

CD RECEIVER

KDC-2022/V KDC-202MR KDC-4023 SERVICE MANUAL

KENWOOD

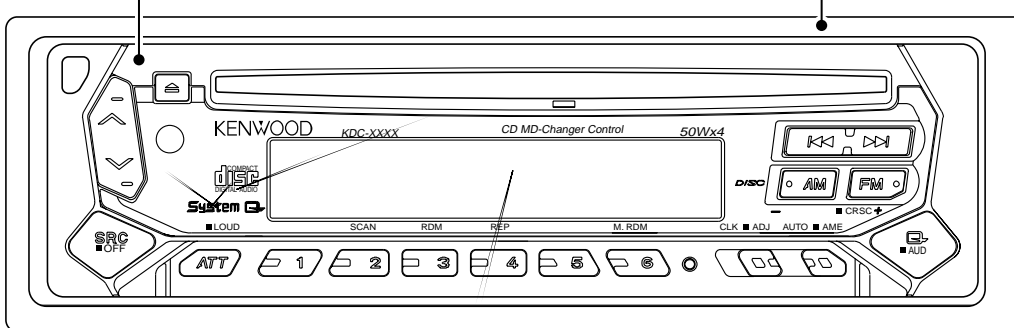
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B53-0003-00 (N) 1724

CD mechanism operation description is not in this service manual.
Please, refer to service manual X92-4030-0x (B51-7867-00).

CD mechanism extension cord : W05-0618-00

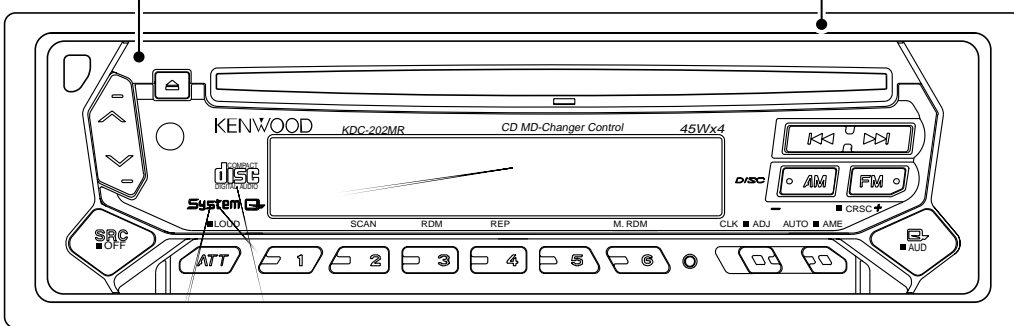
Panel assy
(A64-2864-02): KDC-2022V
(A64-2865-02): KDC-2022
(A64-2871-02): KDC-4023

Escutcheon
(B07-3022-02): KDC-4023
(B07-3060-02): KDC-2022/V

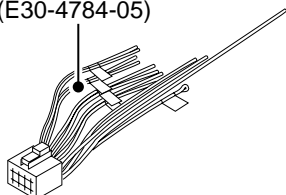


Panel assy
(A64-2866-02): KDC-202MR

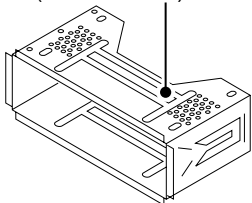
Escutcheon
(B07-3022-02): KDC-202MR



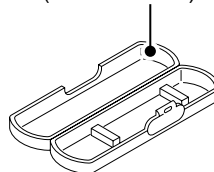
DC cord
(E30-4784-05)



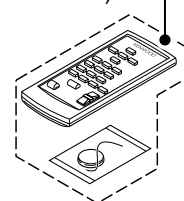
Mounting hardware assy
(J21-9716-03)



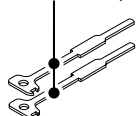
Plastic cabinet assy
(A02-1486-13)



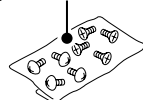
※ Remote controller assy
(A70-2025-05)



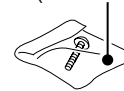
Lever
(D10-4589-04)x2



Screw set
(N99-1719-05)



Screw set ※
(N99-1610-15)

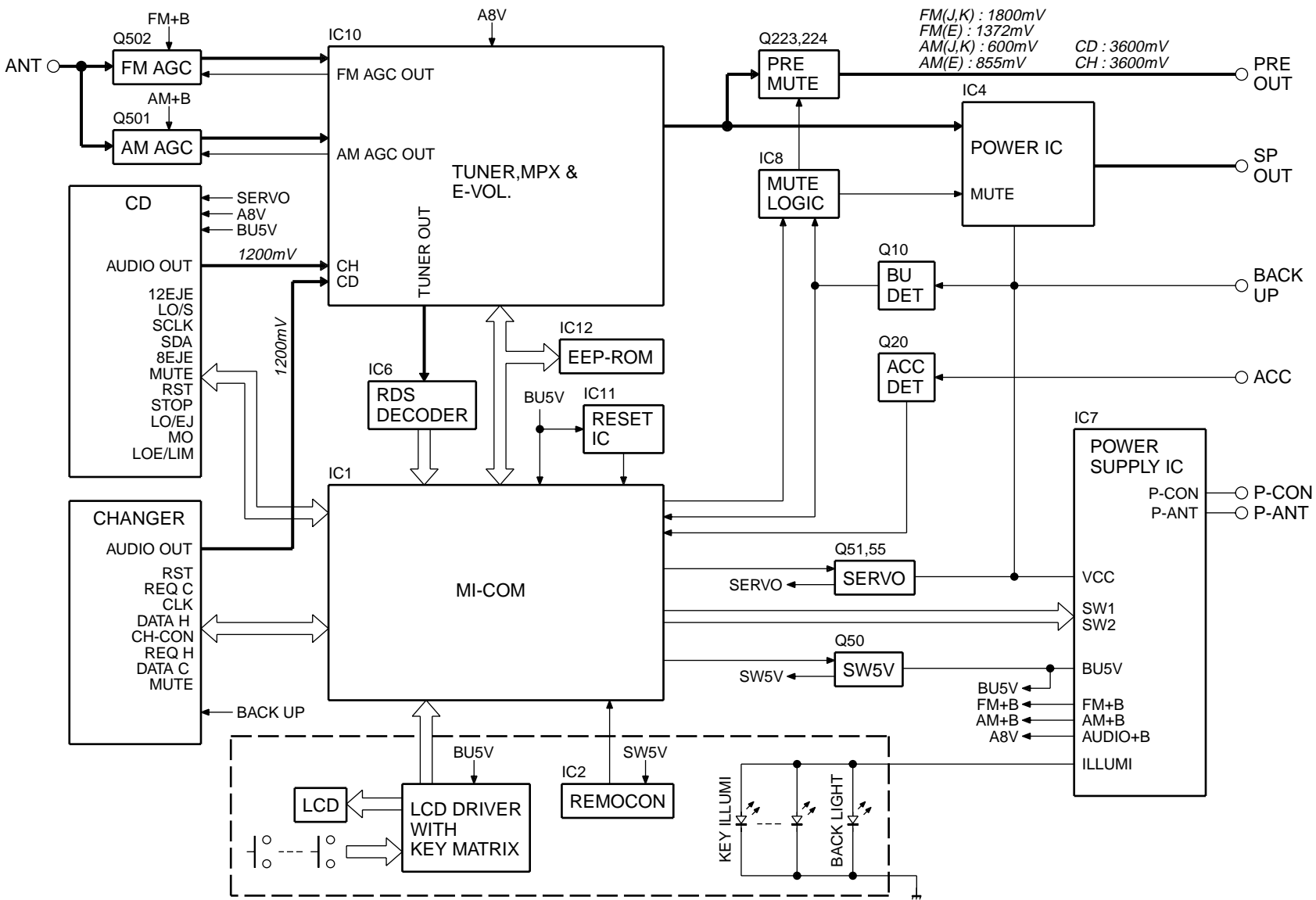


※ Depends on model. Refer to the parts list



KDC-2022/V/202MR/4023

BLOCK DIAGRAM



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COMPONENTS DESCRIPTION

● SWITCH UNIT (X16-1460-1x/2370-10)

Ref.No.	Application/Functions	Operation/Condition/Compatibility
IC1	LCD driver & key matrix	
IC2	Remote Sencer	
Q1	Key scan start	When Q1 base goes Lo, key scan start.

● ELECTRIC UNIT (X25-9600-xx)

Ref.No.	Application/Functions	Operation/Condition/Compatibility
IC1	System control μ -com	System μ -com
IC4	Power amplifire	E-Vol output encoder power amplification for speaker.
IC7	Power supply (Multi AVR)	-
IC8	MUTE Logic	When a pin 1, 2, or 13 is "H", MUTE turns on When a pin 3, 4, or 5 is "H", P-AMP mute turns ON. Changer is RESET when a pin 9, 10, or 11 is "L".
IC10	Tuner & E-Vol.	FM/AM tuner & stereo decoder & E-Vol.
IC11	Power on reset	When B.U. 5V voltage is less than 3.5V, power reset.
IC12	E2P-ROM	Writing and read-out of adjustment data for a tuner
Q10	B.U. detector	BU on (base "H") : Collector "H"
Q20	A.C.C detector	ACC ON (base : "H") : Collector "L"
Q40	MUTE driver	Base "L" : Mute on (collector "L")
Q50	SW 5V	Base "L" : SW5V on
Q51	SERBO AVR control	Pin 2 "H" : Serbo on (pin 4 "H")
Q55	SERBO AVR	Base "H" : Serbo on
Q70	Surge detector	Base "H" : Surge detect
Q101	DSI driver	Base "H" : DSI on
Q102	PANEL 5V SW	Panel attch : PAN5V on
Q223,224	MUTE	Base "H" : Mute on
Q501	AM RF amplifire	Base "H" : Gain UP
Q502	FM RF amplifire	Gate "H" : Gain UP

● DAUGHTER UNIT (X89-2590-10)

Ref.No.	Application/Functions	Operation/Condition/Compatibility
Q221, 222	Audio mute SW	Audio preout is muted when the base goes "H".
Q225	Audio mute driver	Mute driver for audio mute SW.

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MICROCOMPUTER'S TERMINAL DESCRIPTION

● SYSTEM MICROCOMPUTER uPD780058GC499 (X25 : IC1)

Pin No.	Name	I/O	Description	Processing Operation
1	TDF DET	I	Panel detection	H:Panel detached L:Panel attached
2	8EJE SW	I		H:Eject is completed Except 8cm CD model:always output L
3	NC	O	Not used (out put L)	
4	Avss			
5	L-RST	O	LCD driver RESET	H:Panel detached L:RESET Δ3 normal H , Power off L When 7seg model,output L
6	L-CE	O	LCD driver selection	H>Select (panel communication) When panel attached,output L
7	AVREF1			
8	NC		Not used (connected to 9pin)	
9	IC10-DATA	I/O	IC10,E2PROM data communication	Δ3 non communication : H
10	IC10-CLK	O	IC10,E2PROM clock communication	Δ3 non communication : H
11	L-DATAL	I	Data input from the LCD driver	Non communication : H When panel detached : L Δ3 Pull down on X25 unit,Pull up on X16 unit
12	L-DATAS	O	Data output to the LCD driver	When panel detached , output L
13	L-CLK	O	Clock output to the LCD driver	When panel detached , output L
14	R-DATA	I	Data input from the RDS	Except RDS model : output L
15	R-QUAL	I	Quality input from the RDS	Except RDS model : output L
16	CH-DATAC	I	Data input from the changer (new 5L)	Except changer model : output L
17	CH-DATAH	O	Data output to the changer (new 5L)	When non communication ,last data keeping Except changer model : output L
18	CH-CLK	I/O	Clock input/output with the Changer (new 5L)	Check the old and new Except changer model : output L
19	CH-REQH	O	Request output to the changer (new 5L)	L:Requeset Except changer model : output L
20	NC	O	Not used (output L)	
21	AFS	O	Noise detection time constant switching terminal	H:Normal L:FM/AM seek and AF search Δ3 (When tuner SRC auto zero , L)
22-24	NC	O	Not used (output L)	
25	CH-CONT	O	Changer control	H:Changer on L:Changer off Except changer model : output L
26	TYPE REF	O	5V lines output for destination setting	H:During destination reading
27	SD	I	Tuner SD input	H:Station detected
28	NC	O	Not used (output L)	
29	TYPE2	I	Destination type selection terminal 2	Refer to destination type list.
30	TYPE1	I	Destination type selection terminal 1	Refer to destination type list.
31	TYPE0	I	Destination type selection terminal 0	Refer to destination type list.
32	TUNER-TYPE1	I	Destination available/genuine model rool off	H:genuine model 1 L:available model
33	Vss1			
34	TUNER-TYPE0	I	Destination available/genuine model noise cancel	H:genuine model 0 L:available model
35	MUTE	O	Mute (E.Vol,Preset) control	H:mute on L:mute off Power off after that 15 second L
36	M-DATA	I/O	Data input/output with the CD mechanism	Δ3 non communication : H
37	M-CLK	O	Clock output to the CD mechanism	Δ3 non communication : H
38	ADJ	O	Tuner lines adjustment	When adjustment = H PS1-0,1=L PS1-2,2-0,1=Hi-z IC10-DATA,CLK=Hi-z
39	P-MUTE	O	Power IC mute control	H:mute off L:mute on Power off after that 15 second H
40	SVR	O	Power IC servo control	H:When momentary power down detected L:Nomal
41	P-STBY	O	Power IC standby control	H:Power IC ON L:Power IC OFF
42	SW5V	O	SW 5V control	H:SW5V OFF L:SW5V ON Power off after that 10 second H

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MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Name	I/O	Description	Processing Operation																																				
43	B.U-DET	I	Back up detection terminal	H:power down L:B.U. on																																				
44	ACC-DET	I	ACC detection terminal	H:ACC OFF L:ACC ON																																				
45	PS1-0	O	Power supply IC SW1 control 0 Audio 8V,P-CON	<table border="1"> <thead> <tr> <th colspan="3">BA4911 SW1</th> <th colspan="3">Power supply IC output</th> </tr> <tr> <th>PS1-2</th> <th>PS1-1</th> <th>PS1-0</th> <th>A8V</th> <th>P-CON</th> <th>P-ANT</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>L</td> <td>L</td> <td colspan="3">STANBY</td> </tr> <tr> <td>L</td> <td>L(H)</td> <td>H(L)</td> <td>ON</td> <td>OFF</td> <td>OFF</td> </tr> <tr> <td>L</td> <td>H</td> <td>H</td> <td>ON</td> <td>ON</td> <td>OFF</td> </tr> <tr> <td>H</td> <td>H</td> <td>H</td> <td>ON</td> <td>ON</td> <td>ON</td> </tr> </tbody> </table>	BA4911 SW1			Power supply IC output			PS1-2	PS1-1	PS1-0	A8V	P-CON	P-ANT	L	L	L	STANBY			L	L(H)	H(L)	ON	OFF	OFF	L	H	H	ON	ON	OFF	H	H	H	ON	ON	ON
BA4911 SW1			Power supply IC output																																					
PS1-2	PS1-1	PS1-0	A8V	P-CON	P-ANT																																			
L	L	L	STANBY																																					
L	L(H)	H(L)	ON	OFF	OFF																																			
L	H	H	ON	ON	OFF																																			
H	H	H	ON	ON	ON																																			
46	PS1-1	O	Power supply IC SW1 control 1 Audio 8V,P-CON																																					
47	PS1-2	O	Power supply IC SW1 control 2 P-ANT																																					
48	PS2-0	O	Power supply IC SW2 control 0 ILL,FM,AM	<table border="1"> <thead> <tr> <th colspan="2">BA4911 SW2</th> <th colspan="3">Power supply IC output</th> </tr> <tr> <th>PS2-1</th> <th>PS2-0</th> <th>ILLUMI</th> <th>FM</th> <th>AM</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>L</td> <td colspan="3">STANBY</td> </tr> <tr> <td>L(H)</td> <td>H(L)</td> <td>ON</td> <td>ON</td> <td>OFF</td> </tr> <tr> <td>H</td> <td>H</td> <td>ON</td> <td>OFF</td> <td>ON</td> </tr> </tbody> </table>	BA4911 SW2		Power supply IC output			PS2-1	PS2-0	ILLUMI	FM	AM	L	L	STANBY			L(H)	H(L)	ON	ON	OFF	H	H	ON	OFF	ON											
BA4911 SW2		Power supply IC output																																						
PS2-1	PS2-0	ILLUMI	FM	AM																																				
L	L	STANBY																																						
L(H)	H(L)	ON	ON	OFF																																				
H	H	ON	OFF	ON																																				
49	PS2-1	O	Power supply IC SW2 control 1 ILL,FM,AM																																					
50	BEEP		BEEP																																					
51	DSI	O	DSI control	H:Light on L:Light off When panel attached,output L When panel detached,flashing at the panel (H/L) FIX model is output L																																				
52	NC	O	Not used (out put L)																																					
53	NC	O	Not used (out put L)																																					
54	LOE/LIM SW	I	CD mechanism down&limit detection	H:Chucking detection L:Normal																																				
55	MO SW	O	CD mechanism loading motor control output	H:Loading,Eject,Break L:Play																																				
56	LO/EJ	I/O	CD mechanism loading/Eject switching terminal	H:Eject L:Loading																																				
57	M-STOP	O	Stop output to the CD mechanism	H:Play L:Stop																																				
58	M-RST	O	Reset output to the CD mechanism	H:Normal L:CD mechanism reset																																				
59	M-MUTE	I	Mute input from the CD mechanism	H:mute off L:mute on																																				
60	RESET		Reset input from the System microcomputer																																					
61	REMO	I	Remote control input																																					
62	R-CLK	I	RDS clock input	Except RDS model : output L																																				
63	CH-REQC	I	Request input from the changer (new 5L)	H:Changer detection L:Request Except Changer model : output L																																				
64	LOS SW	I	CD mechanism loading's switch detected	H:No disc L:DISK IN(Loading Start)																																				
65	KEY-REQ	I	Key input detected (11pin L connected to the DATA L)	H:Key no input L:Key input (edge key data reading start)																																				
66	12EJE SW	I	12cm disc detected	L:12cm disc																																				
67	Vss0																																							
68	VDD1																																							
69	X2		Δ 3 MAIN X'tal oscillating circuit	Δ 3 4.19MHz X'tal connection																																				
70	X1		Δ 3 MAIN X'tal oscillating circuit	Δ 3 4.19MHz X'tal connection																																				
71	IC		TEST																																					
72	XT2		Not used	OPEN																																				
73	XT1																																							
74	VDD0		VDD	Connected to VDD																																				
75	AVREF0		A/D converter reference voltage control output, connection to the 80pin AVCONT																																					
76	S-METER	I	S-meter input																																					
77	NOISE	I	FM noise detection input	Δ 3																																				
78	PHONE	I	2way mute	2.5V or greater:NAVI MUTE 1.0V or less:TEL MUTE Except phone mute model : output L																																				
79	NC	O	Not used (out put L)																																					
80	AVCONT	O	A/D converter standard voltage control output	H:During A/D converter active same timing with PON																																				

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MICROCOMPUTER'S TERMINAL DESCRIPTION

● MECHANISM MICROCOMPUTER MN6627771KP (X32 : IC2)

Pin No.	Name	I/O	Description	Processing Operation
1	TVD	O	Traverse driver output (PWM output)	
2	SPL	O	Spindle motor drive output (PWM output)	
3	PC	O	Spindle motor ON output	L:ON H:OFF (default)
4	PWM	O	multi-purpose PWM output	It's possible to setup the TOSF2
5	TBAL	O	Tracking balance adjust output (PWM output)	
6	FBAL	O	Focus balance adjust output (PWM output)	
7	NRFDET	I	RF detection signal input	L:detected
8	OFT	I	Off-track signal input	H:detected
9	BDO	I	Drop out signal input	H:detected
10	LDON	O	Laser on signal output H:ON	When command FO on,LDON is H
11	DSL	O	DSL balance output	
12	DVDD1	-	Power supply for digital circuit	
13	DVSS1	-	Ground lines for digital circuit	
14	AVSS2	-	Ground lines for analog circuit	For DSL,PLL and AD
15	DSL	I/O	Loop filter terminal for DSL	The bias of ARF output terminal in one
16	ARF	I	RF signal input	
17	RFSW	I	When DSL circuit,constant switch terminal	
18	PLL	I/O	Loop filter terminal for PLL	
19	PLL2	I/O	Loop filter characteristic switching terminal for PLL	
20	IREF	I	Standard voltage input terminal	
21	RFENV	I	RF envelope signal input	Analog input
22	TRCRS	I	Track cross signal input	Analog input
23	TE	I	Tracking error signal input	Analog input
24	FE	I	Focusing error signal input	Analog input
25	AVDD2	-	Power supply for analog circuit	For DSL,PLL and AD
26	AVSS1	-	Ground lines for analog circuit	For audio output (Lch and Rch in one)
27	OUTR	O	Rch audio output	
28	AVDD1	-	Power supply for analog circuit	For audio output (Lch and Rch in one)
29	OUTL	O	Lch audio output	
30	DVSS3	-	Ground lines for digital circuit	
31	CSEL	I	Oscillation frequency specification terminal	H:33.8488MHz L:16.9344MHz
32	NC	O	Not used	
33	ASEL	I	Audio output polarity switching terminal	L:Reverse H:Non reverse
34	MSEL0	I	Destination type selection port (set 2bit)	Order "MSEL 0" and "MSEL 1" Set up
35	MSEL1	I	Destination type selection port (set 2bit)	Order "MSEL 0" and "MSEL 1" Set up
36	ICRST	O	Reset control terminal for external DAC	
37	BCLK	O	Bit clock output for serial data	
38	LRCK	O	L/R identification signal output	
39	SRDATA	O	Serial data output	
40	VREFP	I	A/D converter standard power supply input	
41	HOT	I	Temperature protection detection terminal (AD input)	Over C5(h):on
42	8EJE_SW	I	8cm disc eject stop detection terminal	H:Stop
43	12EJE/SDET_SW	I	Judge the 8cm or 12cm disc	12cm disc stop detection terminal
44	LOE/LIM_SW	I	Pick-up inside detected	Loading end detection terminal
45	PCK	O	PLL extracted clock output,etc	
46	EFM	O	EFM signal output,etc	
47	SENSE	O	Optics servo status signal output,etc	
48	CLVS	O	Spindle servo phase synchronous signal output,etc	L:Normal operation H:Luff servo
49	DEMPH	O	Dephase detection signal output,etc	H:on
50	DVDD2	-	Power supply for digital circuit	
51	X1	I	Main clock input terminal	

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MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Name	I/O	Description	Processing Operation
52	X2	O	Main clock output terminal	
53	DVSS2	-	Ground lines for digital circuit	
54	XSUB1	I	When external DAC,external clock input terminal	
55	XSUB2	O		
56	TEST1	I	Test port 1	Normal operation is H fixed
57	TEST2	I	Test port 2	Normal operation is H fixed
58	NC	O	Not used	
59	VER/HOR	O	Put length or breadth switching motor terminal	H:Put length L:Put breadth
60	DRV_MUTE	O	Driver mute control terminal	L:MUTE ON H:MUTE OFF
61	/MUTE_L	O	Audio Lch MUTE output	L:MUTE
62	/MUTE_R	O	Audio Rch MUTE output	L:MUTE
63	/RST	I	LSI reset input terminal	H:Normal L:Reset
64	OCD_CLK	I	When OCD connected, clock input	
65	/MSTOP	I	Standby detection terminal	H:Normal L:Mecha stop
66	DATA	I/O	I2C bus data line (communication line with system computer)	At that time serial writer connected
67	SBIO	I	When connected to serial writer,data input terminal	
68	/CLK	I/O	I2C bus clock line (communication line with system computer)	At that time serial writer connected
69	TX	O	Digital audio interface signal output	
70	EQCNT	O	RF EQ switching terminal	L:x2 times H:x1 times
71	XSEL	I	During the external DAC connection	MCLK external input (H:input)
72	MCNT	I	CD mecha Loading/Eject control ON/OFF	L:OFF (HOST control) H:mechanism control
73	P-ON	O	Audio and servo origin power control terminal	L:power on H:power off
74	MOTOR	O	Loading/Eject control switching terminal	At that time LO/EJ is "H"
75	LO/EJ	O	Loading/Eject control terminal or output L	When 72pin (P82) is "L",output "L"
76	CD-RW	O	CD-RW control terminal	H:CD-RW L:normal
77	LDCNT	O	LD control terminal	Operation is same LDON as timing
78	DVDD3	-	Power supply for digital circuit	
79	FOD	O	Focus driver output (PWM output)	
80	TRD	O	Tracking driver output (PWM output)	

System mi-com Destination type list

	TYPE2	TYPE1	TYPE0	MODEL NAME
uPD780058GC499	L	L	L	KDC-2024SA/SYA, 2024SG/SYG
	L	L	H	KDC-2022, 2022V,202MR
	L	H	L	RY-391CD, RX-491CD
	L	H	H	KDC-4023, 2023, 3023
uPD780058GC501	L	L	H	KDC-122, 122S
	L	H	H	KDC-1023, 1023S
	H	L	H	KDC-222, 222S
uPD780058GC502	L	L	L	KDC-3024G/YG, 307G/YG
	L	H	H	KDC-3023R
	H	L	L	KDC-3024A/YA, 307A/YA
	H	L	H	KDC-4024/Y/V/YV
uPD780058GC503	L	L	L	KDC-2094YA/YG
H:	R135	R137	R139	
L:	R136	R138	R140	

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ADJUSTMENT

1. IC10 (TDA7513) -The Tuner adjustment method

- When IC10 and its circumference are fixed, according to the following order, it readjusts if needed.
- The adjustment item changes with parts to exchange. Please refer to "Parts vs Adjustment item table".

1-1. VCO Coil Adjustment -- Adjustment of Tuning Voltage

Voltage Check Point : Vt-Check Land
(PWB Side_B, around D506)

Adjustment Coil : L507 (VCO Coil)

The adjustment method : VCO coil is turned and adjusted according to the following tables.

TYPE	Mode	freq.	Voltage	Fig
E/M	AM	1611kHz	$5.5 \pm 0.1(V)$	(C)
K	AM	1700kHz	$5.8 \pm 0.1(V)$	(C)
J	FM	90.0MHz	$5.6 \pm 0.1(V)$	(C)
W(Wide Band)	FM	108.0MHz	$7.2 \pm 0.1(V)$	(C)

M : AM Adjustment

For Your Information : The frequency of SET is only set up by Pre-Set-Key in case this adjustment

1-2. Adjustment of 1st & 2nd-MIX Coil

Voltage Check Point : S_METER-Check Land
(PWB Side_B, around W572)

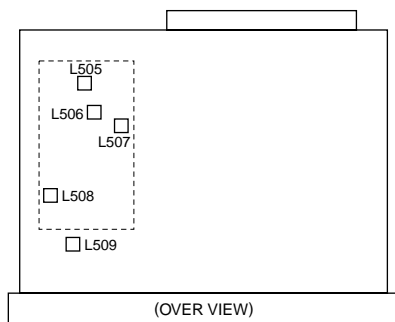
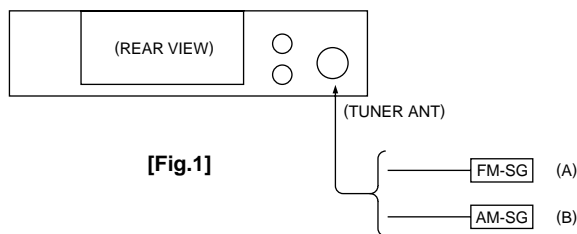
Adjustment Coil : 1stIFT = L508 / 2ndIFT = L509

Setting of Signal Generator : Refer to the following tables

TYPE	MODE	freq.	Mod.	ANT Input	Fig
K	AM	1000kHz	OFF	35dBuEMF	(B),(C)
E,M,J,W	AM	999kHz	OFF	35dBuEMF	(B),(C)

①The appearance and the coil with which S-METER DC voltage serves as the maximum are turned and adjusted in the above-mentioned SG input.

②By the above-mentioned adjustment method, same adjustment is performed to both sides (1st&2nd MIX Coil).



[Fig.2]

1-3. Adjustment of FM_ANT&RF Coil

Voltage Check Point : S_METER-Check Land (PWB Side_B, around W572)

Adjustment Coil : ANT_Coil = L505
RF_Coil = L506

Setting of Signal Generator : Refer to the following tables.

TYPE	MODE	freq.	Mod.	ANT Input	Fig
E/M	FM	87.5MHz	OFF	5 or 11dBuEMF	(A),(C)
K	FM	87.9MHz	OFF	5 or 11dBuEMF	(A),(C)
J	FM	76.0MHz	OFF	5 or 11dBuEMF	(A),(C)
W(Wide Band)	FM	65.0MHz	OFF	5 or 11dBuEMF	(A),(C)

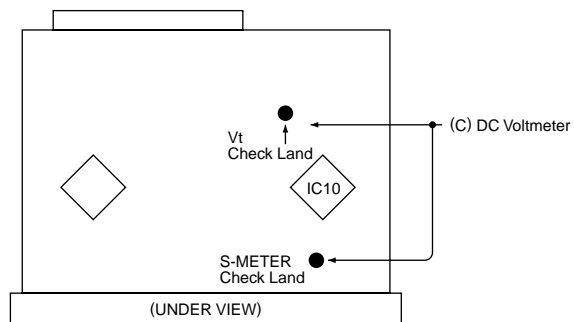
①The appearance and the coil with which S-METER DC voltage serves as the maximum are turned and adjusted in the above-mentioned SG input.

②By the above-mentioned adjustment method, same adjustment is performed to both sides (ANT&RF Coil).

1-4. Adjustment of STEREO (adjustment of 456k-VCO)

Adjust in TEST_MODE

- How to enter the test mode
While pressing on [FM] and [PRESET 6] keys, reset the unit.
- Adjustment method
Complete on condition that show "ALL OFF" when pressing on [PRESET 1] and [PRESET 6] keys.
(Writing adjustment value to the EEPROM.)
Effect of adjustment is in confirmation of adjustment status at [PRESET 4] key.
- Display of [PRESET 4]
Adjustment "OK" : 14seg model "E2P OK" 7seg model "EPO"
Adjustment "NG" : 14seg model "E2P ERR" 7seg model "EPE"
- Releasing the test mode
Reset mode only.
ACC off, Power off, Power down and Remove the panel mode is not releasing.



[Fig.3]

KDC-2022/V/202MR/4023

ADJUSTMENT

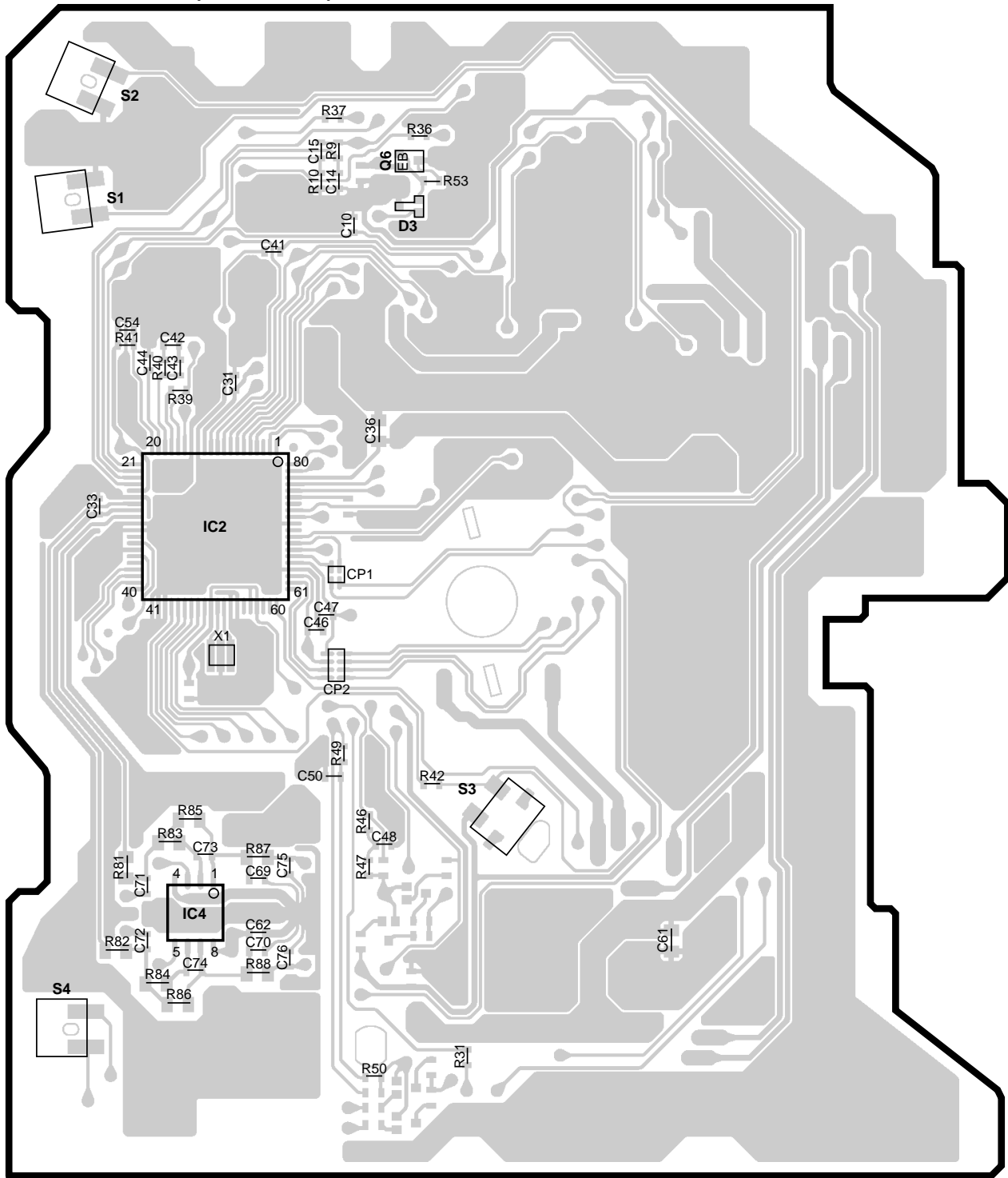
2.IC10 (TDA7513) Replacement-Parts vs Adjustment Item Table

- When the parts in the following tables are exchanged, please readjust according to a table.
- When other parts are exchanged, please perform only a check of operation. There is no necessity for readjustment.

Replacement parts				Adjustment Item					
Parts Name	Ref Number	TYPE	Parts Number	VCOVt	1st MIX	2nd MIX	ANT Coil	RF Coil	Stereo
	IC10	ALL	TDA7513	○	○	○	○	○	○
EEP-ROM	IC12	ALL	M24C01-WMN6T BR24C01AF-W S-24CS02AFJ-TB	○	○	○	○	○	○
Antenna Coil	L505	J E,K,M W(Wide Band)	L31-0966-05 L31-0967-05 L31-0968-05				○		
RF Coil	L506	J E,K,M W(Wide Band)	L31-0969-05 L31-0970-05 L31-0971-05					○	
VCO Coil	L507	J E,K,M W(Wide Band)	L32-0932-05 L32-0933-05 L32-0934-05	○	○	○	○	○	
1st MIX Coil	L508	ALL	L30-0770-05		○				
2nd MIX Coil	L509	ALL	L30-0771-05			○			
Variable Capacitance Diodes	D504	J,E,K,M W(Wide Band)	KV1720S KV1735S	○	○	○	○	○	
Variable Capacitance Diodes	D505	J,E,K,M W(Wide Band)	KV1720S KV1735S	○	○	○	○	○	
Variable Capacitance Diodes	D506	J,E,K,M W(Wide Band)	KV1720S KV1735S	○	○	○	○	○	
X'tal	X501	ALL	L77-2077-05						
				* The "○" mark shows that the adjustment is need.					

PC BOARD (COMPONENT SIDE VIEW)

X32-5380-00 (J74-1485-12)

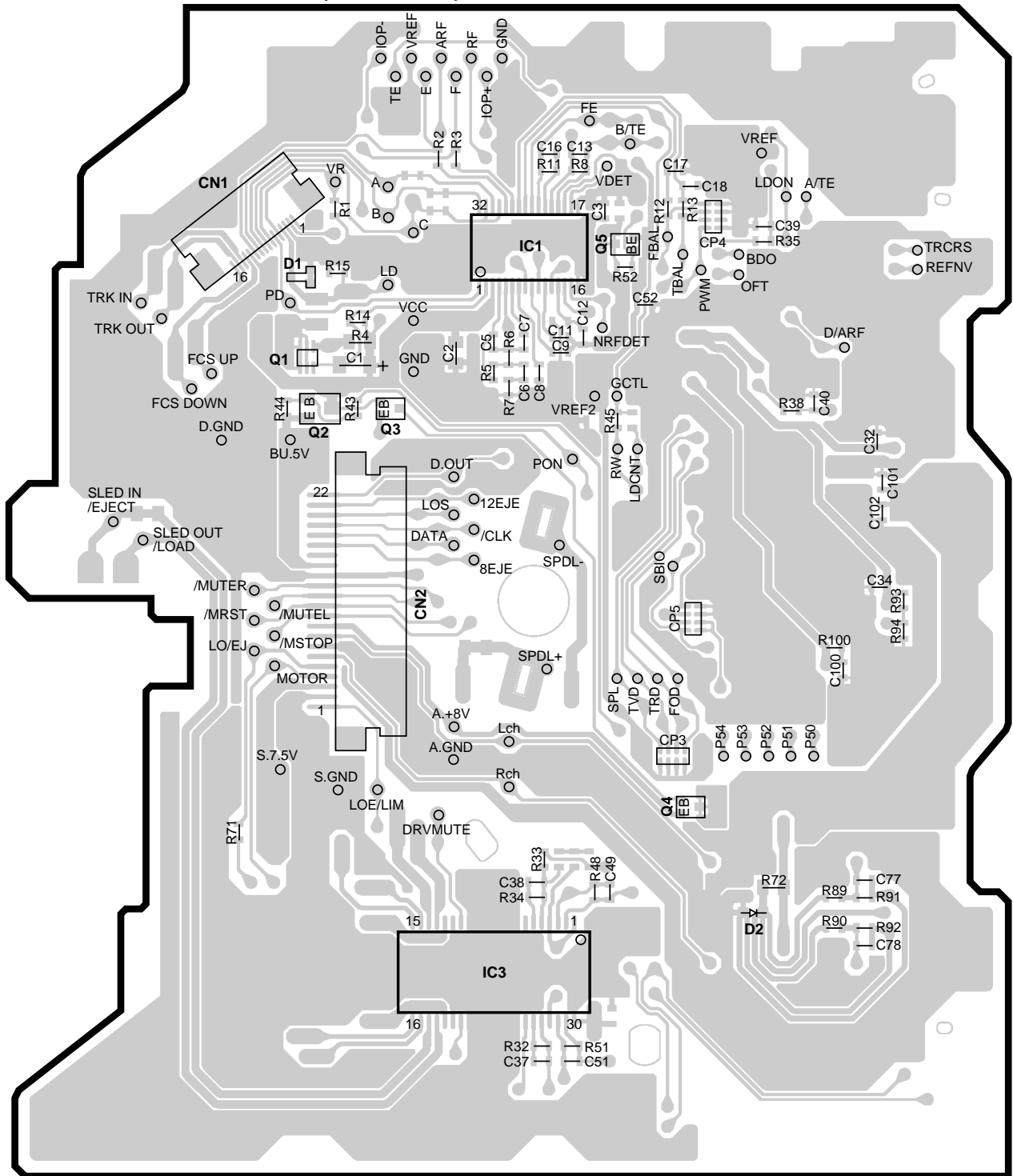


X32-5380-00

Ref. No	address
IC2	3B
IC4	5B
Q6	2C

PC BOARD (FOIL SIDE VIEW)

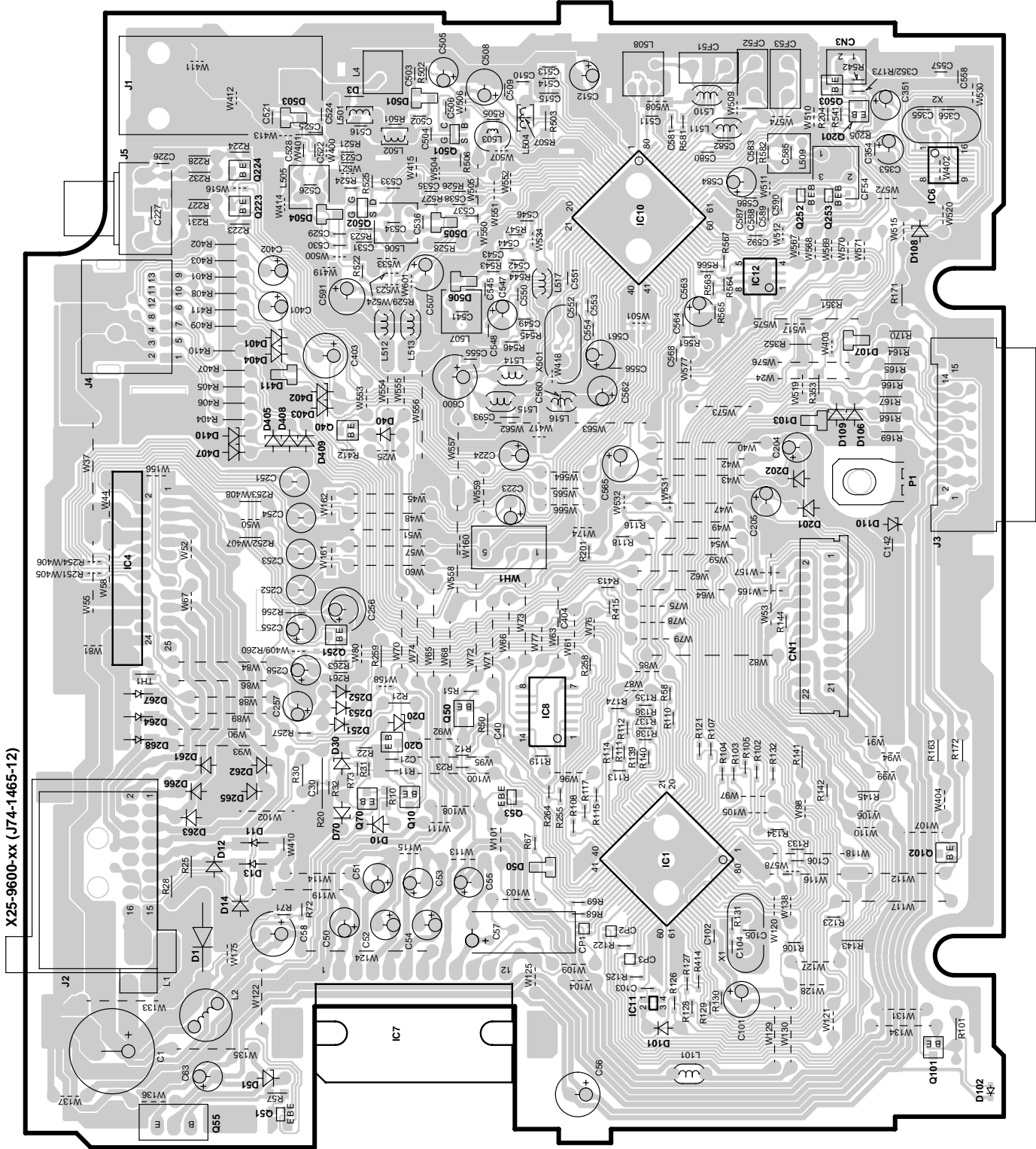
X32-5380-00 (J74-1485-12)



X32-5380-00

Ref. No	address	Ref. No	address	Ref. No	address
IC1	2H	Q2	3G	Q5	2H
IC3	5H	Q3	3G		
Q1	3G	Q4	5I		

PC BOARD (FOIL SIDE VIEW)



X25-9600-xx

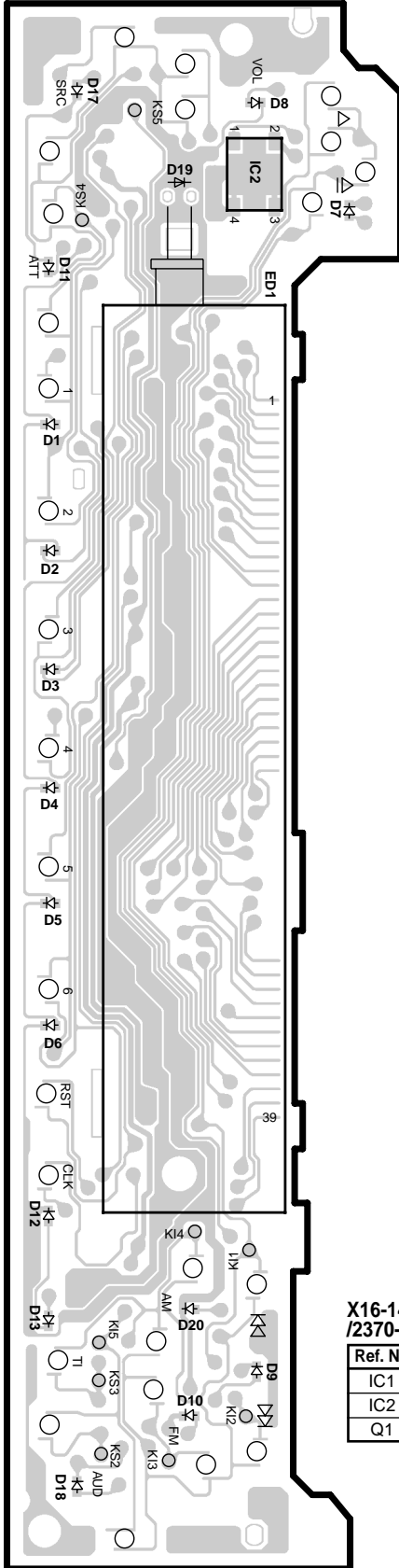
Ref. No	address	Ref. No	address	Ref. No	address
IC1	5N	Q10	5M	Q70	5L
IC4	4K	Q20	5M	Q101	6O
IC7	6M	Q40	3L	Q223	2L
IC8	4M	Q50	4M	Q224	2L
IC10	2N	Q51	6L	Q251	4L
IC11	6N	Q53	5M	Q501	2M
IC12	3N	Q55	6L	Q502	2L

Refer to the schematic diagram for the values of resistors and capacitors.

PC BOARD

(COMPONENT SIDE VIEW)

X16-1460-1x/2370-10 (J74-1285-32)

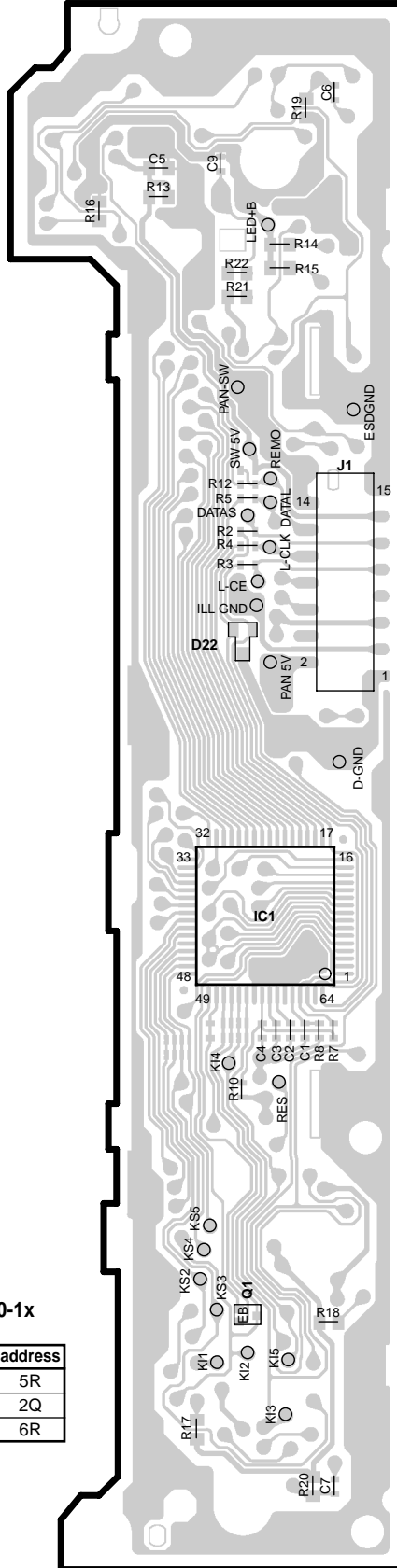


X16-1460-1x /2370-10

Ref. No	address
IC1	5R
IC2	2Q
Q1	6R

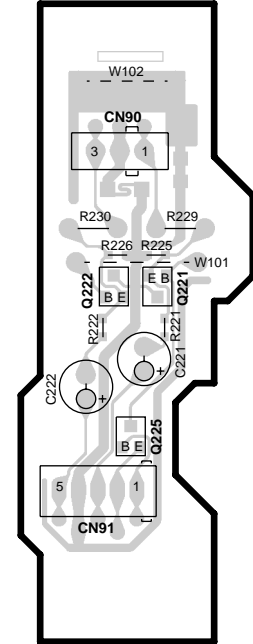
(FOIL SIDE VIEW)

X16-1460-1x/2370-10 (J74-1285-32)



(FOIL SIDE VIEW)

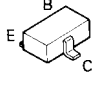
X89-2590-10 (J74-1472-02)



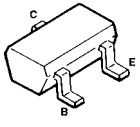
X89-2590-10

Ref. No	address
Q221	2T
Q222	2S
Q225	3T

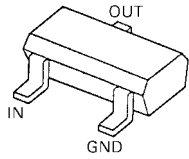
DTC114YUA
DTC143TUA
UN5111
2SA1036K
2SA1362
2SA1576A



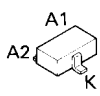
2SC4081



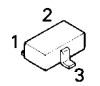
DTA114EUA
DTA124EUA
DTC124EUA



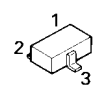
DAN202U



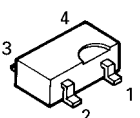
DA204U
DTA114YUA



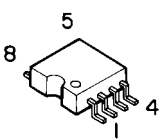
MA142WK
UN5212



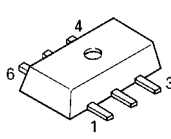
3SK126



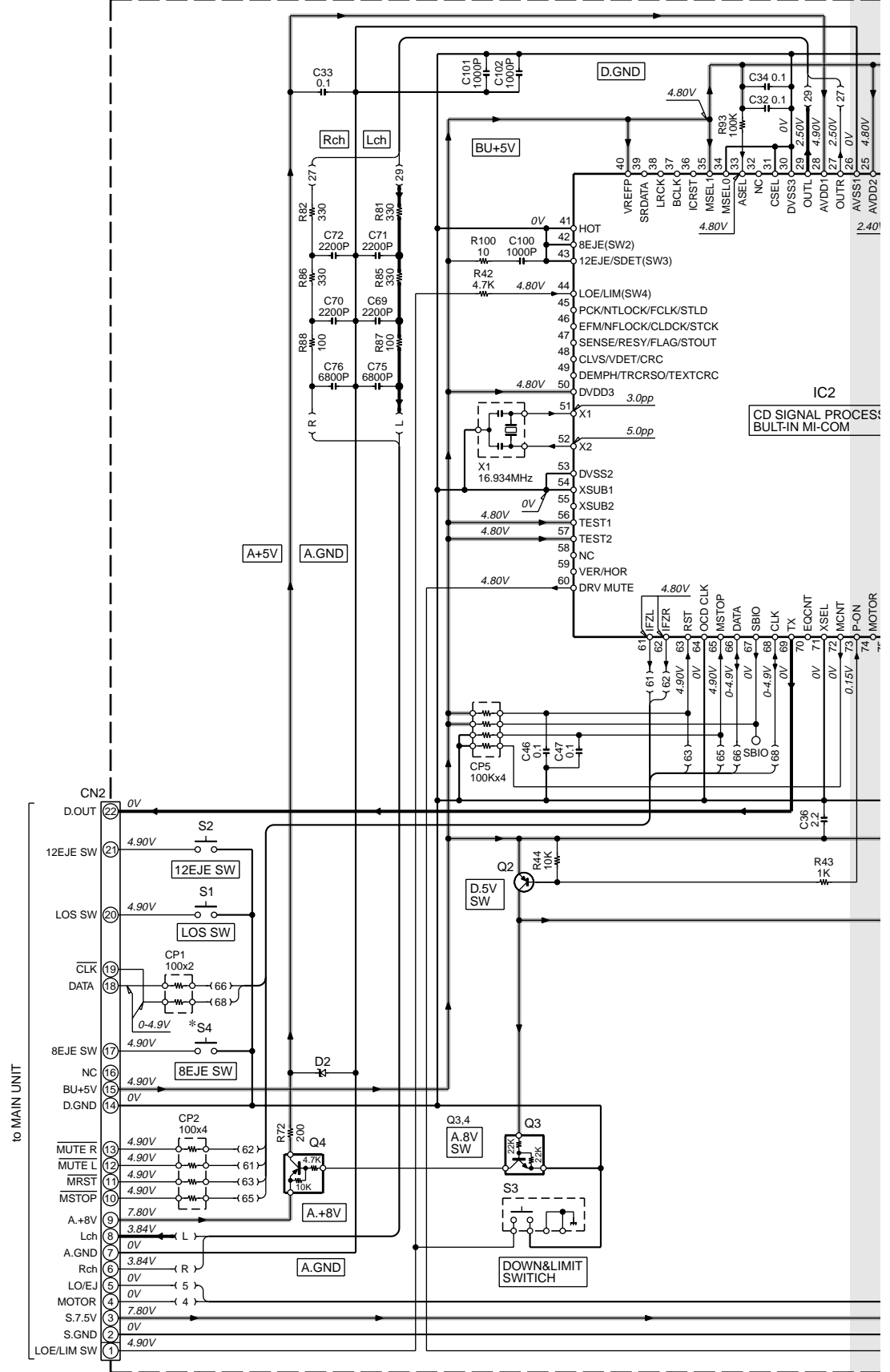
BR24C01AF-W



MCH6101

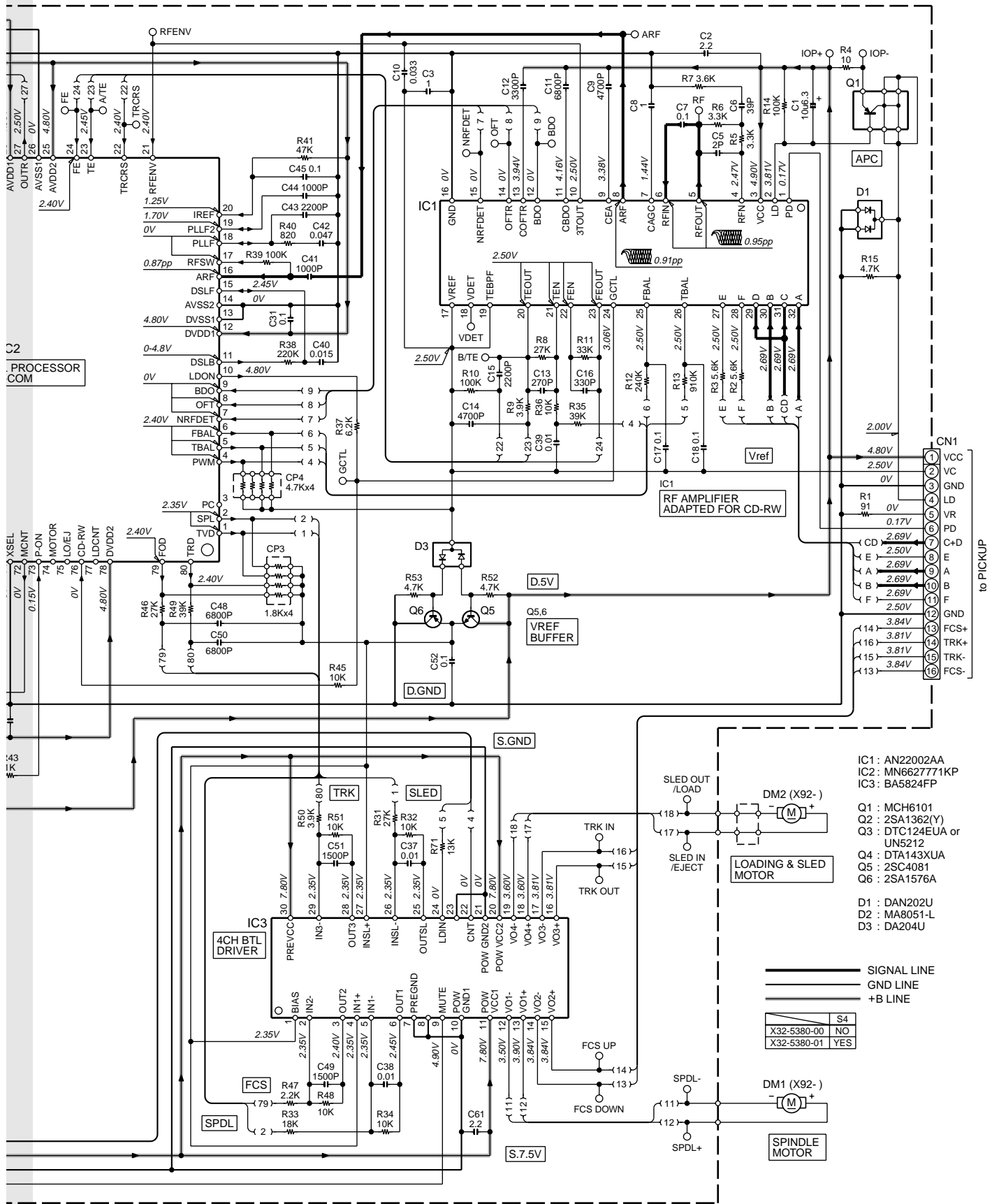


CD PLAYER UNIT (X32-5380-00)

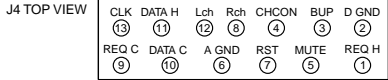


to MAIN UNIT

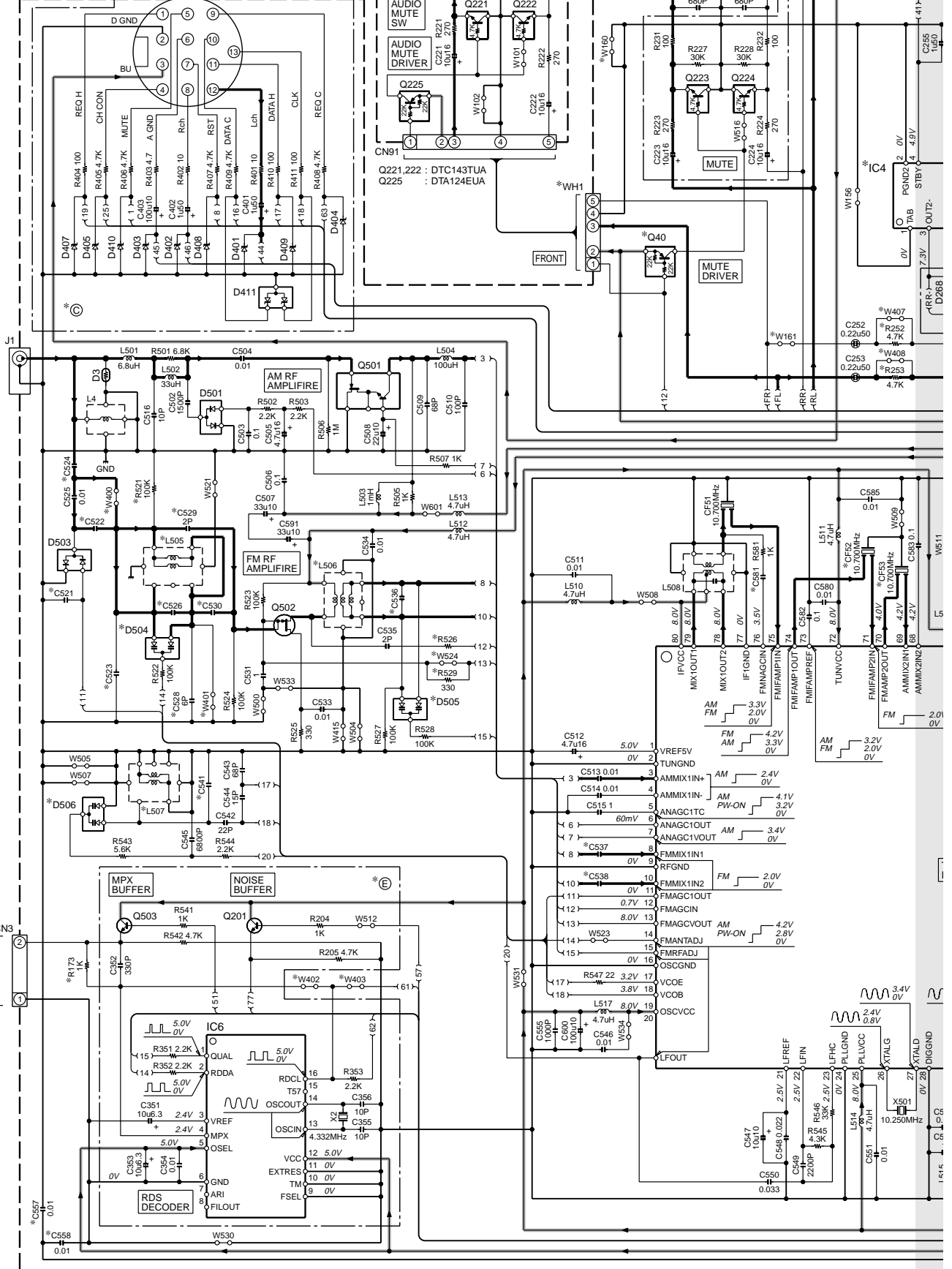
- CN2 D.OUT 22 0V
- 12EJE SW 21 4.90V
- LOS SW 20 4.90V
- CLK 19 4.90V
- DATA 18 0-4.9V *S4
- 8EJE SW 17 4.90V
- NC 16 4.90V
- BU.+5V 15 0V
- D.GND 14 0V
- MUTE R 13 4.90V
- MUTE L 12 4.90V
- MRST 11 4.90V
- MSTOP 10 4.90V
- A.+8V 9 7.80V
- Lch 8 3.84V
- A.GND 7 0V
- Rch 6 3.84V
- LO/EJ 5 0V
- MOTOR 4 7.80V
- S.7.5V 3 0V
- S.GND 2 0V
- LOE/LIM SW 1 4.90V

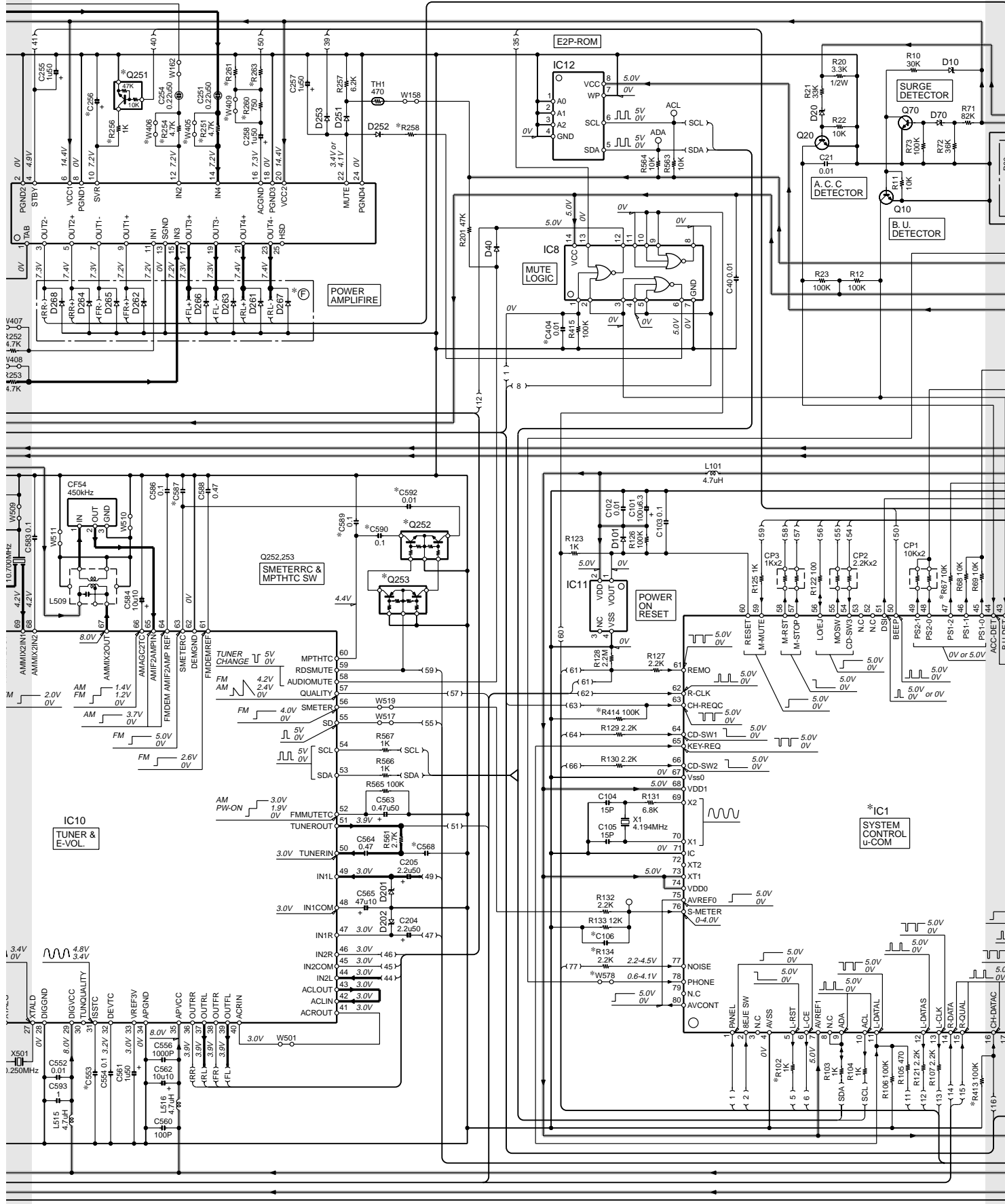


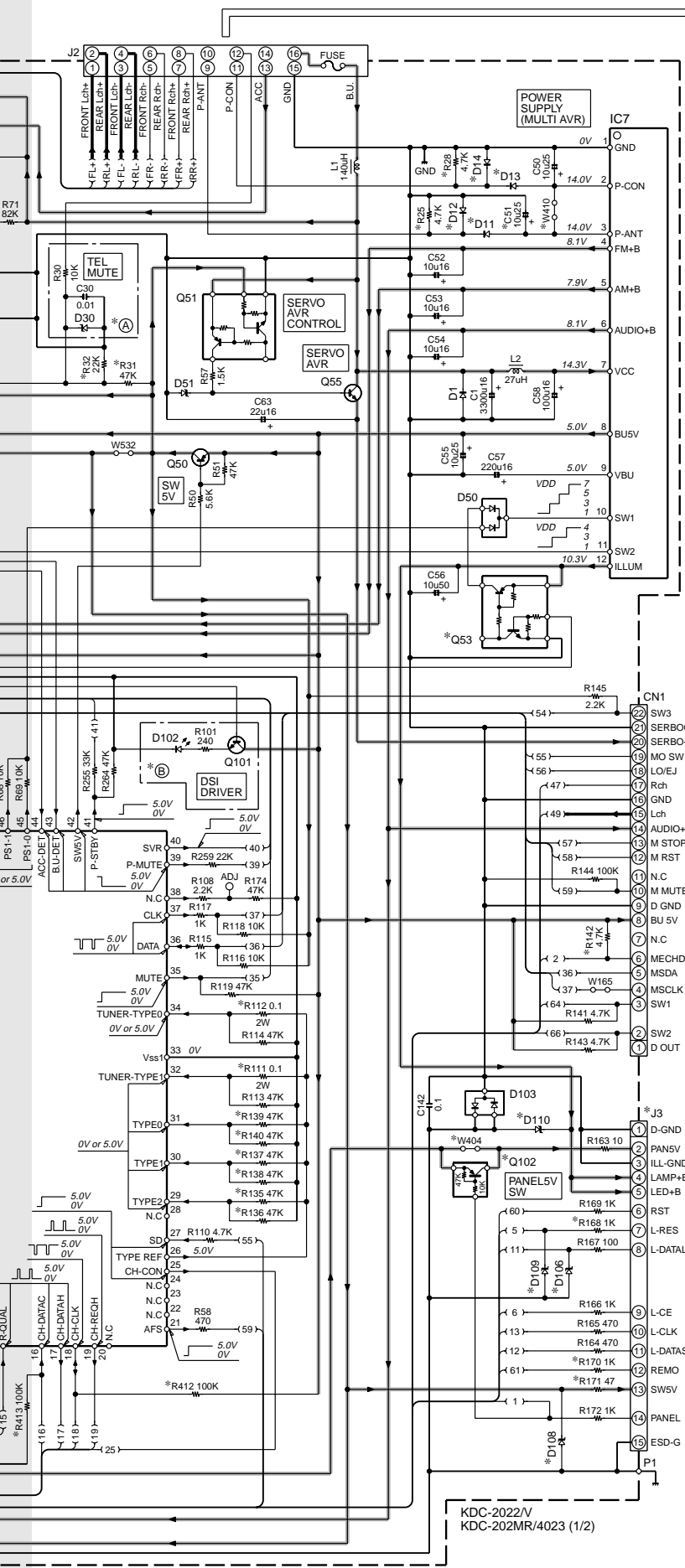
CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).
 ⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.
 • DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.



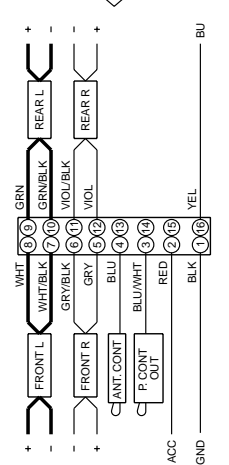
(X25-9600-XX)







- SIGNAL LINE**
GND LINE
+B LINE
- IC1 : *
 IC4 : *
 IC6 : TDA7479AD
 IC7 : BA4911-V4
 IC8 : HD74HC27FP
 IC10 : TDA7513
 IC11 : PST3435UL
 IC12 : M24C01AF-W or M24C01-WMN6T or S-24CS02AFJ-TB
- Q10,20,70,101,201,503 : 2SC4081
 Q40 : DTA124EUA
 Q50 : 2SA1036K
 Q51,53 : UMC2N
 Q55 : 2SD2375
 Q102 : DTA114YUA
 Q223,224 : DTC143TUA
 Q251 : DTC114YUA
 Q252 : UMG4N
 Q253 : UMA1N
 Q501 : CPH5905
 Q502 : 3SK126
- D1 : S2V20*A or 1N5393G-M6
 D3 : IMSA-6801
 D10,20,70,201,202,401,402 : MA4068(N)-M
 D11,13 : D1F60
 D12,14 : AM01Z
 D40,101,251-253 : 1SS133
 D50 : DAN202U
 D51 : MA4082(N)-L
 D103 : DA204U
 D108,108,109,403-405,407-410 : MA4062-L
 D110 : HZS12A2
 D411 : MA3062WA
 D501,503 : RN739F
 D504-506 : *
- DC CORD (E30-4784-05)
 KDC-2022/2022V/202MR/4023



(X25-9600-XX)

MODEL NAME	UNIT No.	A	E	B	C	D	F	C51	C106
KDC-2022V (K)	0-10	NO	NO	YES	YES	NO	NO	NO	1500P
KDC-2022 (K)	0-11	NO	NO	YES	NO	NO	NO	NO	1500P
KDC-202MR (K)	0-11	NO	NO	YES	YES	YES	YES	YES	1500P
KDC-4023 (M)	0-21	NO	NO	YES	YES	YES	YES	YES	1500P

UNIT No.	C227, 228, 529, 557, 558, 590, 592	C256	C404, 528, 589	C521	C522	C523
0-10	NO	33u50	YES	0.1	33P	27P
0-11	NO	100u50	YES	0.1	33P	27P
0-21	NO	33u50	YES	0.1	33P	27P

UNIT No.	C524	C526	C530, 536, 541	C537, 538	C553	C568	C581	C587
0-10	100P	5P	4P	8P	0.01	820P	2P	0.01
0-11	100P	5P	4P	8P	0.01	820P	2P	0.01
0-21	100P	5P	4P	8P	0.01	820P	2P	0.01

UNIT No.	CF52, 53	CN3	D11, 12	D13, 14, 106, 108, 110	D109	D504-506
0-10	L72-0781-05	NO	NO	YES	NO	KV1720S
0-11	L72-0781-05	YES	NO	YES	NO	KV1720S
0-21	L72-0781-05	NO	YES	YES	NO	KV1720S

UNIT No.	IC1	IC4	J3	L505
0-10	UPD780058GC499	TDA7560	E58-0879-05	L31-0967-05
0-11	UPD780058GC499	TDA7386	E58-0879-05	L31-0967-05
0-21	UPD780058GC499	TDA7560	E58-0879-05	L31-0967-05

UNIT No.	L506	L507	Q40, 102	Q53	Q251	Q252, 253
0-10	L31-0970-05	L32-0933-05	YES	NO	NO	NO
0-11	L31-0970-05	L32-0933-05	YES	NO	YES	NO
0-21	L31-0970-05	L32-0933-05	YES	YES	NO	NO

UNIT No.	R25, 67, 137	R28, 136, 139, 170, 171, 412-414, 521	R31, 32, 102, 111, 112, 134, 135, 140, 142, 168, 529
0-10	NO	YES	NO
0-11	NO	YES	NO
0-21	YES	YES	NO

UNIT No.	R138	R173, 251-254, 256, 260	R258	R261	R263	R526
0-10	YES	NO	220	10	4.3K	5.6K
0-11	YES	YES	100	430	180K	5.6K
0-21	NO	NO	220	10	4.3K	5.6K

UNIT No.	W160, 161, 524	W400, 401, 404, 410, 578	W402, 403	W405-409	WH1
0-10	YES	NO	NO	YES	YES
0-11	YES	NO	YES	NO	YES
0-21	YES	NO	NO	YES	YES

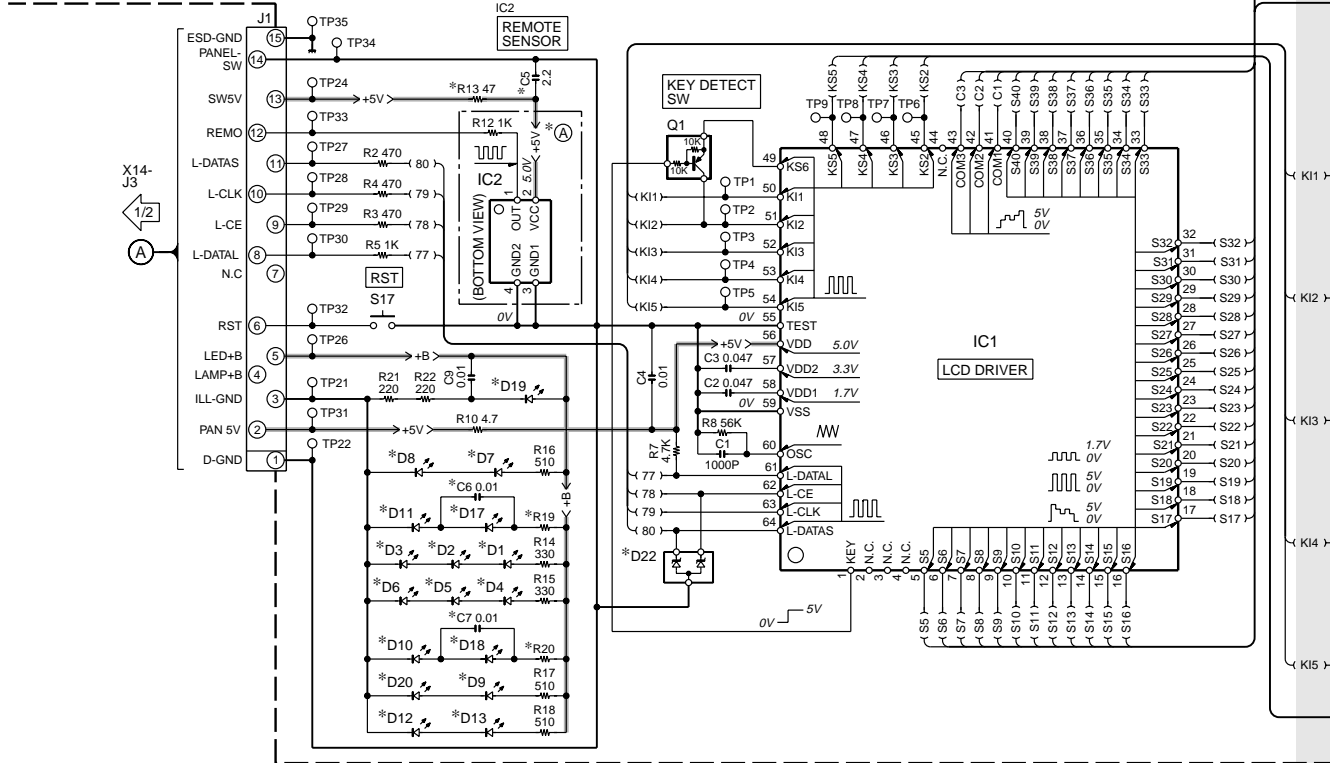
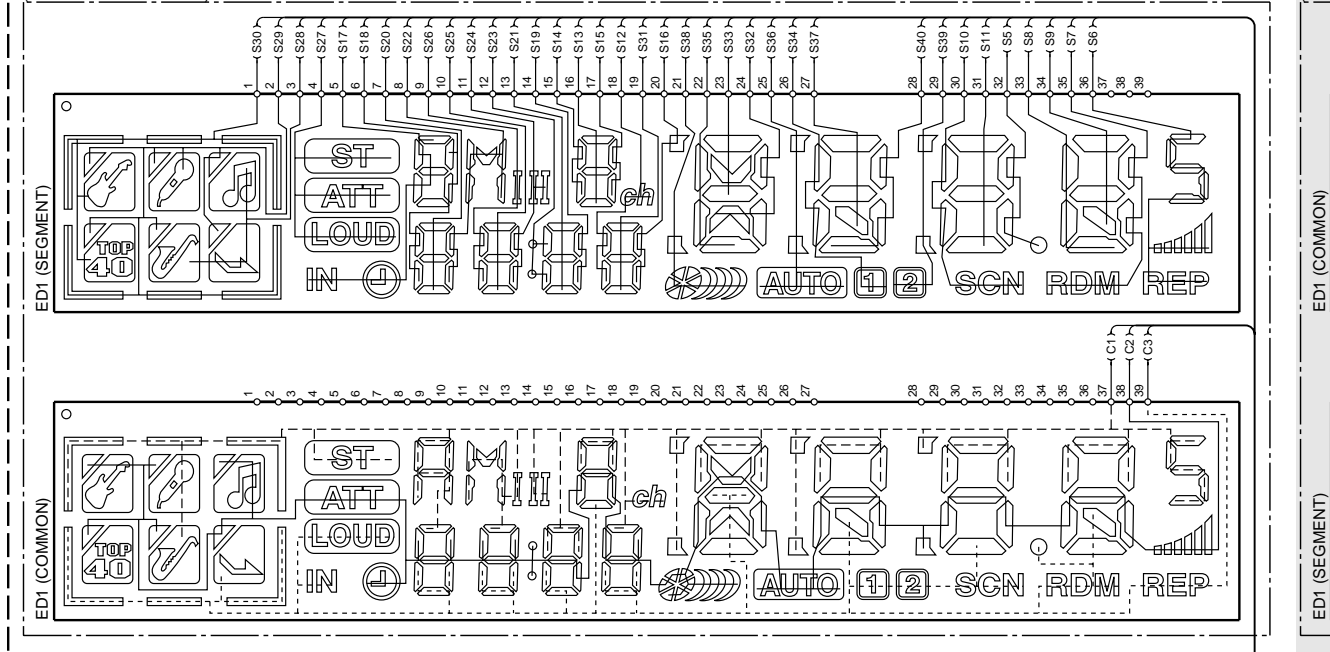
KDC-2022/V
 KDC-202MR/4023 (1/2)

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).
 Δ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

- DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

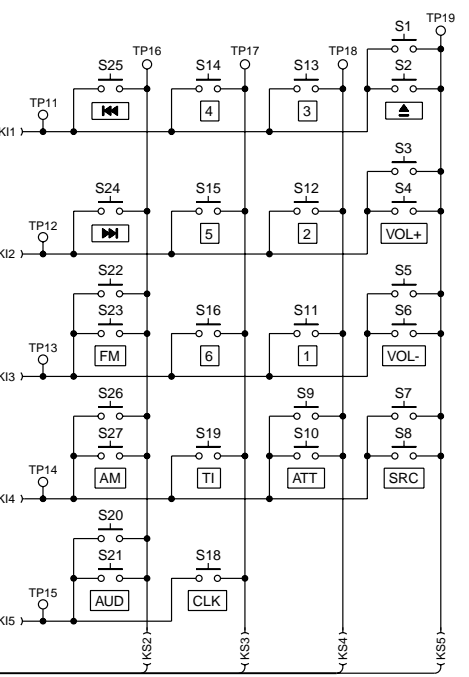
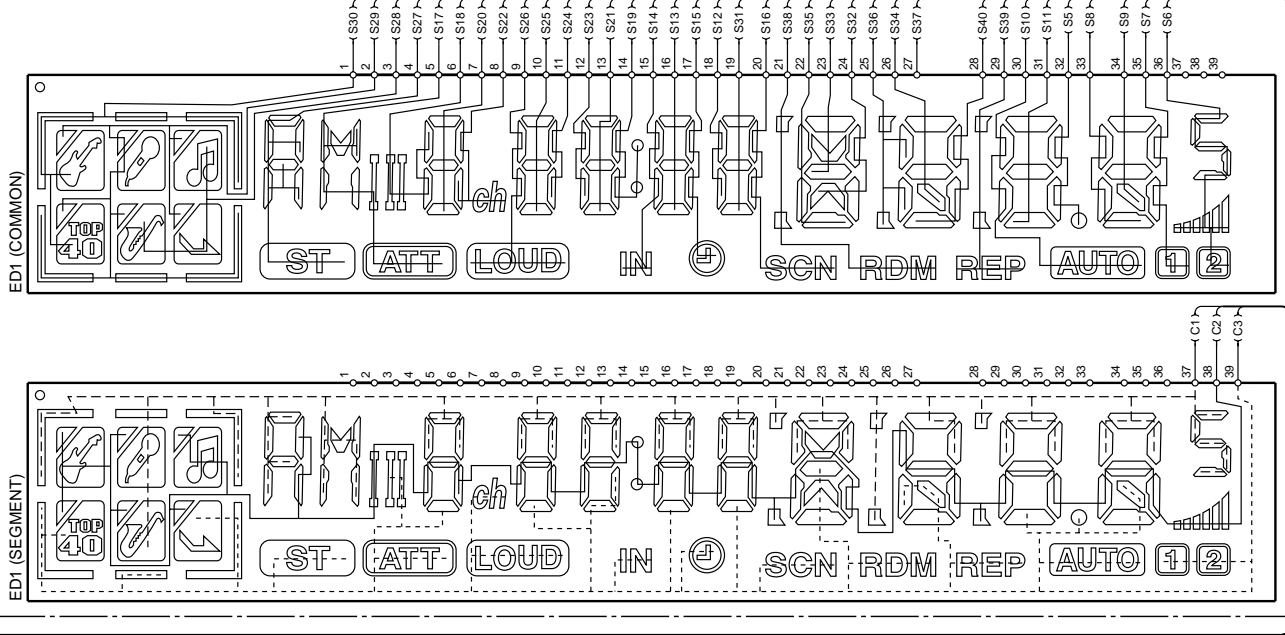
SWITCH UNIT (X16-1460-1x/2370-10)

(B38-1080/1081/1126-05) : KDC-4023/202MR/2024SA/2024SG/2024SYA/2024SYG/2094YA/2094YG/2022/2022V/2023/3023/RX-491CD/RV-391CD



1
2
3
4
5
6
7

(B38-1079-05) : KDC-1023/1023S/122/122S/222/222S



IC1 : LC75853NE D1-13,20 : *
 IC2 : RS-171 D17,18 : *
 Q1 : DTA114EUA D19 : *
 D22 : MA3062WA
 ED1 : *

— GND LINE
 —<+B— +B LINE

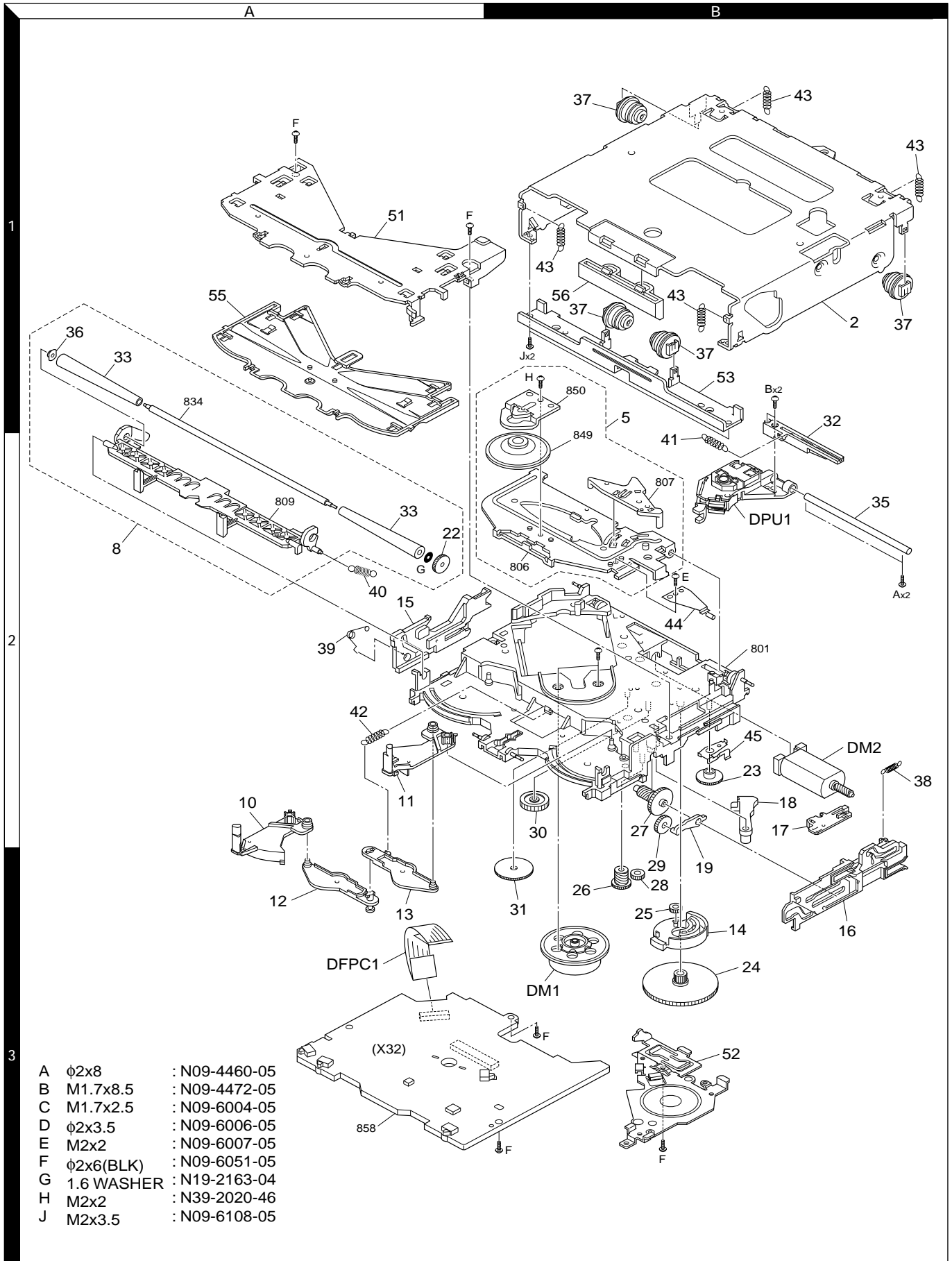
MODEL NAME	UNIT No.	(A)	C5	C6, 7	D1-13,20	D17,18	D19	D22	R13	R19, 20
RX-491CD (J)	X16-1460-01	YES	YES	YES	B30-1533-05 (GREEN)	B30-1564-05 or B30-1642-05 (BLUE)	B30-1633-05	NO	YES	390
RY-391CD (J)	X16-1460-03	NO	NO	NO	B30-1533-05 (GREEN)	B30-1533-05 (GREEN)	B30-1633-05	NO	NO	510
KDC-4023 (M)	X16-1460-11	YES	YES	YES	B30-1533-05 (GREEN)	B30-1564-05 or B30-1642-05 (BLUE)	B30-1633-05	YES	YES	390
KDC-202MR (K)	X16-1460-12	YES	YES	NO	B30-1533-05 (GREEN)	B30-1533-05 (GREEN)	B30-1633-05	YES	YES	510
KDC-1023 (M)	X16-1460-13	NO	NO	NO	B30-1533-05 (GREEN)	B30-1533-05 (GREEN)	B30-1633-05	YES	NO	510
KDC-2024SG (E)	X16-1460-14	NO	YES	NO	B30-1533-05 (GREEN)	B30-1533-05 (GREEN)	B30-1633-05	YES	YES	510
KDC-2022V (K)	X16-1460-15	YES	YES	YES	B30-1567-05 (RED)	B30-1564-05 or B30-1642-05 (BLUE)	B30-1633-05	YES	YES	390
KDC-2024SA (E)	X16-1460-16	NO	YES	NO	B30-1567-05 (RED)	B30-1567-05 (RED)	B30-1633-05	YES	YES	510
KDC-2023 (M)	X16-1460-20	YES	YES	NO	B30-1533-05 (GREEN)	B30-1533-05 (GREEN)	B30-1633-05	YES	YES	510
KDC-3023 (M)	X16-1460-21	YES	YES	NO	B30-1567-05 (RED)	B30-1567-05 (RED)	B30-1641-05	YES	YES	510
KDC-2022 (K)	X16-2370-10	YES	YES	YES	B30-1567-05 (RED)	B30-1564-05 (BLUE)	B30-1633-05	YES	YES	390
KDC-122 (K)	X16-2370-11	NO	NO	NO	B30-1567-05 (RED)	B30-1567-05 (RED)	B30-1633-05	NO	NO	510
KDC-222 (K)	X16-2370-12	NO	YES	NO	B30-1567-05 (RED)	B30-1564-05 (BLUE)	B30-1633-05	YES	YES	510

KDC-2022V/202MR/4023 (2/2)
 KDC-122/S/1023/S (2/2)
 KDC-222/S/2023/3023/2024SA/SG/SYA/SYG/2094YA/YG (2/2)
 RX-491CD/RY-391CD (2/2)

CAUTION : For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).
 △ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.
 • DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

KDC-2022/V/202MR/4023

EXPLODED VIEW (MECHANISM)

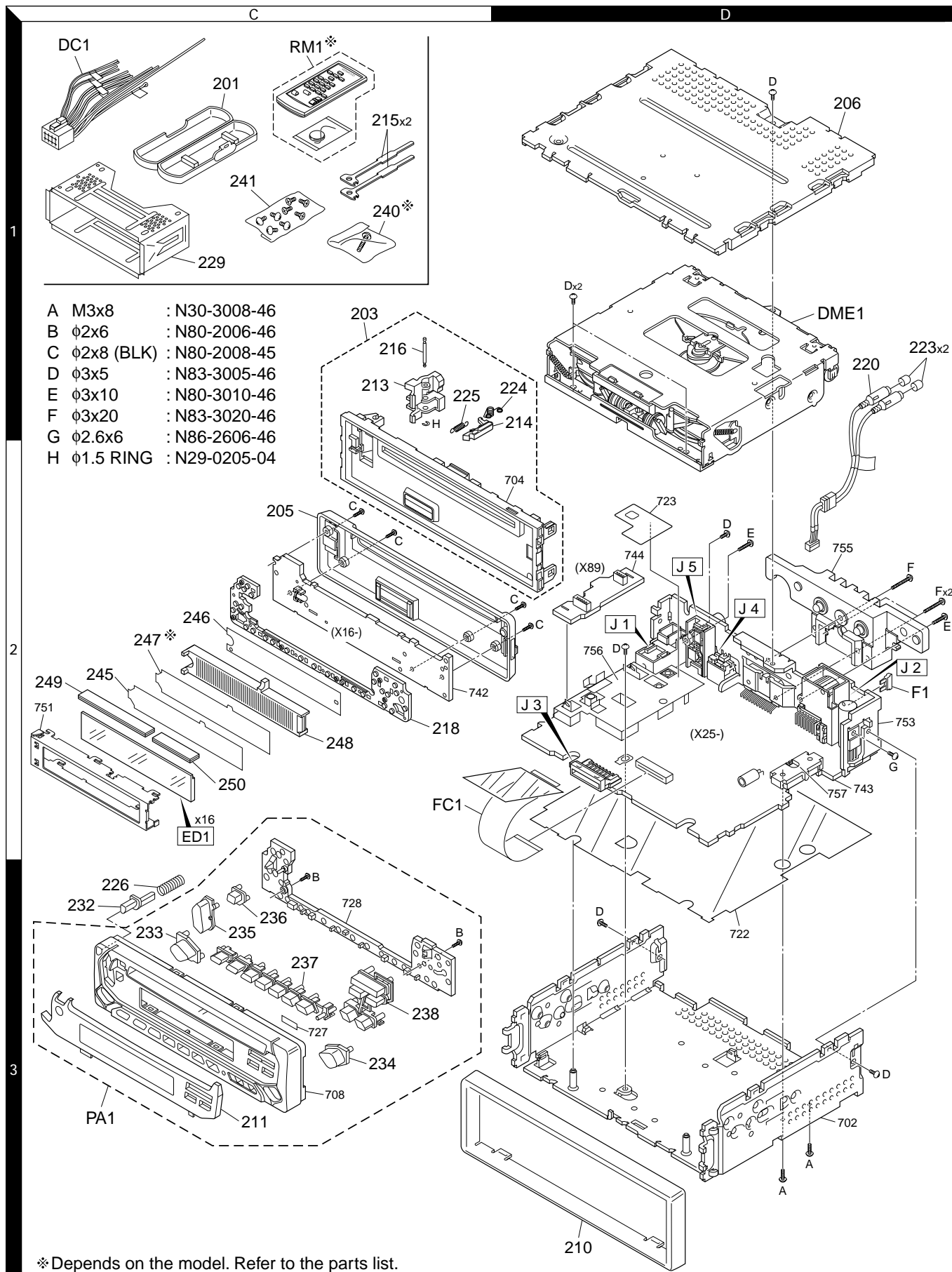


A	φ2x8	: N09-4460-05
B	M1.7x8.5	: N09-4472-05
C	M1.7x2.5	: N09-6004-05
D	φ2x3.5	: N09-6006-05
E	M2x2	: N09-6007-05
F	φ2x6(BLK)	: N09-6051-05
G	1.6 WASHER	: N19-2163-04
H	M2x2	: N39-2020-46
J	M2x3.5	: N09-6108-05

Parts with the exploded numbers larger than 700 are not supplied.

KDC-2022/V/202MR/4023

EXPLODED VIEW (UNIT)



KDC-2022/V/202MR/4023

PARTS LIST

* New Parts

Parts without **Parts No.** are not supplied.

Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.

Teile ohne **Parts No.** werden nicht geliefert.

Ref. No.	A d d	N e w	Parts No.	Description	Dest inati on
KDC-2022/2022V/202MR/4023					
201	1C		A02-1486-13	PLASTIC CABINET ASSY	
203	1C		A22-2863-03	SUB PANEL ASSY	
205	2C		A46-1750-01	REAR COVER	
206	1D		A52-0804-02	TOP PLATE	
PA1	3C	*	A64-2864-02	PANEL ASSY	K
PA1	3C	*	A64-2865-02	PANEL ASSY	K1
PA1	3C	*	A64-2866-02	PANEL ASSY	K2
PA1	3C		A64-2871-02	PANEL ASSY	M1
RM1	1C		A70-2025-05	REMOTE CONTROLLER ASSY	KK1M1
-			B46-0100-50	WARRANTY CARD	
-			B46-0606-04	ID CARD	
-			B58-1365-04	CAUTION CARD	
-		*	B64-2475-00	INST.MANUAL(ENG.FRE.SPA.POR.)	KK1K2
-		*	B64-2476-00	INSTRUCTION MANUAL(ENG.T-CHI)	M1
-		*	B64-2477-00	INSTRUCTION MANUAL(ARABIC)	M1
210	3D		B07-3022-02	ESCUTCHEON	K2M1
210	3D		B07-3060-02	ESCUTCHEON	KK1
211	3C	*	B10-4334-01	FRONT GLASS	K
211	3C	*	B10-4335-01	FRONT GLASS	K1
211	3C	*	B10-4336-01	FRONT GLASS	K2
211	3C	*	B10-4340-01	FRONT GLASS	M1
213	1C		D10-4446-03	LEVER	
214	2C		D10-4447-03	LEVER	
215	1C		D10-4589-04	LEVER	
216	1C		D21-2329-04	SHAFT	
218	2C		E29-1872-02	CONDUCTIVE RUBBER	
220	1D		E30-4801-05	CORD WITH PINPLUG	
△ DC1	1C		E30-4784-05	DC CORD	
△ DC1	1C		E30-6131-05	DC CORD	
FC1	2D		E39-0476-05	FLAT CABLE	
△ 223	1D	*	F29-0626-04	INSULATING COVER	
F1	2D		F52-0006-05	FUSE(MINI BLADE TYPE)	
224	1C		G01-2987-04	TORSION COIL SPRING	
225	1C		G01-3096-04	EXTENSION SPRING	
226	3C		G01-3149-04	COMPRESSION SPRING	
-		*	H10-4856-02	POLYSTYRENE FOAMED FIXTURE	
-			H25-0329-04	PROTECTION BAG (280X450X0.03)	
-			H25-0337-04	PROTECTION BAG (180X300X0.03)	
-		*	H54-2733-03	ITEM CARTON CASE	K
-		*	H54-2734-03	ITEM CARTON CASE	K1
-		*	H54-2735-03	ITEM CARTON CASE	K2
-		*	H54-2739-03	ITEM CARTON CASE	M1
229	1C		J21-9716-03	MOUNTING HARDWARE ASSY	
232	3C		K24-3822-04	KNOB (RELEASE)	
233	3C		K24-3823-04	KNOB (SRC)	
234	3C		K24-3824-04	KNOB (AUD)	
235	3C		K24-3825-03	KNOB (VOL)	
236	3C		K24-3826-04	KNOB (EJECT)	
237	3C		K25-1396-03	KNOB (PRE1-6,ATT,RESET)	
238	3C		K25-1397-03	KNOB (AUTO,CLK,FM,AM)	

Ref. No.	A d d	N e w	Parts No.	Description	Dest inati on
240	1C		N99-1610-15	SCREW SET	KK1M1
241	1C		N99-1719-05	SCREW SET	
A	3D		N30-3008-46	PAN HEAD MACHINE SCREW	
B	3C		N80-2006-46	PAN HEAD TAPTITE SCREW	
C	2C		N80-2008-45	PAN HEAD TAPTITE SCREW	
D	1D		N83-3005-46	PAN HEAD TAPTITE SCREW	
H	1C		N29-0205-04	RETAINING RING (1.5)	
DME1	1D	*	X92-4640-00	MECHANISM ASSY	
SWITCH UNIT (X16-1460-1x, X16-2370-10)					
245	2C		B11-1358-04	OPTICAL DIFFUSER	K1M1
245	2C		B11-1372-04	OPTICAL DIFFUSER	KK2
246	2C		B11-1359-04	REFLECTION SHEET	
247	2C		B11-1360-04	COLOR FILTER	K2
247	2C		B11-1361-04	COLOR FILTER	K
248	2C		B19-2130-03	LIGHTING BOARD	
D1 -13			B30-1533-05	LED(1608,PG)	K2M1
D1 -13			B30-1567-05	LED(1608,RED)	KK1
D17 ,18			B30-1533-05	LED(1608,PG)	K2
D17 ,18			B30-1564-05	LED(1608,BLUE)	KK1M1
D17 ,18			B30-1642-05	LED (BLU)	KM1
D19			B30-1633-05	LED(WHITE)	
D20			B30-1533-05	LED(1608,PG)	K2M1
D20			B30-1567-05	LED(1608,RED)	KK1
ED1			B38-1080-05	LIQUID CRYSTAL	K1M1
ED1			B38-1081-05	LIQUID CRYSTAL	KK2
C1			CK73GB1H102K	CHIP C 1000PF K	
C2 ,3			CK73GB1E473K	CHIP C 0.047UF K	
C2 ,3			CK73GB1H473K	CHIP C 0.047UF K	
C4			CK73GB1H103K	CHIP C 0.010UF K	
C5			CK73FB1A225K	CHIP C 2.2UF K	
C6 ,7			CK73GB1H103K	CHIP C 0.010UF K	KK1M1
C9			CK73GB1H103K	CHIP C 0.010UF K	
249	2C		E29-1887-04	CONDUCTIVE RUBBER	
250	2C		E29-1888-04	CONDUCTIVE RUBBER	
J1			E59-0828-05	RECTANGULAR PLUG (15P)	
-			J19-5130-04	HOLDER (LED)	
R2 -4			RK73GB2A471J	CHIP R 470 J 1/10W	
R5			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R7			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R8			RK73GB2A563J	CHIP R 56K J 1/10W	
R10			RK73GB2A4R7J	CHIP R 4.7 J 1/10W	
R12			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R13			RK73FB2B470J	CHIP R 47 J 1/8W	
R14 ,15			RK73FB2B331J	CHIP R 330 J 1/8W	
R16 -18			RK73FB2B511J	CHIP R 510 J 1/8W	
R19 ,20			RK73FB2B391J	CHIP R 390 J 1/8W	KK1M1
R19 ,20			RK73FB2B511J	CHIP R 510 J 1/8W	K2
R21 ,22			RK73FB2B221J	CHIP R 220 J 1/8W	
D22			MA3062WA	ZENER DIODE	
IC1			LC75853NE	MOS-IC	
IC2			RS-171	ANALOGUE IC	

K : KDC-2022V K2 : KDC-202MR
K1 : KDC-2022 M1 : KDC-4023

△ indicates safety critical components.

KDC-2022/V/202MR/4023

PARTS LIST

* New Parts

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KDC-2022/2022V/202MR/4023

Ref. No.	A d d	N e w	Parts No.	Description	Dest inati on
Q1			DTA114EUA	DIGITAL TRANSISTOR	
Q1			UN5111	DIGITAL TRANSISTOR	
ELECTRIC UNIT (X25-9600-xx)					
D102			B30-1567-05	LED(1608,RED)	
C1			C90-5242-05	ELECTRO 3300UF 16WV	
C21			CK73GB1H103K	CHIP C 0.010UF K	
C40			CK73GB1H103K	CHIP C 0.010UF K	
C50			CE04NW1E100M	ELECTRO 10UF 25WV	KK1K2
C50,51			CE04NW1E100M	ELECTRO 10UF 25WV	M1
C52-54			CE04NW1C100M	ELECTRO 10UF 16WV	
C55			CE04NW1E100M	ELECTRO 10UF 25WV	
C56			CE04CW1H100M	ELECTRO 10UF 50WV	
C57			C90-2980-05	ELECTRO 220UF 16WV	
C58			C90-2962-05	ELECTRO 100UF 16WV	
C63			CE04NW1C220M	ELECTRO 22UF 16WV	
C101			CE04NW0J101M	ELECTRO 100UF 6.3WV	
C102			CK73GB1H103K	CHIP C 0.010UF K	
C103			CK73GB1C104K	CHIP C 0.10UF K	
C104,105			CC73GCH1H150J	CHIP C 15PF J	
C106			CK73GB1H152K	CHIP C 1500PF K	
C142			CK73GB1C104K	CHIP C 0.10UF K	
C204,205			CE04NW1H2R2M	ELECTRO 2.2UF 50WV	
C223,224			CE04NW1C100M	ELECTRO 10UF 16WV	
C251-254			C90-5296-05	NP-ELECT 0.22UF 50WV	
C255			CE04NW1H010M	ELECTRO 1.0UF 50WV	
C256			CE04NW1A101M	ELECTRO 100UF 10WV	K2
C256			CE04NW1A330M	ELECTRO 33UF 10WV	KK1M1
C257			CE04NW1H010M	ELECTRO 1.0UF 50WV	
C258			C90-2935-05	ELECTRO 1.0UF 50WV	
C401,402			C90-2608-05	ELECTRO 1.0UF 50WV	
C403			CE04CW1A101M	ELECTRO 100UF 10WV	
C404			CK73GB1H103K	CHIP C 0.010UF K	
C502			CK73GB1H152K	CHIP C 1500PF K	
C503			CK73GB1C104K	CHIP C 0.10UF K	
C504			CK73GB1H103K	CHIP C 0.010UF K	
C505			C90-2595-05	ELECTRO 4.7UF 16WV	
C506			CK73GB1C104K	CHIP C 0.10UF K	
C507			CE04CW1A330M	ELECTRO 33UF 10WV	
C508			CE04CW1A220M	ELECTRO 22UF 10WV	
C509			CC73GCH1H680J	CHIP C 68PF J	
C510			CC73GCH1H101J	CHIP C 100PF J	
C511			CK73GB1H103K	CHIP C 0.010UF K	
C512			C90-2595-05	ELECTRO 4.7UF 16WV	
C513,514			CK73GB1H103K	CHIP C 0.010UF K	
C515			CK73FB1C105K	CHIP C 1.0UF K	
C516			CC73GCH1H100D	CHIP C 10PF D	
C521			CK73GB1C104K	CHIP C 0.10UF K	
C522			CC73GCH1H330J	CHIP C 33PF J	
C523			CC73GCH1H270J	CHIP C 27PF J	
C524			CC73GCH1H101J	CHIP C 100PF J	
C525			CK73GB1H103K	CHIP C 0.010UF K	
C526			CC73GCH1H050C	CHIP C 5.0PF C	
C528			CC73GCH1H060D	CHIP C 6.0PF D	
C530			CC73GCH1H040C	CHIP C 4.0PF C	

Ref. No.	A d d	N e w	Parts No.	Description	Dest inati on
C531			CK73FB1C105K	CHIP C 1.0UF K	
C533,534			CK73GB1H103K	CHIP C 0.010UF K	
C535			CC73GCH1H020C	CHIP C 2.0PF C	
C536			CC73GCH1H040C	CHIP C 4.0PF C	
C537,538			CC73GCH1H080D	CHIP C 8.0PF D	
C541			CC73GCH1H040C	CHIP C 4.0PF C	
C542			CC73GCH1H220J	CHIP C 22PF J	
C543			CC73GCH1H680J	CHIP C 68PF J	
C544			CC73GCH1H150J	CHIP C 15PF J	
C545			CK73GB1H682K	CHIP C 6800PF K	
C546			CK73GB1H103K	CHIP C 0.010UF K	
C547			C90-2594-05	ELECTRO 10UF 10WV	
C548			CK73GB1E223K	CHIP C 0.022UF K	
C549			CK73GB1H222K	CHIP C 2200PF K	
C550			CK73GB1E333K	CHIP C 0.033UF K	
C551,552			CK73GB1H103K	CHIP C 0.010UF K	
C553,554			CK73GB1C104K	CHIP C 0.10UF K	
C555,556			CK73GB1H102K	CHIP C 1000PF K	
C560			CC73GCH1H101J	CHIP C 100PF J	
C561			C90-2608-05	ELECTRO 1.0UF 50WV	
C562			C90-2594-05	ELECTRO 10UF 10WV	
C563			C90-2606-05	ELECTRO 0.47UF 50WV	
C564			CK73GB1A474K	CHIP C 0.47UF K	
C565			CE04NW1A470M	ELECTRO 47UF 10WV	
C568			CC73GCH1H821J	CHIP C 820PF J	
C580			CK73GB1H103K	CHIP C 0.010UF K	
C581			CC73GCH1H020C	CHIP C 2.0PF C	
C582,583			CK73GB1C104K	CHIP C 0.10UF K	
C584			C90-2594-05	ELECTRO 10UF 10WV	
C585			CK73GB1H103K	CHIP C 0.010UF K	
C586			CK73GB1C104K	CHIP C 0.10UF K	
C587			CK73GB1H103K	CHIP C 0.010UF K	
C588			CK73GB1A474K	CHIP C 0.47UF K	
C589			CK73GB1C104K	CHIP C 0.10UF K	
C591			CE04CW1A330M	ELECTRO 33UF 10WV	
C593			CK73FB1C105K	CHIP C 1.0UF K	
C600			CE04CW1A101M	ELECTRO 100UF 10WV	
CN1			E40-9550-05	FLAT CABLE CONNECTOR	
CN3			E40-3246-05	PIN ASSY	K2
J1			E04-0312-05	RF COAXIAL CABLE RECEPTACLE	
J2			E58-0863-15	RECTANGULAR RECEPTACLE	
J3			E58-0879-05	RECTANGULAR RECEPTACLE	
J4			E56-0834-05	CYLINDRICAL RECEPTACLE	
J5			E63-0852-05	PIN JACK	
CF51-53			L72-0781-05	CERAMIC FILTER	
CF54			L72-0743-05	CERAMIC FILTER	
L1			L33-1170-05	CHOKE COIL ASSY	
L2			L33-1807-05	CHOKE COIL	
L4			L33-1123-05	LINE FILTER COIL	
L101			L40-4795-91	SMALL FIXED INDUCTOR(4.7UH,J)	
L501			L40-6891-58	SMALL FIXED INDUCTOR	
L502		*	L40-3301-58	SMALL FIXED INDUCTOR(33U)	
L503			L40-1021-56	SMALL FIXED INDUCTOR(1MH)	
L504			L40-1011-58	SMALL FIXED INDUCTOR	

KDC-2022/V/202MR/4023

PARTS LIST

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ELECTRIC UNIT (X25-9600-xx)

Ref. No.	A d d	N e w	Parts No.	Description	Dest inati on	Ref. No.	A d d	N e w	Parts No.	Description	Dest inati on
L505		*	L31-0967-05	FM-RF COIL		R132			RK73GB2A222J	CHIP R 2.2K J 1/10W	
L506		*	L31-0970-05	FM-RF COIL		R133			RK73GB2A123J	CHIP R 12K J 1/10W	
L507		*	L32-0933-05	OSCILATING COIL		R136			RK73GB2A473J	CHIP R 47K J 1/10W	KK1K2
L508		*	L30-0770-05	FM IFT		R136,137			RK73GB2A473J	CHIP R 47K J 1/10W	M1
L509		*	L30-0771-05	AM IFT		R138,139			RK73GB2A473J	CHIP R 47K J 1/10W	KK1K2
L510-517			L40-4795-91	SMALL FIXED INDUCTOR(4.7UH,J)		R139			RK73GB2A473J	CHIP R 47K J 1/10W	M1
X1			L77-1167-05	CRYSTAL RESONATOR(4.19M)		R141			RD14BB2C472J	RD 4.7K J 1/6W	
X501			L77-2077-05	CRYSTAL RESONATOR		R143			RD14BB2C472J	RD 4.7K J 1/6W	
D	2D		N83-3005-46	PAN HEAD TAPTITE SCREW		R144			RK73GB2A104J	CHIP R 100K J 1/10W	
E	2D		N80-3010-46	PAN HEAD TAPTITE SCREW		R145			RD14BB2C222J	RD 2.2K J 1/6W	
F	2D		N83-3020-46	PAN HEAD TAPTITE SCREW		R163			RD14BB2C100J	RD 10 J 1/6W	
G	2D		N86-2606-46	BINDING HEAD TAPTITE SCREW		R164,165			RD14BB2C471J	RD 470 J 1/6W	
CP1			R90-1049-05	MULTI-COMP 10K X2		R166			RD14BB2C102J	RD 1.0K J 1/6W	
CP2			R90-1047-05	MULTI-COMP 2.2K X2		R167			RD14BB2C101J	RD 100 J 1/6W	
CP3			R90-1046-05	MULTI-COMP 1K X2		R169,170			RD14BB2C102J	RD 1.0K J 1/6W	
R10			RK73FB2B303J	CHIP R 30K J 1/8W		R171			RD14BB2C470J	RD 47 J 1/6W	
R11			RK73GB2A103J	CHIP R 10K J 1/10W		R172			RD14BB2C102J	RD 1.0K J 1/6W	
R12			RK73GB2A104J	CHIP R 100K J 1/10W		R173			RK73GB2A102J	CHIP R 1.0K J 1/10W	K2
R20			RD14DB2H332J	SMALL-RD 3.3K J 1/2W		R174			RK73GB2A473J	CHIP R 47K J 1/10W	
R21			RD14BB2C333J	RD 33K J 1/6W		R201			RK73GB2A473J	CHIP R 47K J 1/10W	
R22			RK73GB2A103J	CHIP R 10K J 1/10W		R223,224			RK73FB2B271J	CHIP R 270 J 1/8W	
R23			RK73GB2A104J	CHIP R 100K J 1/10W		R227,228			RD14BB2C303J	RD 30K J 1/6W	
R25			RD14BB2C472J	RD 4.7K J 1/6W	M1	R231,232			RD14BB2C101J	RD 100 J 1/6W	
R28			RD14BB2C472J	RD 4.7K J 1/6W		R251			RK73GB2A472J	CHIP R 4.7K J 1/10W	K2
R50			RD14BB2C562J	RD 5.6K J 1/6W		R252,253			RD14BB2C472J	RD 4.7K J 1/6W	K2
R51			RK73GB2A473J	CHIP R 47K J 1/10W		R254			RK73GB2A472J	CHIP R 4.7K J 1/10W	K2
R57			RK73FB2B152J	CHIP R 1.5K J 1/8W		R255			RK73GB2A333J	CHIP R 33K J 1/10W	
R58			RK73GB2A471J	CHIP R 470 J 1/10W		R256			RK73FB2B102J	CHIP R 1.0K J 1/8W	K2
R67 -69			RK73GB2A103J	CHIP R 10K J 1/10W	M1	R257			RK73GB2A622J	CHIP R 6.2K J 1/10W	
R68 ,69			RK73GB2A103J	CHIP R 10K J 1/10W	KK1K2	R258			RK73GB2A101J	CHIP R 100 J 1/10W	K2
R71			RK73GB2A823J	CHIP R 82K J 1/10W		R258			RK73GB2A221J	CHIP R 220 J 1/10W	KK1M1
R72			RK73GB2A363J	CHIP R 36K J 1/10W		R259			RD14BB2C223J	RD 22K J 1/6W	
R73			RK73GB2A104J	CHIP R 100K J 1/10W		R260			RK73GB2A751J	CHIP R 750 J 1/10W	K2
R101			RD14BB2C241J	RD 240 J 1/6W		R261			RK73GB2A100J	CHIP R 10 J 1/10W	KK1M1
R103,104			RK73GB2A102J	CHIP R 1.0K J 1/10W		R261			RK73GB2A431J	CHIP R 430 J 1/10W	K2
R105			RK73GB2A471J	CHIP R 470 J 1/10W		R263			RK73GB2A184J	CHIP R 180K J 1/10W	K2
R106			RK73GB2A104J	CHIP R 100K J 1/10W		R263			RK73GB2A432J	CHIP R 4.3K J 1/10W	KK1M1
R107,108			RK73GB2A222J	CHIP R 2.2K J 1/10W		R264			RK73GB2A473J	CHIP R 47K J 1/10W	
R110			RK73GB2A472J	CHIP R 4.7K J 1/10W		R401,402			RD14BB2C100J	RD 10 J 1/6W	
R113,114			RK73GB2A473J	CHIP R 47K J 1/10W		R403			RD14BB2C4R7J	RD 4.7 J 1/6W	
R115			RK73GB2A102J	CHIP R 1.0K J 1/10W		R404			RD14BB2C101J	RD 100 J 1/6W	
R116			RK73GB2A103J	CHIP R 10K J 1/10W		R405-409			RD14BB2C472J	RD 4.7K J 1/6W	
R117			RK73GB2A102J	CHIP R 1.0K J 1/10W		R410,411			RD14BB2C101J	RD 100 J 1/6W	
R118			RK73GB2A103J	CHIP R 10K J 1/10W		R412-415			RK73GB2A104J	CHIP R 100K J 1/10W	
R119			RK73GB2A473J	CHIP R 47K J 1/10W		R501			RK73GB2A682J	CHIP R 6.8K J 1/10W	
R121			RK73GB2A222J	CHIP R 2.2K J 1/10W		R502			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R122			RK73GB2A101J	CHIP R 100 J 1/10W		R503			RK73EB2E222J	CHIP R 2.2K J 1/4W	
R123			RK73GB2A102J	CHIP R 1.0K J 1/10W		R505			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R125			RK73GB2A102J	CHIP R 1.0K J 1/10W		R506			RK73GB2A105J	CHIP R 1.0M J 1/10W	
R126			RK73GB2A104J	CHIP R 100K J 1/10W		R507			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R127			RK73GB2A222J	CHIP R 2.2K J 1/10W		R521-524			RK73GB2A104J	CHIP R 100K J 1/10W	
R128			RK73GB2A225J	CHIP R 2.2M J 1/10W		R525			RK73GB2A331J	CHIP R 330 J 1/10W	
R129,130			RK73GB2A222J	CHIP R 2.2K J 1/10W		R526			RK73GB2A562J	CHIP R 5.6K J 1/10W	
R131			RK73GB2A682J	CHIP R 6.8K J 1/10W		R527			RK73GB2A104J	CHIP R 100K J 1/10W	
						R528			RD14BB2C104J	RD 100K J 1/6W	

K : KDC-2022V
K1 : KDC-2022

K2 : KDC-202MR
M1 : KDC-4023

△ indicates safety critical components.

KDC-2022/V/202MR/4023

PARTS LIST

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ELECTRIC UNIT (X25-9600-xx)

Ref. No.	A d d	N e w	Parts No.	Description	Dest inati on
R543			RK73GB2A562J	CHIP R 5.6K J 1/10W	
R544			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R545			RK73GB2A432J	CHIP R 4.3K J 1/10W	
R546			RK73GB2A333J	CHIP R 33K J 1/10W	
R547			RK73GB2A220J	CHIP R 22 J 1/10W	
R561			RK73GB2A272J	CHIP R 2.7K J 1/10W	
R563,564			RK73GB2A103J	CHIP R 10K J 1/10W	
R565			RK73GB2A104J	CHIP R 100K J 1/10W	
R566,567			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R581			RK73GB2A102J	CHIP R 1.0K J 1/10W	
W156,157			R92-2053-05	CHIP R 0 J 1/8W	
W158			R92-1252-05	CHIP R 0 OHM J 1/16W	
W160			R92-2052-05	CHIP R 0 OHM J 1/10W	
W161,162			R92-2053-05	CHIP R 0 J 1/8W	
W165			R92-2053-05	CHIP R 0 J 1/8W	
W402			R92-2053-05	CHIP R 0 J 1/8W	K2
W403			R92-1252-05	CHIP R 0 OHM J 1/16W	K2
W405,406			R92-1252-05	CHIP R 0 OHM J 1/16W	KK1M1
W409			R92-1252-05	CHIP R 0 OHM J 1/16W	KK1M1
W415			R92-2053-05	CHIP R 0 J 1/8W	
W500,501			R92-1252-05	CHIP R 0 OHM J 1/16W	
W504,505			R92-1252-05	CHIP R 0 OHM J 1/16W	
W506			R92-2053-05	CHIP R 0 J 1/8W	
W507			R92-1252-05	CHIP R 0 OHM J 1/16W	
W508			R92-2053-05	CHIP R 0 J 1/8W	
W509			R92-1252-05	CHIP R 0 OHM J 1/16W	
W510			R92-2053-05	CHIP R 0 J 1/8W	
W511			R92-1252-05	CHIP R 0 OHM J 1/16W	
W516			R92-1252-05	CHIP R 0 OHM J 1/16W	
W517			R92-2053-05	CHIP R 0 J 1/8W	
W519			R92-2053-05	CHIP R 0 J 1/8W	
W521			R92-1252-05	CHIP R 0 OHM J 1/16W	
W523,524			R92-1252-05	CHIP R 0 OHM J 1/16W	
W530			R92-2053-05	CHIP R 0 J 1/8W	
W531,532			R92-1252-05	CHIP R 0 OHM J 1/16W	
W533			R92-2053-05	CHIP R 0 J 1/8W	
W534			R92-1252-05	CHIP R 0 OHM J 1/16W	
W601			R92-1252-05	CHIP R 0 OHM J 1/16W	
D1			S2V20*A	DIODE	
D1			1N5393G-M6	DIODE	
D3			IMSA-6801	SURGE ABSORBER	
D10			MA4068(N)-M	ZENER DIODE	
D11			D1F60	DIODE	M1
D12			AM01Z	DIODE	M1
D13			D1F60	DIODE	
D14			AM01Z	DIODE	
D20			MA4068(N)-M	ZENER DIODE	
D40			1SS133	DIODE	
D50			DAN202U	DIODE	
D51			MA4082(N)-L	ZENER DIODE	
D70			MA4068(N)-M	ZENER DIODE	
D101			1SS133	DIODE	
D103			DA204U	DIODE	
D106			MA4062-L	ZENER DIODE	

Ref. No.	A d d	N e w	Parts No.	Description	Dest inati on
D107			MA3062WA	ZENER DIODE	
D108			MA4062-L	ZENER DIODE	
D110			HZS12A2	ZENER DIODE	
D201,202			MA4068(N)-M	ZENER DIODE	
D251-253			1SS133	DIODE	
D261-263			AM01Z	DIODE	KK1M1
D264			D1F60	DIODE	KK1M1
D264			S1J	DIODE	KK1M1
D265,266			AM01Z	DIODE	KK1M1
D267,268			D1F60	DIODE	KK1M1
D267,268			S1J	DIODE	KK1M1
D401,402			MA4068(N)-M	ZENER DIODE	
D403-405			MA4062-L	ZENER DIODE	
D407-410			MA4062-L	ZENER DIODE	
D411			MA3062WA	ZENER DIODE	
D501			RN739F	DIODE	
D503			RN739F	DIODE	
D504-506		*	KV1720S	VARIABLE CAPACITANCE DIODE	
IC1		*	UPD780058GC499	MI-COM IC	
IC4			TDA7386	ANALOGUE IC	K2
IC4			TDA7560	ANALOGUE IC	KK1M1
IC7			BA4911-V4	ANALOGUE IC	
IC8			HD74HC27FP	MOS-IC	
IC10		*	TDA7513	ANALOGUE IC	
IC11		*	PST3435UL	MOS-IC	
IC12			BR24C01AF-W	MEMORY IC	
IC12			M24C01-WMN6T	MEMORY IC	
IC12		*	S-24CS02AFJ-TB	MEMORY IC	
Q10			2SC4081	TRANSISTOR	
Q20			2SC4081	TRANSISTOR	
Q40			DTA124EUA	DIGITAL TRANSISTOR	
Q50			2SA1036K	TRANSISTOR	
Q51			UMC2N	TRANSISTOR	
Q53			UMC2N	TRANSISTOR	M1
Q55			2SD2375	TRANSISTOR	
Q70			2SC4081	TRANSISTOR	
Q101			2SC4081	TRANSISTOR	
Q102			DTA114YUA	DIGITAL TRANSISTOR	
Q223,224			DTC143TUA	DIGITAL TRANSISTOR	
Q251			DTC114YUA	DIGITAL TRANSISTOR	K2
Q501		*	CPH5905	TRANSISTOR	
Q502			3SK126	FET	
TH1			PTH9C42BE471Q	POSITIVE RESISTOR	
CD PLAYER UNIT (X32-5380-00)					
C1			C92-0566-05	CHIP-TAN 10UF 6.3WV	
C2			CK73FB1A225K	CHIP C 2.2UF K	
C3			CK73GB0J105K	CHIP C 1.0UF K	
C5			CC73GCH1H020C	CHIP C 2.0PF C	
C6			CC73GCH1H390J	CHIP C 39PF J	
C7			CK73GB1C104K	CHIP C 0.10UF K	
C8			CK73GB0J105K	CHIP C 1.0UF K	
C9			CK73GB1H472K	CHIP C 4700PF K	
C10			CK73GB1C333K	CHIP C 0.033UF K	
C11			CK73GB1H682K	CHIP C 6800PF K	

KDC-2022/V/202MR/4023

PARTS LIST

* New Parts

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CD PLAYER UNIT (X32-5380-00)

Ref. No.	A d d	N e w	Parts No.	Description	Dest inati on
C12			CK73GB1H332K	CHIP C 3300PF K	
C13			CC73GCH1H271J	CHIP C 2700PF J	
C14			CK73GB1H472K	CHIP C 4700PF K	
C15			CK73GB1H222K	CHIP C 2200PF K	
C16			CC73GCH1H331J	CHIP C 330PF J	
C17 ,18			CK73GB1C104K	CHIP C 0.10UF K	
C31 -34			CK73GB1C104K	CHIP C 0.10UF K	
C36			CK73FB1A225K	CHIP C 2.2UF K	
C37 -39			CK73GB1H103K	CHIP C 0.010UF K	
C40			CK73GB1H153K	CHIP C 0.015UF K	
C41			CK73GB1H102K	CHIP C 1000PF K	
C42			CK73GB1E473K	CHIP C 0.047UF K	
C43			CK73GB1H222K	CHIP C 2200PF K	
C44			CK73GB1H102K	CHIP C 1000PF K	
C45 -47			CK73GB1C104K	CHIP C 0.10UF K	
C48			CK73GB1H682K	CHIP C 6800PF K	
C49			CK73GB1H152K	CHIP C 1500PF K	
C50			CK73GB1H682K	CHIP C 6800PF K	
C51			CK73GB1H152K	CHIP C 1500PF K	
C52			CK73GB1C104K	CHIP C 0.10UF K	
C61			CK73FB1A225K	CHIP C 2.2UF K	
C69 -72			CK73GB1H222K	CHIP C 2200PF K	
C75 ,76			CK73GB1H682K	CHIP C 6800PF K	
C100-102			CK73GB1H102K	CHIP C 1000PF K	
CN1			E40-9536-05	FLAT CABLE CONNECTOR	
CN1			E41-0193-05	FLAT CABLE CONNECTOR	
CN2			E40-9339-05	FLAT CABLE CONNECTOR	
CN2			E41-0129-05	FLAT CABLE CONNECTOR	
X1			L78-0851-05	RESONATOR (16.93MHZ)	
CP1			R90-1019-05	MULTI-COMP 100 X2	
CP2			R90-1014-05	MULTI-COMP 100 X4	
CP3 ,4			R90-0974-05	MULT R 1.8K X4	
CP5			R90-0720-05	MULTI-COMP 100K X4	
R1			RK73GB2A910J	CHIP R 91 J 1/10W	
R2 ,3			RK73GB2A562J	CHIP R 5.6K J 1/10W	
R4			RK73FB2B100J	CHIP R 10 J 1/8W	
R5 ,6			RK73GB2A332J	CHIP R 3.3K J 1/10W	
R7			RK73GB2A362J	CHIP R 3.6K J 1/10W	
R8			RK73GB2A273J	CHIP R 27K J 1/10W	
R9			RK73GB2A392J	CHIP R 3.9K J 1/10W	
R10			RK73GB2A104J	CHIP R 100K J 1/10W	
R11			RK73GB2A333J	CHIP R 33K J 1/10W	
R12			RK73GB2A244J	CHIP R 240K J 1/10W	
R13			RK73GB2A914J	CHIP R 910K J 1/10W	
R14			RK73GB2A104J	CHIP R 100K J 1/10W	
R15			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R31			RK73GB2A273J	CHIP R 27K J 1/10W	
R32			RK73GB2A103J	CHIP R 10K J 1/10W	
R33			RK73GB2A183J	CHIP R 18K J 1/10W	
R34			RK73GB2A103J	CHIP R 10K J 1/10W	
R35			RK73GB2A393J	CHIP R 39K J 1/10W	
R36			RK73GB2A103J	CHIP R 10K J 1/10W	
R37			RK73GB2A622J	CHIP R 6.2K J 1/10W	
R38			RK73GB2A224J	CHIP R 220K J 1/10W	

Ref. No.	A d d	N e w	Parts No.	Description	Dest inati on
R39			RK73GB2A104J	CHIP R 100K J 1/10W	
R40			RK73GB2A821J	CHIP R 820 J 1/10W	
R41			RK73GB2A473J	CHIP R 47K J 1/10W	
R42			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R43			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R44 ,45			RK73GB2A103J	CHIP R 10K J 1/10W	
R46			RK73GB2A273J	CHIP R 27K J 1/10W	
R47			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R48			RK73GB2A103J	CHIP R 10K J 1/10W	
R49			RK73GB2A393J	CHIP R 39K J 1/10W	
R50			RK73GB2A392J	CHIP R 3.9K J 1/10W	
R51			RK73GB2A103J	CHIP R 10K J 1/10W	
R52 ,53			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R71			RK73GB2A133J	CHIP R 13K J 1/10W	
R72			RK73FB2B201J	CHIP R 200 J 1/8W	
R81 ,82			RK73FB2B331J	CHIP R 330 J 1/8W	
R85 ,86			RK73FB2B331J	CHIP R 330 J 1/8W	
R87 ,88			RK73FB2B101J	CHIP R 100 J 1/8W	
R93			RK73GB2A104J	CHIP R 100K J 1/10W	
R100			RK73GB2A100J	CHIP R 10 J 1/10W	
S1 ,2			S68-0863-05	PUSH SWITCH	
S3			S68-0862-05	PUSH SWITCH	
D1			DAN202U	DIODE	
D1			MA142WK	DIODE	
D2			MA8051-L	ZENER DIODE	
D3			DA204U	DIODE	
IC1			AN22002AA	ANALOGUE IC	
IC2		*	MN6627771KP	MOS-IC	
IC3			BA5824FP	ANALOGUE IC	
Q1			MCH6101	TRANSISTOR	
Q2			2SA1362(Y)	TRANSISTOR	
Q3			DTC124EUA	DIGITAL TRANSISTOR	
Q3			UN5212	DIGITAL TRANSISTOR	
Q4			DTA143XUA	DIGITAL TRANSISTOR	
Q5			2SC4081	TRANSISTOR	
Q6			2SA1576A	TRANSISTOR	
DAUGHTER UNIT (X89-2590-10)					
C221,222			CE04DW1C100M	ELECTRO 10UF 16WV	
CN90			E40-3238-05	PIN ASSY	
CN91			E40-3249-05	PIN ASSY	
R221,222			RK73GB2A271J	CHIP R 270 J 1/10W	
R225,226			RK73GB2A303J	CHIP R 30K J 1/10W	
R229,230			RD14BB2C101J	RD 100 J 1/6W	
Q221,222			DTC143TUA	DIGITAL TRANSISTOR	
Q225			DTA124EUA	DIGITAL TRANSISTOR	
CD MECHANISM ASSY (X92-4640-00)					
2		1B	A10-4827-12	CHASSIS	
5		1B	D10-4576-33	ARM ASSY	
8		2A	D10-4579-03	LEVER ASSY	
10		3A	D10-4581-13	ARM	
11		2A	D10-4582-13	ARM	
12		3A	D10-4583-03	ARM	

K : KDC-2022V K2 : KDC-202MR
K1 : KDC-2022 M1 : KDC-4023

△ indicates safety critical components.

KDC-2022/V/202MR/4023

PARTS LIST

*New Parts

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Teile ohne **Parts No.** werden nicht geliefert.

CD MECHANISM ASSY (X92-4640-00)

Ref. No.	A d d	N e w	Parts No.	Description	Dest inati on
13	3A		D10-4584-03	ARM	
14	3B		D10-4585-03	ARM	
15	2A		D10-4586-13	SLIDER	
16	3B		D10-4587-22	SLIDER	
17	3B		D10-4588-03	SLIDER	
18	3B		D10-4595-04	ARM	
19	3B		D10-4596-14	ARM	
22	2A		D13-2151-04	GEAR	
23	2B		D13-2152-04	GEAR	
24	3B		D13-2153-04	GEAR	
25	3B		D13-2154-04	GEAR	
26	3B		D13-2155-04	WORM	
27	3B		D13-2156-14	GEAR	
28	3B		D13-2157-04	GEAR	
29	3B		D13-2158-04	GEAR	
30	3B		D13-2168-04	GEAR	
31	3B		D13-2171-04	GEAR	
32	2B		D13-2172-03	RACK (GEAR)	
33	2A		D14-0759-04	ROLLER	
35	2B		D21-2382-04	SHAFT	
36	1A		D23-0954-04	RETAINER	
37	1B		D39-0246-05	DAMPER	
38	2B		G01-3072-04	EXTENSION SPRING	
39	2A		G01-3073-04	TORSION COIL SPRING	
40	2A		G01-3074-04	EXTENSION SPRING	
41	1B		G01-3075-04	EXTENSION SPRING	
42	2A		G01-3076-04	EXTENSION SPRING	
43	1B		G01-3077-04	EXTENSION SPRING	
44	2B		G02-1399-04	FLAT SPRING	
45	2B		G02-1408-04	FLAT SPRING	
51	1A		J21-9676-22	MOUNTING HARDWARE	
52	3B		J21-9677-02	MOUNTING HARDWARE	
53	1B		J21-9678-03	MOUNTING HARDWARE	
55	1A		J90-1001-11	GUIDE	
56	1B		J90-1023-03	GUIDE	
A	2B		N09-4460-05	TAPTITE SCREW (OVAL P TAPTIT)	
B	1B		N09-4472-05	MACHINE SCREW (M1.7X8.5)	
C	2B		N09-6004-05	MACHINE SCREW (M1.7X2.5 IB-L)	
E	2B		N09-6007-05	MACHINE SCREW (PAN M2X2)	
F	1A		N09-6051-05	TAPTITE SCREW (BIND P≠ 2X5)	
G	2A		N19-2163-04	FLAT WASHER	
H	1B		N39-2020-46	PAN HEAD MACHIN SCREW	
J	1B		N09-6108-05	MACHINE SCREW (M2*3.5TYPE3)	
DM1	3B		T42-1066-04	DC MOTOR ASSY (SP)	
DM2	2B		T42-1067-04	DC MOTOR ASSY (LO)	
DPU1	2D	*	X93-2010-00	OPTICAL PICKUP ASSY	

Ref. No.	A d d	N e w	Parts No.	Description	Dest inati on
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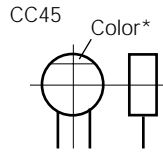
KDC-2022/V/202MR/4023

PARTS LIST

CAPACITORS

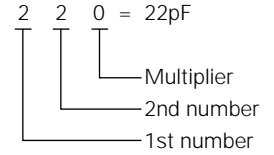
CC 45 TH 1H 220 J
 1 2 3 4 5 6

- 1 = Type ... ceramic, electrolytic, etc.
- 2 = Shape ... round, square, etc.
- 3 = Temp. coefficient
- 4 = Voltage rating
- 5 = Value
- 6 = Tolerance



• Capacitor value

- 010 = 1pF
- 100 = 10pF
- 101 = 100pF
- 102 = 1000pF = 0.001μF
- 103 = 0.01μF



• Temperature coefficient

1st Word	C	L	P	R	S	T	U
Color*	Black	Red	Orange	Yellow	Green	Blue	Violet
ppm/°C	0	-80	-150	-220	-330	-470	-750

2nd Word	G	H	J	K	L
ppm/°C	±30	±60	±120	±250	±500

Example : CC45TH = -470±60ppm/°C

• Tolerance (More than 10pF)

Code	C	D	G	J	K	M	X	Z	P	No code
(%)	±0.25	±0.5	±2	±5	±10	±20	+40 -20	+80 -20	+100 -0	More than 10μF : -10~+50 Less than 4.7μF : -10~+75

(Less than 10pF)

Code	B	C	D	F	G
(pF)	±0.1	±0.25	±0.5	±1	±2

• Voltage rating

2nd word \ 1st word	A	B	C	D	E	F	G	H	J	K	V
0	1.0	1.25	1.6	2.0	2.5	3.15	4.0	5.0	6.3	8.0	-
1	10	12.5	16	20	25	31.5	40	50	63	80	35
2	100	125	160	200	250	315	400	500	630	800	-
3	1000	1250	1600	2000	2500	2150	4000	5000	6300	8000	-

CHIP CAPACITORS

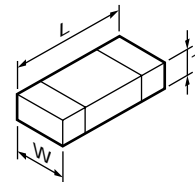
(EX) CC 73 F SL 1H 000 J
 1 2 3 4 5 6 7
 (Chip) (CH, RH, UJ, SL)

(EX) CK 73 F F 1H 000 Z
 1 2 3 4 5 6 7
 (Chip) (B, F)

Refer to the table above.

- 1 = Type
- 2 = Shape
- 3 = Dimension
- 4 = Temp. coefficient
- 5 = Voltage rating
- 6 = Value
- 7 = Tolerance

• Dimension



Chip capacitor

Code	L	W	T
Empty	5.6±0.5	5.0±0.5	Less than 2.0
A	4.5±0.5	3.2±0.4	Less than 2.0
B	4.5±0.5	2.0±0.3	Less than 2.0
C	4.5±0.5	1.25±0.2	Less than 1.25
D	3.2±0.4	2.5±0.3	Less than 1.5
E	3.2±0.2	1.6±0.2	Less than 1.25
F	2.0±0.3	1.25±0.2	Less than 1.25
G	1.6±0.2	0.8±0.2	Less than 1.0
H	1.0±0.05	0.5±0.05	0.5±0.05

Chip resistor

Code	L	W	T
E	3.2±0.2	1.6±0.2	1.0
F	2.0±0.3	1.25±0.2	1.0
G	1.6±0.2	0.8±0.2	0.5±0.1
H	1.0±0.05	0.5±0.05	0.35±0.05

RESISTORS

• Chip resistor (Carbon)

(EX) RD 73 E B 2B 000 J
 1 2 3 4 5 6 7
 (Chip) (B, F)

• Carbon resistor (Normal type)

(EX) RD 14 B B 2C 000 J
 1 2 3 4 5 6 7
 (Chip) (B, F)

- 1 = Type ... ceramic, electrolytic, etc.
- 2 = Shape ... round, square, etc.
- 3 = Dimension
- 4 = Temp. coefficient
- 5 = Voltage rating
- 6 = Value
- 7 = Tolerance

• Rating wattage

Code	Wattage	Code	Wattage	Code	Wattage
1J	1/16W	2C	1/6W	3A	1W
2A	1/10W	2E	1/4W	3D	2W
2B	1/8W	2H	1/2W		

KDC-2022/V/202MR/4023

SPECIFICATIONS

		KDC-2022/2022V	KDC-202MR	KDC-4023
FM	Frequency Range	-	-	87.5MHz-108.0MHz
	Frequency Step	-	-	50kHz
	Frequency Range	87.9MHz-107.9MHz	87.9MHz-107.9MHz	87.9MHz-107.9MHz
	Frequency Step	200kHz	200kHz	200kHz
	Channel Space Selection	50k/200kHz	50k/200kHz	50k/200kHz
	Usable Sensitivity	9.3dBf	9.3dBf	9.3dBf
	S/N:30dB	(0.8μV/75Ω)	(0.8μV/75Ω)	(0.8μV/75Ω)
	Quieting Sensitivity	15.2dBf	15.2dBf	15.2dBf
	S/N 50dB	(1.6μV/75Ω)	(1.6μV/75Ω)	(1.6μV/75Ω)
Frequency Response (±3.0dB)	30Hz-15kHz	30Hz-15kHz	30Hz-15kHz	
SN	70dB (MONO)	70dB (MONO)	70dB (MONO)	
Selectivity	≥80dB (±400kHz)	≥80dB (±400kHz)	≥80dB (±400kHz)	
Stereo Separation	40dB(1kHz)	40dB(1kHz)	40dB (1kHz)	
AM	Frequency Range	530kHz-1700kHz	530kHz-1700kHz	530kHz-1700kHz
	Frequency Step	10kHz	10kHz	10kHz
	Frequency Range	-	-	531kHz-1611kHz
	Frequency Step	-	-	9kHz
	Channel Space Selection	9k/10kHz	9k/10kHz	9k/10kHz
Usable Sensitivity	28dBμ (25μv)	28dBμ (25μv)	28dBμ (25μv)	
S/N:20dB				
CD	Laser Diode	GaAIAs (λ=780nm)	GaAIAs (λ=780nm)	GaAIAs (λ=780nm)
	Digital Filter (D/A)	8 times Over Sampling	8 times Over Sampling	8 times Over Sampling
	D/A Converter	1 Bit	1 Bit	1 Bit
	Spindle Speed	500-200 (CLV)	500-200 (CLV)	500-200 (CLV)
	Wow & Flutter	Below Mesurable Limit	Below Mesurable Limit	Below Mesurable Limit
	Frequency Respons	10-20kHz	10-20kHz	10-20kHz
	THD	0.01% (1kHz)	0.01% (1kHz)	0.01% (1kHz)
	S/N Ratio (dB)	96dB (1kHz)	96dB (1kHz)	96dB (1kHz)
	Dynamic Range	93dB	93dB	93dB
	Channel Sparation	85dB	85dB	85dB
	Preout Level (mV) /Load	2000mV/10kΩ (CD/CD-CH)	2000mV/10kΩ (CD/CD-CH)	2000mV/10kΩ (CD/CD-CH)
Preout Impedance (Ω)	≤600Ω	≤600Ω	≤600Ω	
AMP	Maximum Power	50wx4	45wx4	50wx4
	Full Bandwidth Power (at less than 1% THD)	22wx4	22wx4	22wx4
TONE	Bass	100Hz ±10dB	100Hz±10dB	100Hz±10dB
	Middle	1kHz ±10dB	1kHz ±10dB	1kHz ±10dB
	Treble	10kHz ±10dB	10kHz±10dB	10kHz±10dB
GENE	Operating voltage (11~16v allowable)	14.4v	14.4v	14.4v
	Current Consumption	10A	10A	10A
	Installation Size (W)	182 (mm) 7-3/16 (in)	182 (mm) 7-3/16 (in)	182 (mm) 7-3/16 (in)
	(H)	53 (mm) 2-1/16 (in)	53 (mm) 2-1/16 (in)	53 (mm) 2-1/16 (in)
	(D)	157 (mm) 6-3/16 (in)	157 (mm) 6-3/16 (in)	157 (mm) 6-3/16 (in)
Weight	3.1lbs (1.4kg)	3.1lbs (1.4kg)	3.1lbs (1.4kg)	

KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

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