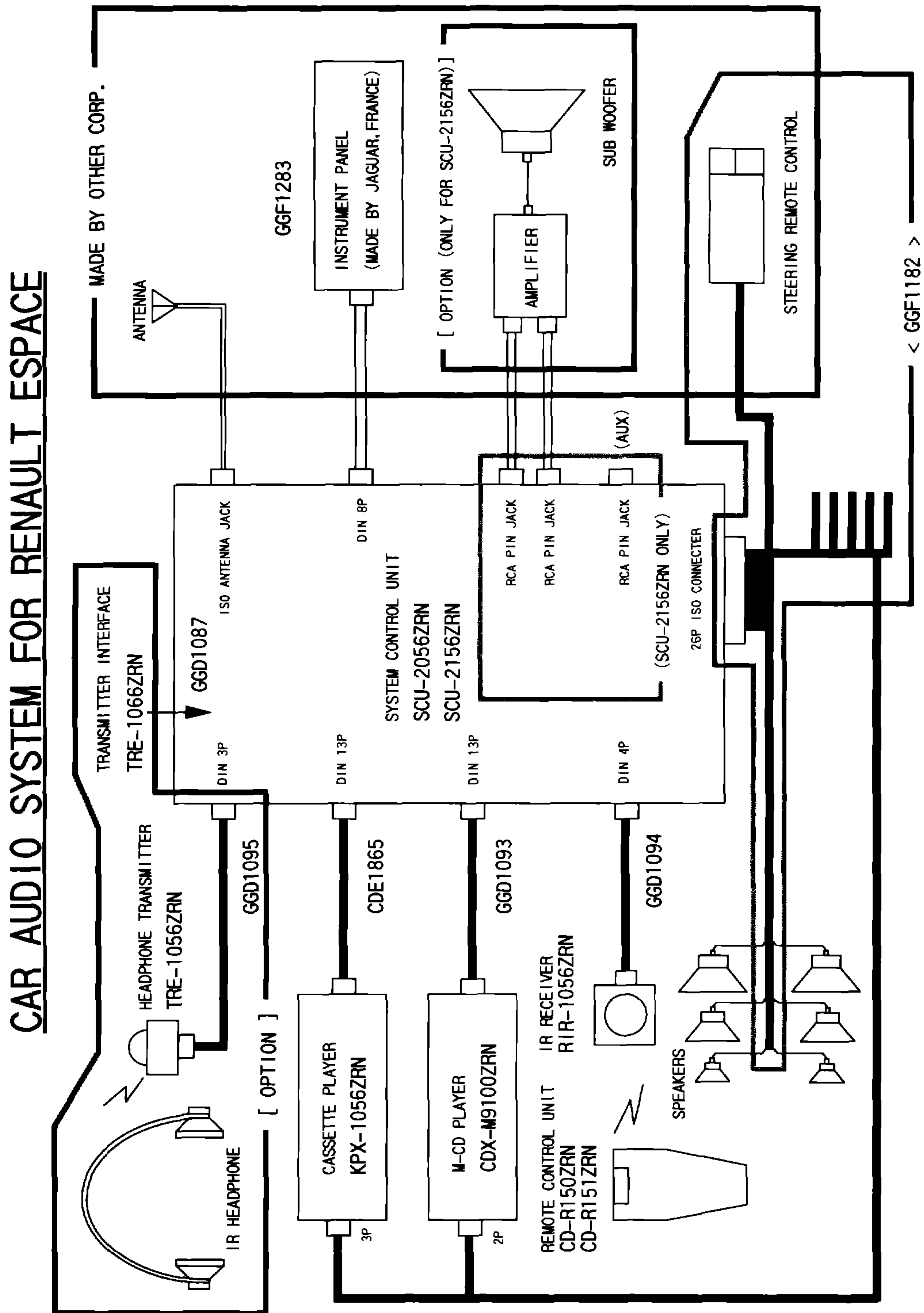


Fig. 1

### 3. IC INFORMATION

● Pin Functions(PD4494A)

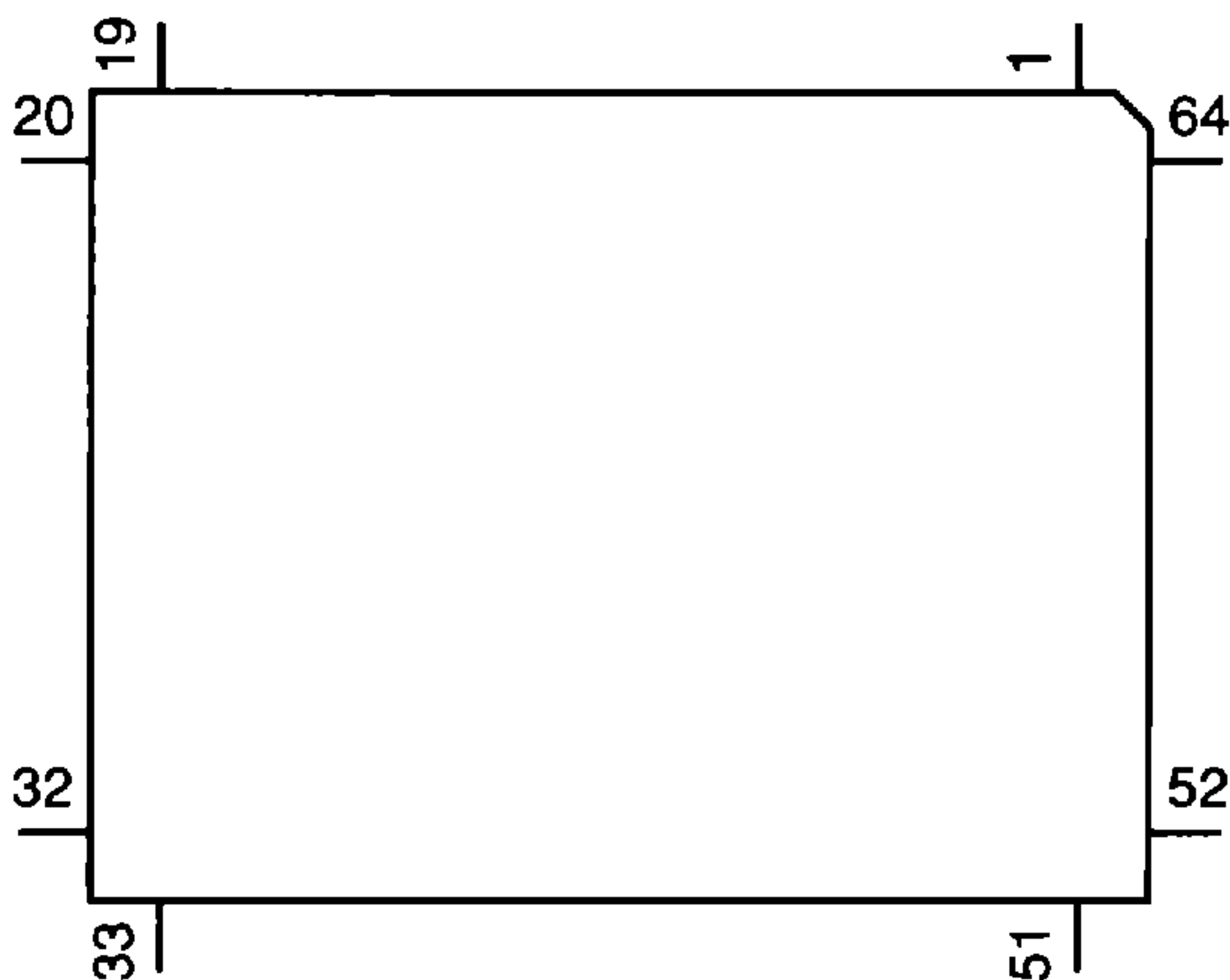
Pin No.	Pin Name	I/O	I/O Format	Function and Operation
1-25	LCD24-0	O	C	LCD segment signal output 24-0
26	GND			GND
27	BATIN			(Open)
28	BLTOUT	O	C	LCD back light output
29	ILLOUT	O	C	Illumination output
30	EW/US	I		Destination input
31	NC			(Open : H output)
32-35	KDT0-3	I		Key data input 0-3
36-43	KST0-7	O	N	Key strobe output 0-7
44	NC			(Open)
45	REMOUT	O	C	Remote controller transmission output
46	VDD			Power supply(+3.0V)
47	XIN			Main clock connection
48	XOUT			Main clock connection
49	RESET	I		Reset signal input
50	WDOUT	O	N	Error detection output
51	NC			(GND)
52	NC			(53 pin connection)
53	NC			(52 pin connection)
54	BATSENS			Battery sense
55	VLLCD			LCD driver reference voltage adjustment
56, 57	VLCD0, 1	O		LCD driver voltage output 0, 1
58	GND			GND
59	VLCD2	O		LCD driver voltage output 2
60	CAPL			To the capacitor for boosting the voltage
61	CAPH			To the capacitor for boosting the voltage
62, 63	COM0, 1	O	C	LCD common signal output 0, 1
64	LCD25	O	C	LCD segment signal output 25

Format	Meaning
C	C MOS
N	N channel open drain

\*PD4494A

IC's marked by\* are MOS type.

Be careful in handling them because they are very liable to be damaged by electrostatic induction.



4. LCD

● UAW1233(CD-R151ZRN/X1B/WL)

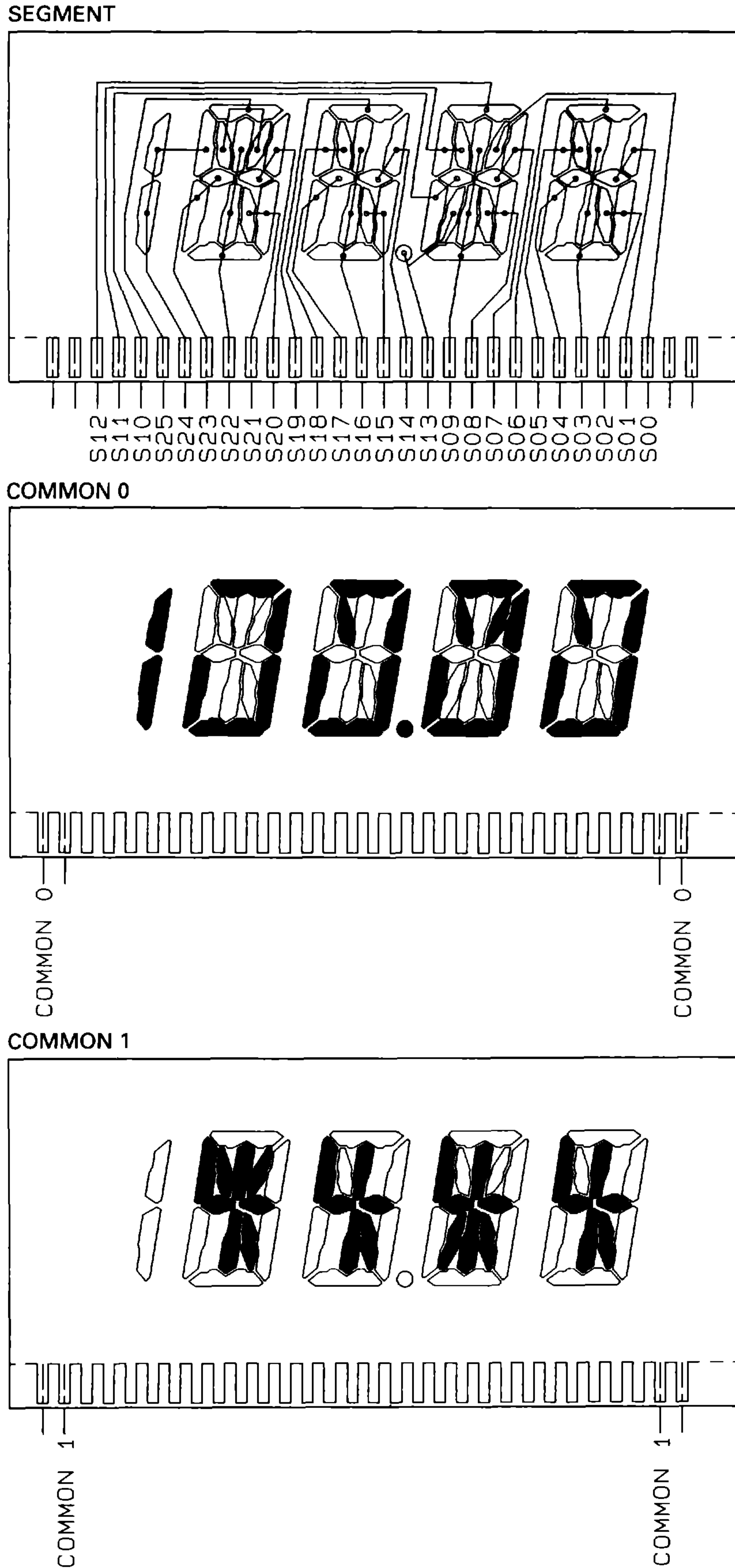


Fig. 2

## 5. ELECTRICAL PARTS LIST

**NOTE:**

- Parts whose parts numbers are omitted are subject to being not supplied.
- The part numbers shown below indicate chip components.

Chip Resistor

RS1/OSOOOJ,RS1/OOSOOOJ

Chip Capacitor (except for CQS.....)

CKS....., CCS....., CSZS.....

====Circuit Symbol & No. Part Name===== Part No.

====Circuit Symbol & No. Part Name===== Part No.

Remote Control Unit
Consists of
Upper P.C.Board
Lower P.C.Board

Remote Control Unit
Consists of
Upper P.C.Board
Lower P.C.Board

Unit Number : UWM-005(CD-R151ZRN/X1B/WL)  
Unit Name : Remote Control Unit

Unit Number : UWM-004(CD-R150ZRN/X1B/WL)  
Unit Name : Remote Control Unit

MISCELLANEOUS

MISCELLANEOUS

IC 901											PD4494A
Q 901											2SD1781K
Q 902											2SD1664
Q 903											DTA114EU
Q 904											2SD1949
D 902	903	904	905	907		LED					CL170DCD
D 908	909	910	912	913		LED					CL170DCD
D 920	921	923	927	928		LED					CL170DCD
D 922	925	939	940			LED					CL220D
D 924						LED					CL170DCD
D 929	930	931	932	942		LED					CL170DCD
D 936						LED					SIR-33ST
D 937						LED					SE303AC
D 943	946	947	950			LED					CL170DCD
X 901											Ceramic Resonator 4.000MHz
											CSS1068
S 930						Switch(ILL)					CSG1060
VR 901						Semi-fixed 1MΩ(B)					CCP1193
LCD 1						LCD					UAW1233

IC 901											PD4494A
Q 901											2SD1781K
Q 902											2SD1664
Q 903											DTA114EU
Q 904											2SD1949
D 911	912	914	915	916		LED					CL170DCD
D 920	921	923	924	927		LED					CL170DCD
D 928	929	930	931	932	943	950					LED
D 936											LED
D 937											LED
X 901											Ceramic Resonator 4.000MHz
S 930											Switch(ILL)
VR 901											Semi-fixed 1MΩ(B)
											CCP1193

RESISTORS

RESISTORS

R 901	967	968	969	970							RS1/10S102J
R 902											RS1/10S103J
R 909	910	912	913	942	952	953	954	956	957		RS1/10S331J
R 920	923	928	929								RS1/10S241J
R 921	930										RS1/10S101J
R 922											RS1/10S151J
R 924	925	927	931	950	951						RS1/10S151J
R 932											RS1/10S101J
R 933											RS1/10S5R6J
R 934											RS1/10S2R2J
R 935											RS1/10S182J
R 936											RS1/10S222J
R 945	946	949	997								RS1/10S473J
R 947											RS1/10S155J
R 948											RS1/10S474J
R 958	961	962	965	966							RS1/10S331J
R 999											RS1/10S684J

R 901	967	968	969	970							RS1/10S102J
R 902											RS1/10S103J
R 911	912	914	915	916	924	927	931	958			RS1/10S151J
R 920	923	928	929								RS1/10S241J
R 921	930	932									RS1/10S101J
R 933											RS1/10S5R6J
R 934											RS1/10S2R2J
R 935											RS1/10S182J
R 936											RS1/10S222J
R 945	946	949	997								RS1/10S473J
R 954											RS1/10S331J
R 999											RS1/10S684J

CAPACITORS

CAPACITORS

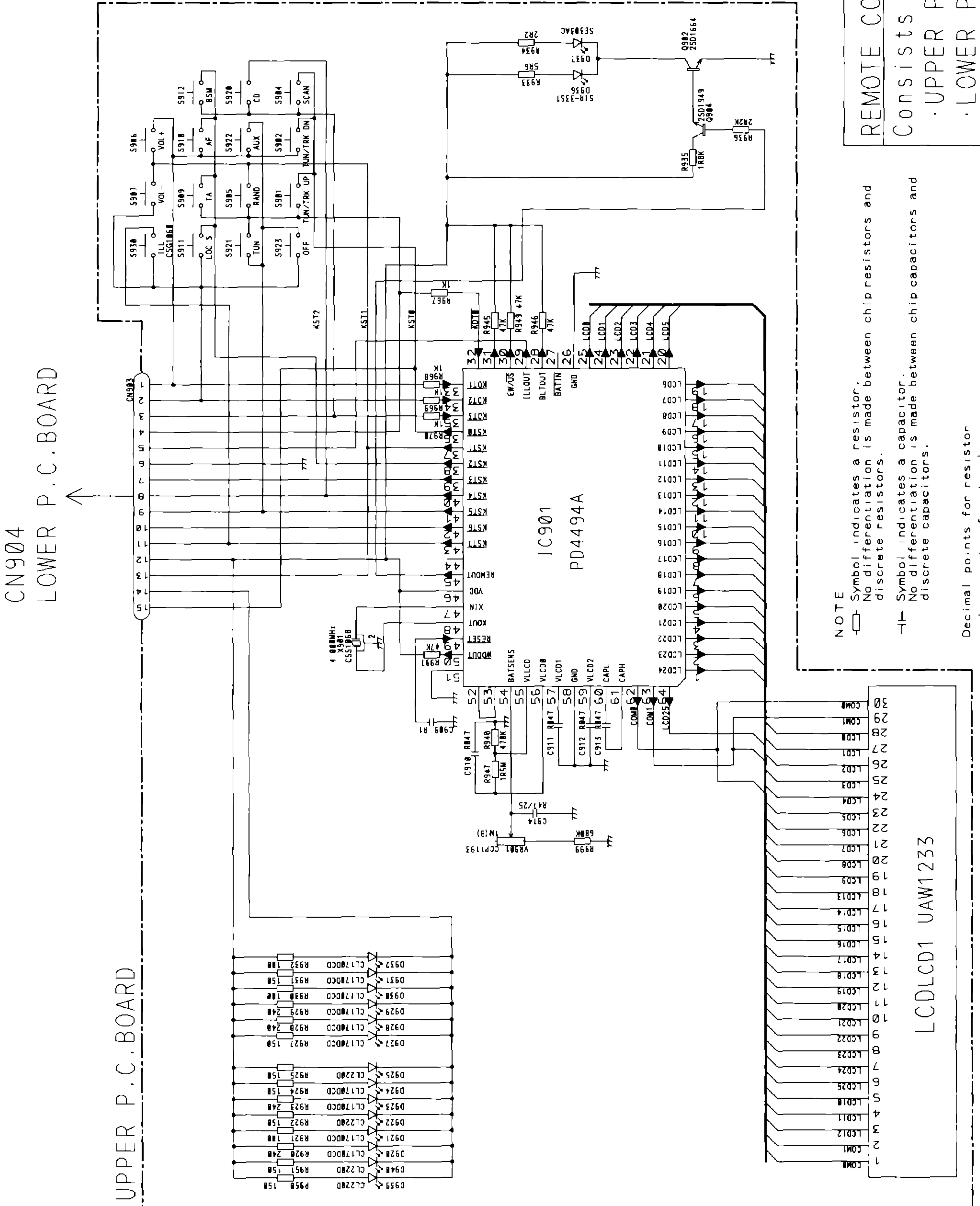
C 906											CEV470M6R3
C 909											CKSQYF104Z25
C 910	911	912	913								CKSQYB473K50
C 914											CSZSR47M25

C 906											CEV470M6R3
C 909											CKSQYF104Z25
C 910	911	912	913								CKSQYB473K50
C 914											CSZSR47M25

# 6. CIRCUIT DIAGRAM AND PATTERN

## 6.1 UPPER P.C. BOARD

### ● Circuit Diagram(CD-R151ZR/X1B/WL)

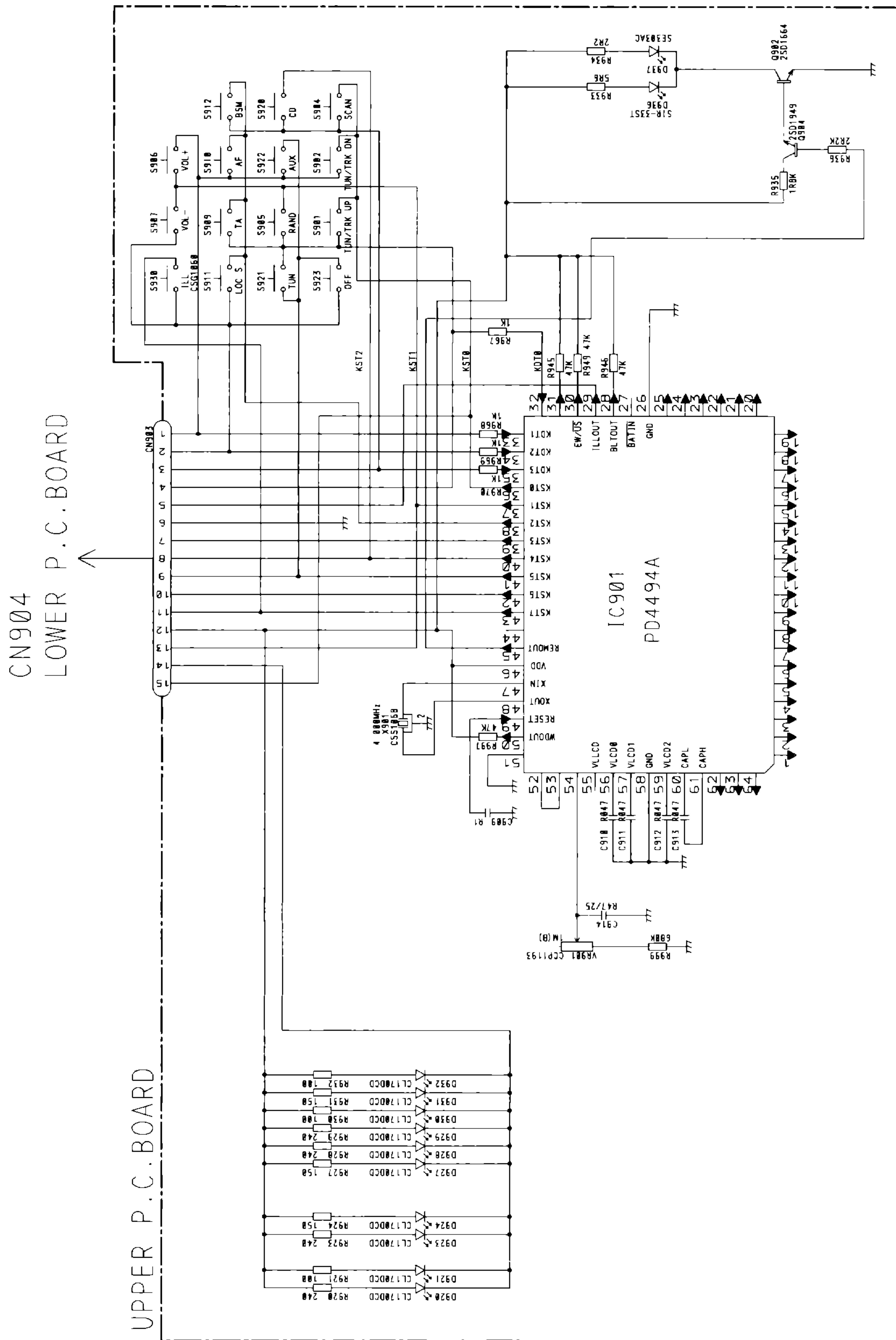


REMOTE CONTROL UNIT  
 Consists of  
 . UPPER P.C. BOARD  
 . LOWER P.C. BOARD

NOTE  
 Symbol indicates a resistor.  
 No differentiation is made between chip resistors and discrete resistors.  
 Symbol indicates a capacitor.  
 No differentiation is made between chip capacitors and discrete capacitors.  
 Decimal points for resistor and capacitor fixed values are expressed as:  
 2.2→R22  
 0.022→R022

Fig. 3

● Circuit Diagram(CD-R150ZR/X1B/WL)



REMOTE CONTROL UNIT  
 Consists of  
 · UPPER P.C. BOARD  
 · LOWER P.C. BOARD

Fig. 4

● Connection Diagram

UPPER P.C.BOARD

IC.0

Q902

Q904

IC901

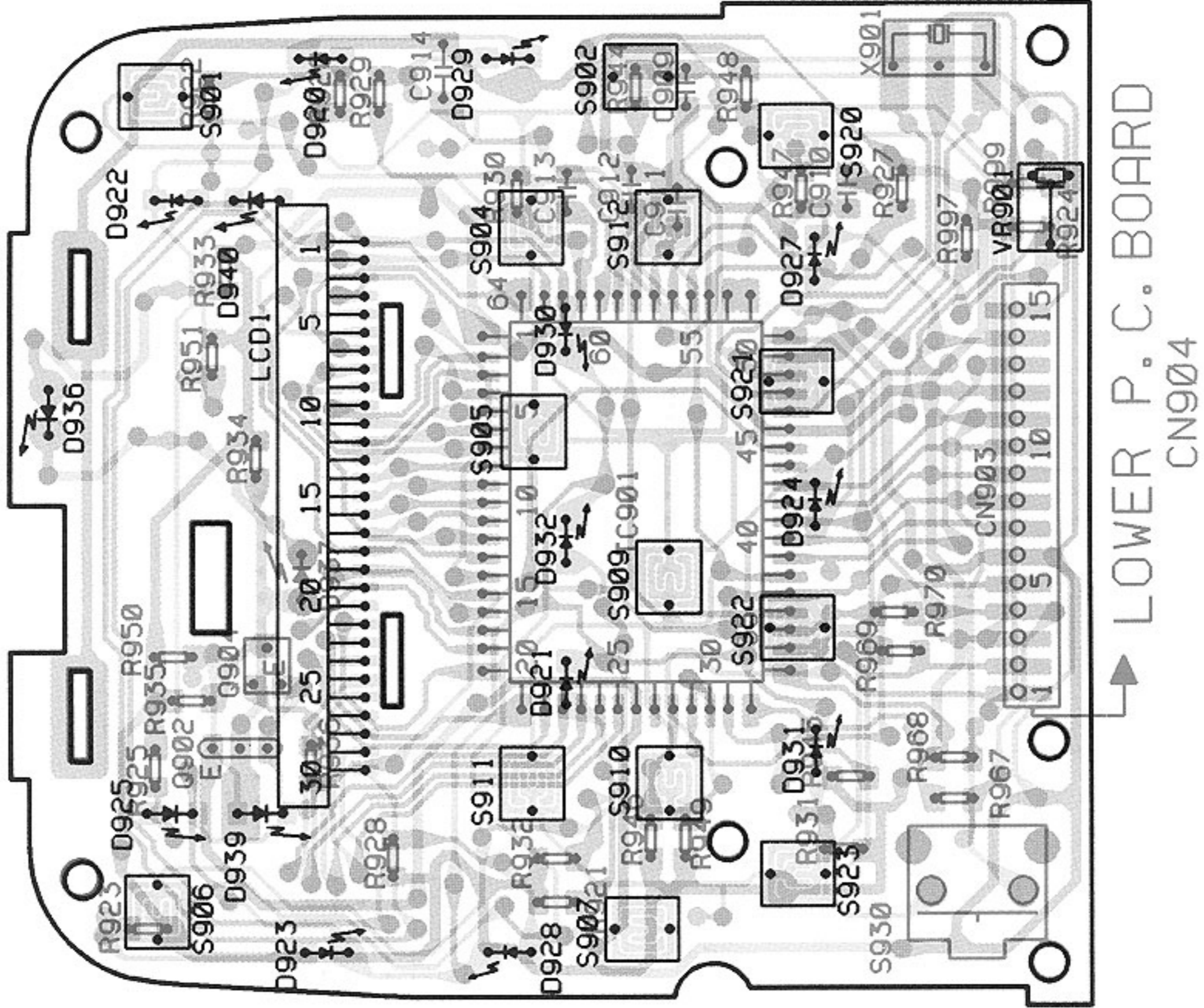


Fig. 5

**NOTE:**

The parts mounted on this PCB include all necessary parts for several destinations.  
For further information for respective destinations, be sure to check with the schematic diagram.



## 6.2 LOWER P.C.BOARD

### ● Connection Diagram

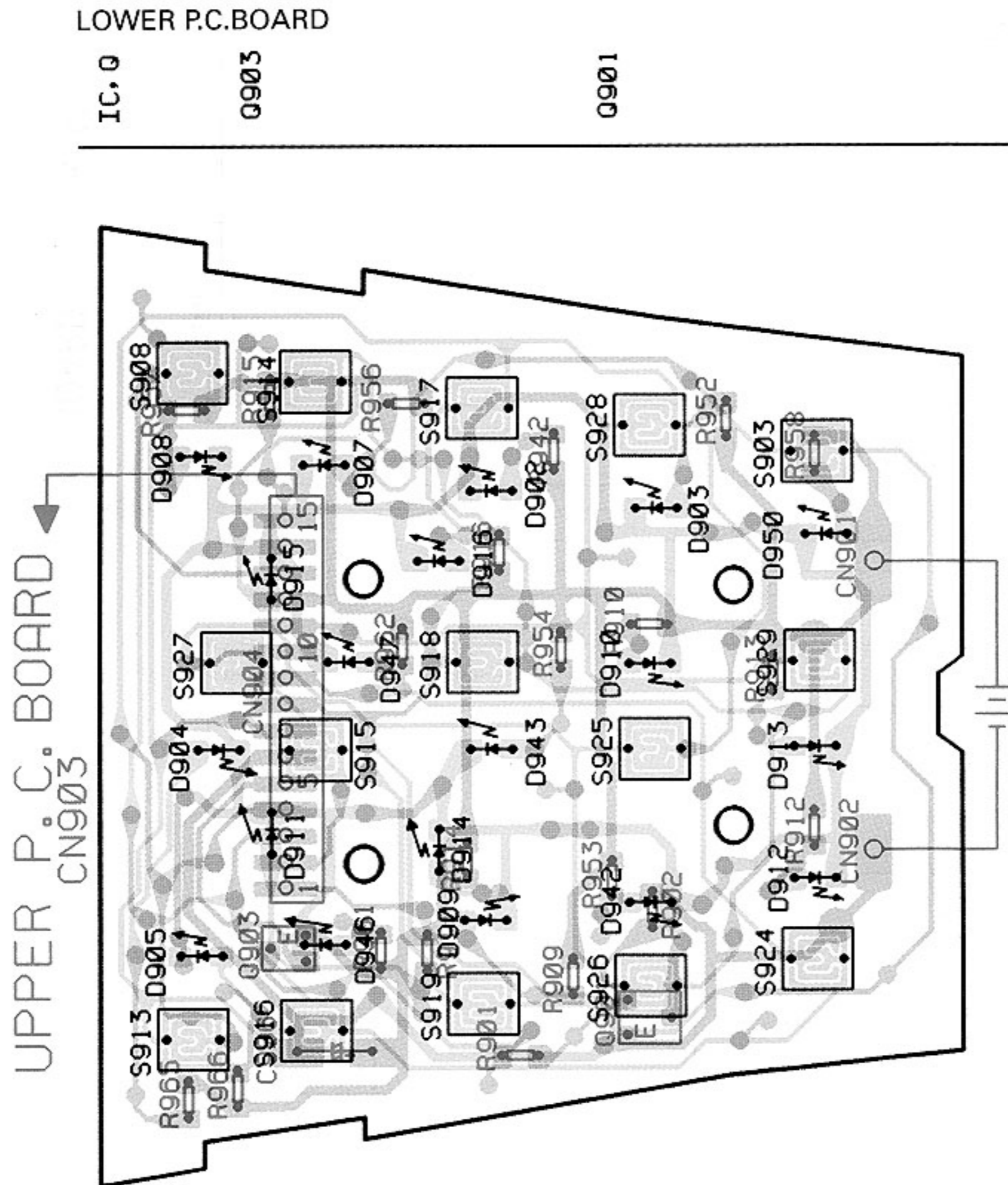


Fig. 6

**NOTE:**

The parts mounted on this PCB include all necessary parts for several destinations.  
For further information for respective destinations, be sure to check with the schematic diagram.

● Circuit Diagram(CD-R151ZRN/X1B/WL)

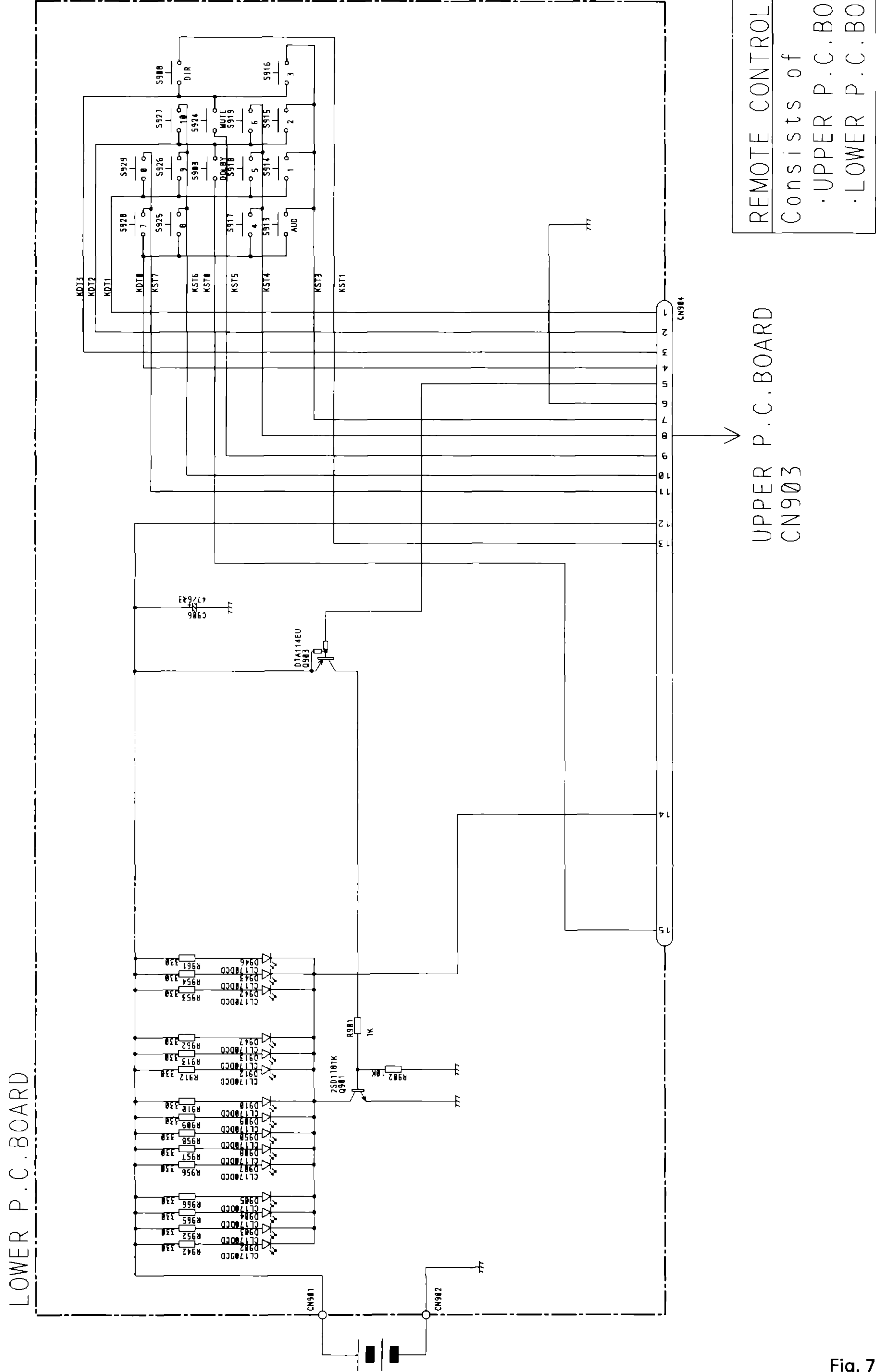
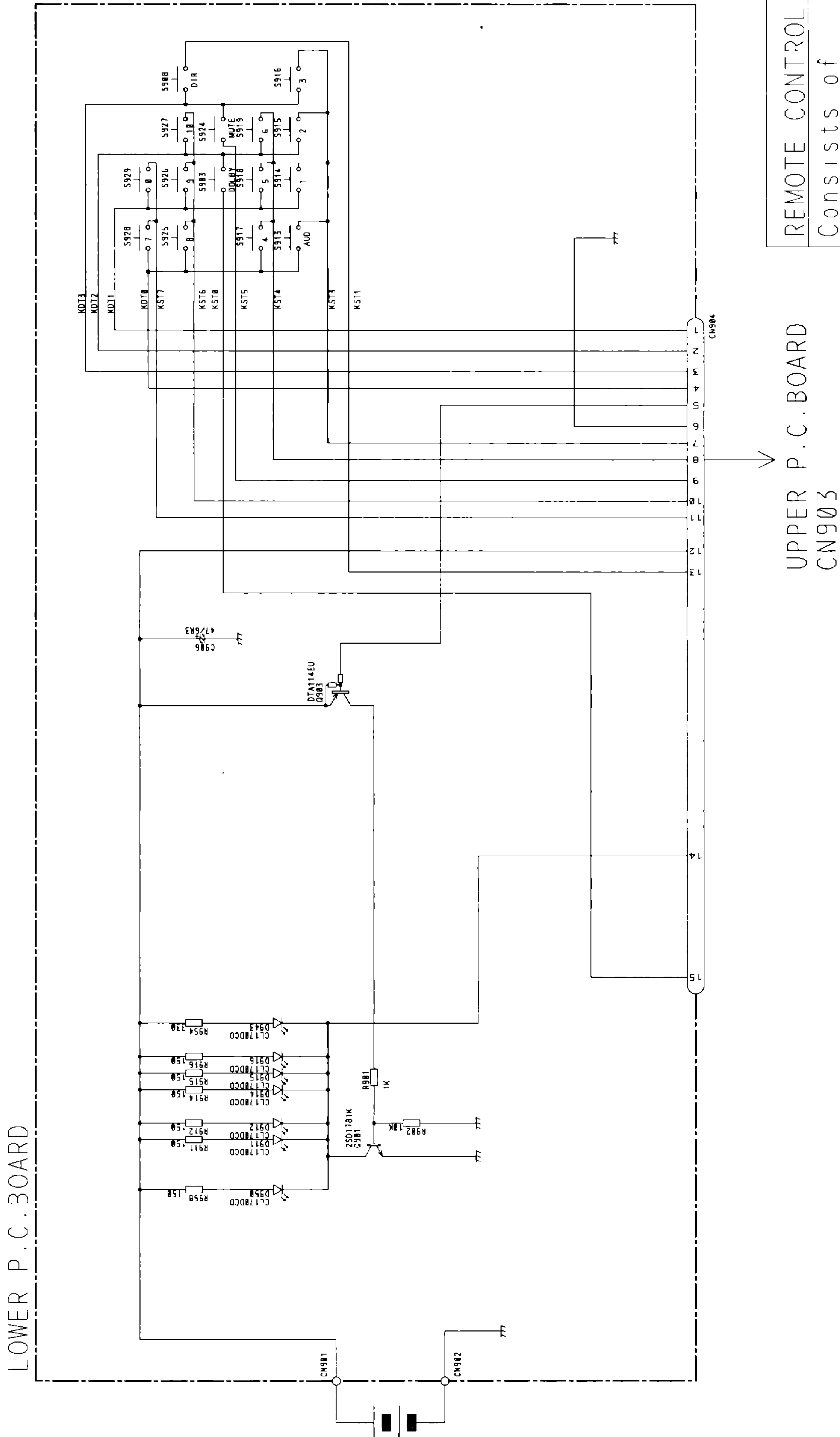


Fig. 7

● Circuit Diagram(CD-R150ZRN/X1B/WL)



REMOTE CONTROL UNIT  
 Consists of  
 · UPPER P.C. BOARD  
 · LOWER P.C. BOARD

UPPER P.C. BOARD  
 CN903

Fig. 8 11

7. EXPLODED VIEW AND PARTS LIST

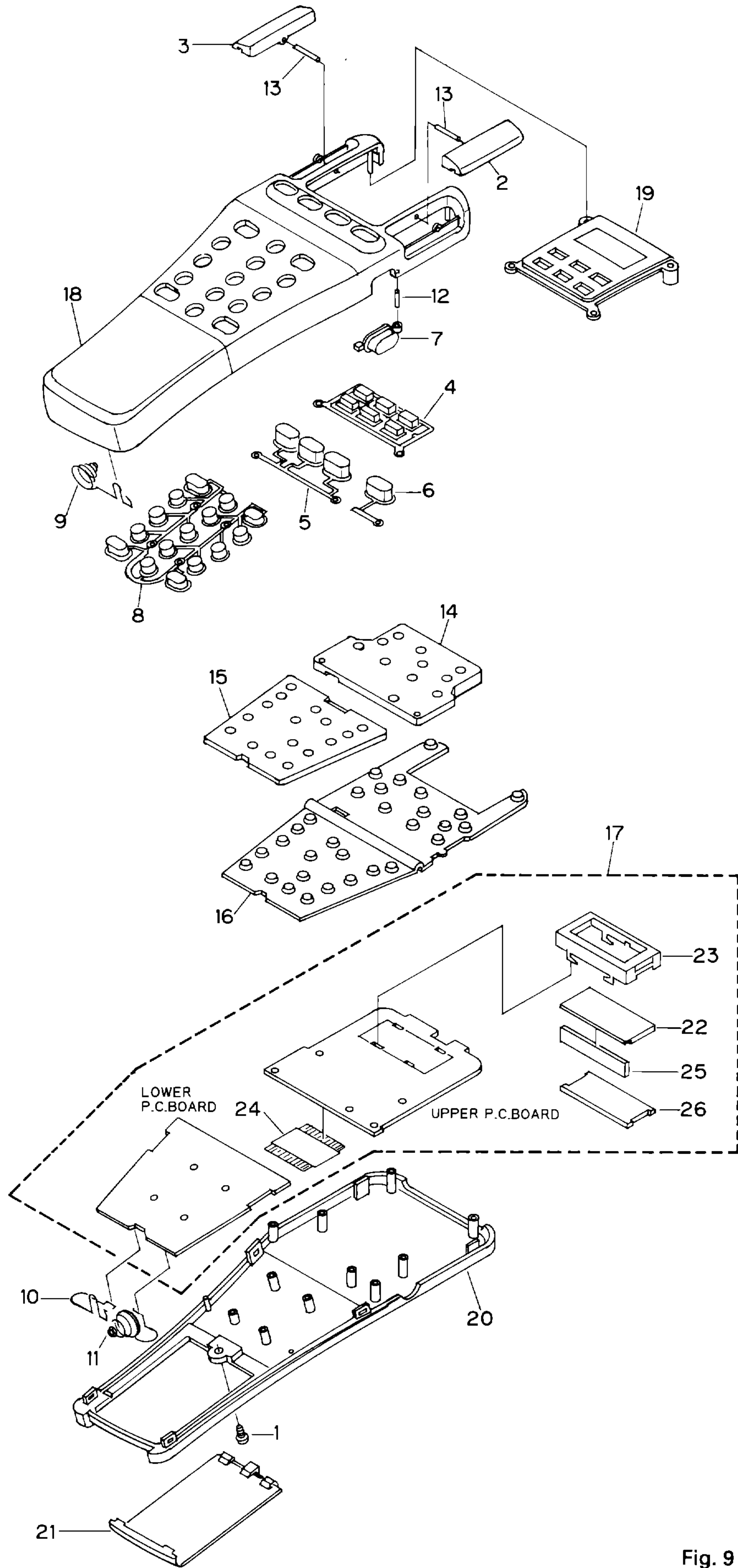


Fig. 9

**NOTE:**

● Parts marked by “ \* ” are generally unavailable because they are not in our Master Spare Parts List.

● **Parts List**

Mark No. Description	CD-R151ZRN/X1B/WL	CD-R150ZRN/X1B/WL
	Part No.	Part No.
1 Screw	BUZ20P060FMC	BUZ20P060FMC
2 Button	UAC-013	UAC-013
3 Button	UAC-014	UAC-014
4 Button	UAC-015	UAC-020
5 Button	UAC-016	UAC-021
6 Button	UAC-017	UAC-017
7 Button	UAC-018	UAC-018
8 Button	UAC-019	UAC-022
9 Spring	UBH-003	UBH-003
10 Spring	UBH-004	UBH-004
11 Spring	UBH-005	UBH-005
12 Shaft	UBH-006	UBH-006
13 Shaft	UBH-007	UBH-007
14 Upper Lens	UNV-003	UNV-003
15 Lower Lens	UNV-004	UNV-004
16 Switch	UNV-005	UNV-005
17 Remote Control Unit	UWM-005	UWM-004
18 Upper Case	UNS-017	UNS-021
19 Cover	UNS-028	UNS-022
20 Lower Case	UNS-018	UNS-018
21 Battery Cover	UNS-019	UNS-019
22 LCD(LCD1)	UAW1233	.....
* 23 LCD Holder	UNC-003	.....
* 24 P.C.Board(CN903)	UNP-003	UNP-003
* 25 Cover	UNV-006	.....
* 26 LCD Lens	UNV-007	.....

## **8. PACKING METHOD**

### **● Parts List**

<b>Mark No.</b>	<b>Description</b>	<b>Part No.</b>
* 1	Sheet	UEG-008
2	Battery	UEX-001
* 3	Contain Box	UHD-021
* 4	Board	UHW-004