

CD RECEIVER

KDC-MP738U/W7541U /W7541UY/X792/X8009U

KENWOOD

Kenwood Corporation

SERVICE MANUAL

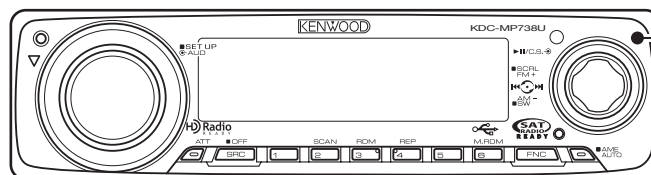
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B53-0628-00 (N) 429

TDF SPARE-PANEL

MODEL	TDF PANEL No.	TDF NAME
KDC-X792	Y33-2940-60	TDF-88DX
KDC-MP738U	Y33-2940-61	TDF-MP88D
KDC-W7541U/W7541UY	Y33-2940-64	TDF-W7541U
KDC-X8009U	Y33-2940-66	TDF-X8009U

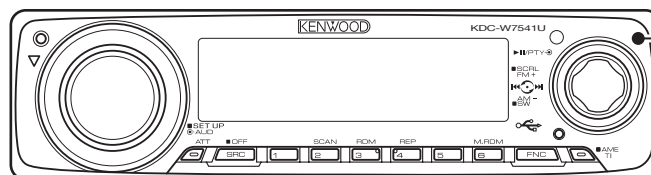
CD MECHANISM EXTENSIONCORD (30P) : **E39-1014-05**

KDC-MP738U
(K type)



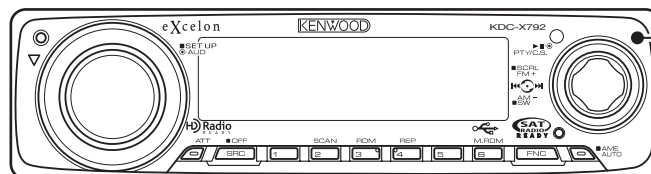
Panel assy
(A64-4425-02)

KDC-W7541U
KDC-W7541UY
(E type)



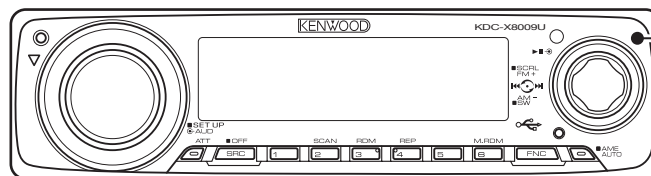
Panel assy
(A64-4428-02)

KDC-X792
(K type)



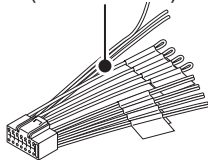
Panel assy
(A64-4424-02)

KDC-X8009U
(M type)

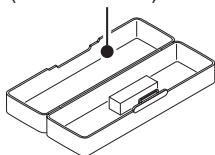


Panel assy
(A64-4431-02)

DC cord (K,M type)
(E30-6428-05)



Plastic cabinet assy (M type)
(A02-2757-03)



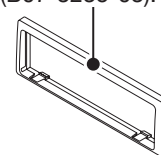
Remote controller assy
(A70-2085-05)



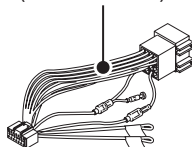
SIZE AA BATTERY
(Not supplied)



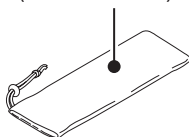
Escutcheon
(B07-3238-03): KDC-MP738U
(B07-3235-03): K,E,M type



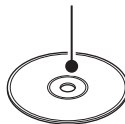
DC cord (E type)
(E30-6671-05)



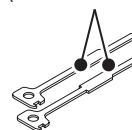
Carrying case
(W01-1664-05): KDC-X792
(W01-1710-05): K,E type



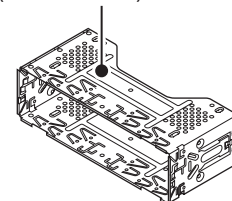
Compact disc
(W01-1723-05)



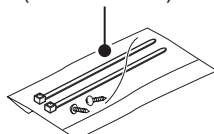
Lever
(D10-7012-04) x2



Mounting hardware assy
(J22-0011-03)



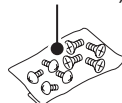
Screw set (KDC-X792)
(N99-1790-05)



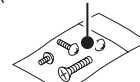
Cover (KDC-X792)
(F19-1475-04)



Screw set (K,M type)
(N99-1757-15)



Screw set (K,M type)
(N99-1730-35)



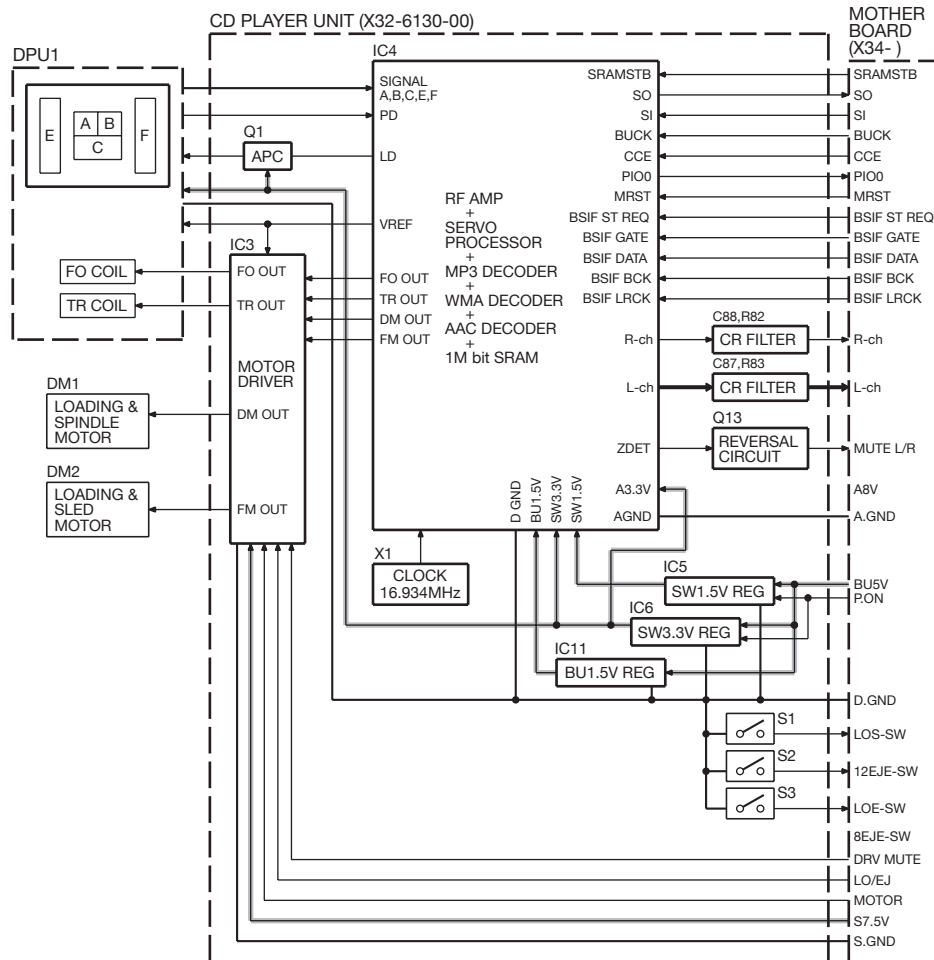
This product uses Lead Free solder.

This product complies with the **RoHS** directive for the European market.





BLOCK DIAGRAM



COMPONENTS DESCRIPTION

● ELECTRIC UNIT (X34-579x-xx)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC10	Audio8V Ref Power Supply	Output 1.27V.
IC20	Regulator	Power supply for BU3.3V.
IC60	Switching Regulator	Power supply for 65V FL+B. (to PANEL)
IC80	Switching Regulator	Power supply for D5V. (to USB/PANEL)
IC300	Hi-side SW	Detection of USB Over Current & On/Off SW
IC310	G-Sensor	Inclination detection (only 0-10)
IC340	RDS decoder IC	RDBS & RDS ecoder. (only K & E type)
IC350	OPAMP	Vref of IC480
IC450	Power IC	Amplifies the front L/R and the rear L/R to 50W maximum.
IC480	Eelectrical Volume & Source Selecter	Controls the source, volume, and tone.
IC500	System μ -com	Controls FM/AM tuner, the changer, CD mechanism, Panel, volume and tone.
IC510	Reset IC	"L" when detection voltage goes below 3.6V or less.
IC520	EEPROM	Rom correction
IC530	Muting logic IC	Controls logic for muting.
IC600	Logic IC	Level Shift (3.3V \rightarrow 5V)
IC602	Logic IC	Level Shift (5V \rightarrow 3.3V)
IC700	Sub μ -com	USB/CD mechanism control
IC751	EEPROM	Rom correction
IC752	iPod Authentication Coprocessor	iPod Authentication
Q10	Audio8V AVR	When Q11&Q12' go ON, A8V AVR outputs 8.0V.
Q11,12	Audio8V AVR SW	When Q12' Base goes Hi, Supply current to IC10.
Q13,14	Audio8V AVR SW	When Q14' Base goes Hi, Q13 are ON.
Q20,21	B.U.5V AVR	While BU is applied, BU5V AVR outputs +5V.
Q22,23	PON5V	When Q23' base goes Hi, PON5V outputs +5V.
Q30	Servo +B SW	When Q31' go ON, Servo +B outputs 8V.
Q31	Servo +B SW	When Q13' go ON, Q30 are ON
Q40,41	PANEL +5V SW	When Q41' base gose Hi, PANEL +5V is outputs.
Q45,46	FDC SW	When PON-ILL (μ -CON) goes ON, AVR outputs 5V. (FL Filament)
Q50,51	Illumination+B AVR	When Q52&Q53' go ON, AVR outputs 10V.
Q52,53	Illumination+B SW	When PON-ILL (μ -CON) goes ON, Hi, Q52 is ON.
Q70,71	SW15V	When Q13' go ON, The voltage appears. (~15V)
Q80	Change of Oscillation Frequency	When Q80 is turned ON, the oscillation frequency at IC80 in the switching regulator changes from 1MHz to 2.45MHz.
Q120	B.U Detected SW	When Q120' base gose Hi, B.U voltage is detected.
Q122	ACC Detect SW	When Q122' base gose Hi, Acc voltage is detected.
Q123	Surge Detect SW	When Q123' base goes Hi, Surge voltage is detected.
Q140,143	P-CON SW	When Q140' base goes Hi, AVR outputs 14V.
Q141,142	P-CON Protect	Protect Q142 by turning on when P-CON output is grounded
Q150,151	Power Antenna SW	When Q151' base goes Hi, power antenna switch outputs 14V.
Q180	Small-lamp Detect SW	When Q180' base goes Hi, Small-lamp is detected.

COMPONENTS DESCRIPTION

Ref. No.	Application / Function	Operation / Condition / Compatibility
Q350,351	4VPRE+B	When Q353' go ON, 4VPRE+B is outputs. (~12V)
Q352	4VPRE+B Protect	When 4VPRE+B is overcurrent, Q352 turn Q350 off.
Q353,354	4VPRE+B SW	When Q354' Base goes Hi, Q353 is ON.
Q370,372~376	Pre-out mute SW	When a base goes Hi, Pre-out is set to mute.
Q371,377	Pre-out mute driver	When a base goes Lo, mute driver is turned on.
Q400,401	AM+B SW	When Q401' base goes Hi, AM+B is outputs.
Q500,501	FL+B SW	When PON-ILL (μ-CON) goes ON, FL+B outputs 65V.
Q650	X15 LED SW	When DSI Port LOW, LED of X15 are ON
Q702,703	3.3V_SW_for_IC700 (flash_type)	When base of Q702 is "H", 3.3V_On.
Q704	Decoder SRAM standby control Buffer	When base of Q704 is "L", SRAM_STBY.
Q705	CD "LOE_LIM" SW_Buffer	When base of Q705 is "H", Loading_End.

● SWITCH UNIT (X16-624x-xx)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC1	ROM IC FLASH ROM IC	Graphics data included
IC3	ROM CORRECTION	For program correcting emergency (EEP_ROM)
IC4	PANEL μ-COM	FL VddSupply (ON/OFF) Encoder Key LedSW (ON/OFF) is controlled by IC4
IC6	REMOTE CONTROL IC	Remote control receiver
IC7	BUFFER IC	It is change into 3.3V from 5V
IC8	BUFFER IC	It is change into 5V from 3.3V
IC9	BUFFER IC	For Control ED1
IC10	2.5V REGULATOR	The power supply for 2.5V
IC11	3.3V REGULATOR	The power supply for 3.3V
Q1~5	LED DRIVER	It is controlled by IC4
Q6	POWER ON/OFF SWITCH OF IC1	It is controlled by IC4
Q11,13	POWER ON/OFF SWITCH OF ED1 (65V)	It is controlled by IC4

● CD PLAYER UNIT (X32-6130-00)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC3	4ch BTL Driver	Driver for focusing & tracking coil, driver for sled & spindle motor, and operation for disc loading & ejection.
IC4	Servo DSP with built-in Audio DAC	With built-in MP3/WMA/AAC decoder and 1M-bit-SRAM.
IC5	D1.5V REG.	Power supply for digital 1.5V.
IC6	D3.3V REG.	Power supply for digital 3.3V.
IC11	BU1.5V REG.	Power supply for back-up 1.5V.
Q1	APC (Auto Power Control)	Drives LD (Laser Diode).
Q13	Inverter	Inverts ZDET signal.
D2	Laser Diode Protection	Prevents reverse bias which is applied to laser. Laser destruction prevention.
D3,4	Static Electricity Countermeasure	Prevents malfunction by static electricity.

MICROCOMPUTER'S TERMINAL DESCRIPTION

● SYSTEM MICROCOMPUTER 30624MGPB77GP (X34: IC500)

Pin No.	Pin Name	I/O	Application	Truth Value Table	Processing / Operation / Description
1	WIRED_REMO	I	Remote controller input		Pulse width detection
2	RDS_QUAL	I	RDS decoder QUAL input terminal		
2	NC	O	Not used. (In models without RDS)		Output L fixed
3	S_SYS_DATA	O	System μ -com \rightarrow SOC data		400k
4	S_SOC_DATA	I	SOC \rightarrow System μ -com data		400k
5	S_SOC_CLK	I	Host is SOC. CLK from SOC		400k
6	BYTE				
7	CNVSS				
8	XCIN				32,768Hz
9	XCOUT				32,768Hz
10	RESET				
11	XOUT				12MHz
12	VSS				
13	XIN				12MHz
14	VCC1				
15	NMI	I	Not used		
16	RDS_CLK	I	RDS clock input terminal		
16	NC	O	Not used. (In models without RDS)		Output L fixed
17	FLIP_DET	I	FLIP panel open detection		H: Open, L: Close Shut down power to panel system in synchronous with opening the panel. Audio shall be kept on
18	SRC_KEY	I	Source key input		H: OFF, L: ON
19	RDS_DATA	I	RDS decoder DATA input terminal		
19	NC	O	Not used. (In models without RDS)		Output L fixed
20	PANEL_SW_DET	I	FLIP panel detach detection		H: Panel attached, L: Panel detached Enter PowOFF condition simultaneously with detection
21	EJECT_KEY	I	Eject key input		H: OFF, L: ON
22	PANRST	O	Panel reset terminal		H: Normal, L: Reset
23	DSI (EJECT_ILL)	I/O	DSI control terminal		L: Turns on, Hi-Z: Turns off
24	NC	O	Not used (SW_REG frequency setup terminal 2)		Output L fixed
25	F_SEL1	I/O	SW_REG frequency setup terminal 1	⑤	H: For AM, Hi-Z: For other than AM
26	PWIC_BEEP	O	Beep output		2kHz 1kHz
27	TUN_SCL	I/O	F/E I2C clock input/output terminal		MAX 400k
28	TUN_SDA	I/O	F/E I2C data input/output terminal		MAX 400k
29	PAN_SYS_DATA	O	System μ -com \rightarrow Panel data		UART MAX500k
30	PAN_PAN_DATA	I	Panel \rightarrow System μ -com data		UART MAX500k
31	PAN_SYS_REQ	O	System μ -com \rightarrow Panel communication request		
32	PAN_PAN_REQ	I	Panel \rightarrow System μ -com communication request		
33,34	NC	O	Not used		Output L fixed

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Truth Value Table	Processing / Operation / Description
35	NC (D5V_DIS)	O	Not used		Output L fixed
36	PON_ILL	I/O	Panel LED FL filament power supply FL bias power supply control		H: ON, Hi-Z: OFF Turned OFF when the display is black out. Turned OFF when panel is dismounted/opened.
37	NC	O	Not used		Output L fixed
38	PON_PANEL	I/O	Power supply for panel μ -com Required for panel authentication		H: ON, Hi-Z: OFF Turn OFF when panel is dismounted/opened or when power is off.
39	ROMCOR_DET	I	ROM correction writing-in request		H: Can re-write ROM (ROM correction)(I2C is open)
39	EPM	I	EPM input terminal for re-writing ROM. ROM is re-writable when the input is "L" at the boot up.		
40	CD_MOTOR	O	CD motor control terminal	②	Refer to the truth value table
41	CD_LOE_LIM_SW	I	CD detection terminal (Chucking detection)		H: Loading completed, L: No disc is found.
42	CD_LOS_SW	I	CD loading detection terminal		L: Ejection completed.
43	CD_DISC12_SW	I	CD disc detection terminal (12cm)		L: 12cm disc
44	PAN_SC_CON	O	Panel operation control terminal CE when the system μ -com is re-written		H: In normal condition, L: Stop the panel.
45	CD_LOEJ	I/O	CD motor control terminal	②	Refer to the truth value table
46	S_SOC_REQ	I	SOC \rightarrow System μ -com communication request		
47	SOC_STOP	O	SOC stop terminal		H: Normal, L: Stop SOC.
48	SOC_RST	O	SOC reset terminal		H: Normal, L: Reset
49	S_SYS_REQ	O	System μ -com \rightarrow SOC communication request		
50	SOC_MUTE	I	SOC mute request		L: MUTE request, H: In normal condition
51	PON_D5V	I/O	5V power supply control terminal for FL filament, panel, and USB.		H: ON, Hi-Z: OFF
52	PON	I/O	Power supply control terminal		H: ON, Hi-Z: OFF
53	OEM_DISP_DATA	I/O	External display DATA		External display
53	NC	O	Not used (Model without OEM_DISP)		Output L fixed
54	OEM_DISP_CLK	I/O	External display CLK		External display
54	NC	O	Not used (Model without OEM_DISP)		Output L fixed
55	OEM_DISP_CE	I/O	External display control request		External display
55	NC	O	Not used (Model without OEM_DISP)		Output L fixed
56	P_CON	I/O	PCON control terminal		POWER ON: H, POWER OFF: Hi-Z STBY source: Hi-Z
57	ANT_CON	O	ANTCON control terminal		TUNER source: H, POWER OFF: L STBY source: L
58	NC	O	Not used		Output L fixed
59	ILLUMI_DET	I	Dimmer illumi detection		L: ON, H: OFF
60	VCC2				
61	MUTE_0	O	IC-2 FRONT MUTE control		L: Mute ON, Independent setup of time constant 10ms, H: In normal condition
62	VSS				
63	MUTE_1	O	IC-2 REAR MUTE control		L: Mute ON, Independent setup of time constant 10ms, H: In normal condition

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Truth Value Table	Processing / Operation / Description
64	MUTE_2	O	IC-2 SW MUTE control		L: Mute ON, Independent setup of time constant 10ms, H: In normal condition Shall be used together with MUTE_PRE_SW IC2 shock noise measure
65	LINE_MUTE	I	Line mute detection		TEL MUTE: 1V or less, NAVI MUTE: 2.5V or higher
66	NC (SA_IN)	O	Not used		Output L fixed
67	NC (SA_RST)	O	Not used		Output L fixed
68	NC (SA_CLK)	O	Not used		Output L fixed
69	NC (MUTE_SA)	O	Not used		Output L fixed
70	PWIC_DC_DET	I	DC offset detection terminal		
71	ACC_DET	I	ACC detection		L: ACC found, H: ACC not found
72	BU_DET	I	BU detection		L: BU found, H: When No BU Reduction of power, and Over voltage
73	LX_REQ_S	I	Communication request from slave unit		
74	MUTE_AFS	I/O	IC-2 MUTE_C control AFS MUTE		L: Mute ON, Independent setup of time constant 0.5ms, Hi-Z: While in normal
74	NC	I	Not used (For other type than E-TYPE)		Input Hi-Z fixed
75	SDA/EVOL_SDA	I/O	System μ -com \rightarrow IC-2 data output		Communication speed 200-400k
75	SDA/E2P_SDA	I/O	I2C data for ROM correction		Communication speed 200-400k
76	SCL/EVOL_SCL	I/O	System μ -com \rightarrow IC-2 CLK output		Communication speed 200-400k
76	SCL/E2P_SCL	I/O	I2C clock for ROM correction		Communication speed 200-400k
77	PWIC_MUTE	O	Power IC MUTE terminal		L: While STANDBY source, momentary power down, L: While TEL MUTE
78	PWIC_STBY	O	Power IC standby terminal		POWER ON: H, POWER OFF: L
79	LX_REQ_M	O	Communication request to slave unit		
80	LX_MUTE	I	MUTE request from slave unit		H: Mute ON, L: Mute OFF
81	LX_CON	O	Start-up request to slave unit		H: Slave unit ON, L: Slave unit OFF
82	LX_RST	O	Hardware-reset to slave unit		H: RST, L: Normal
83	MUTE_PRE_FR	O	External PREOUT_MUTE F/R		"L" when Obit, or momentary power down
84	MUTE_PRE_SW	O	External PREOUT_MUTE SUB MUTE_2 shock noise measure		"L" when Obit, or momentary power down Shall be used in addition to MUTE_2.
85	PON_AM	I/O	AM+B power supply control terminal		H: ON when AM is being received. Hi-z: OFF in other condition.
86	TUN_IFC_OUT	I	F/E IFC OUT input terminal		H: Station is found., L: No station is found.
87	TUN_SMETER	I	S meter voltage detection terminal		
88	RDS_NOISE	I	FM noise voltage detection terminal		
88	NC	O	Not used. (In models without RDS)		Output L fixed
89	RDS_AFS_M	I/O	Time constant switching when noise is detected	③	L: During AF search, Hi-Z: In normal condition
89	NC	O	Not used. (In models without RDS)		Output L fixed
90	TYPE_1	I	A/D 5 pattern	①	
91	TYPE_2	I	A/D 5 pattern	①	
92	G_Y_OUT	I	Detection of Y direction movement of G analyzer		
92	NC	O	Not used. (In models without G antenna)		Output L fixed

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Truth Value Table	Processing / Operation / Description
93	G_X_OUT	I	Detection of X direction movement of G analyzer		
93	NC	O	Not used. (In models without G antenna)		Output L fixed
94	AVSS				
95	NC	O	Not used		Output L fixed
96	VREF		A/D analog reference voltage		
97	AVCC				
98	LX_DATA_S	I	Data from slave unit		
99	LX_DATA_M	O	Data to slave unit		
100	LX_CLK	I/O	LX BUS clock	④	

① Destination setting

TYPE_2 (91)	TYPE_1 (90)	Destination
1	1	KDC-MP738U [*]
1	2	KDC-X792
1	3	KDC-X692
1	4	SKDCMP9090U(Visteon)
1	5	KDC-MP638U
2	1	KDC-X8009U
2	2	
2	3	
2	4	
2	5	KDC-X7009U
3	1	U737 (J)
3	2	
3	3	(Reserve)
3	4	
3	5	
4	1	KDC-W7541UY
4	2	
4	3	
4	4	
4	5	KDC-W7141UY
5	1	KDC-W7541U
5	2	
5	3	
5	4	
5	5	KDC-W7041U

		R540	R530	R529	R528
TYPE1 (90)	1	-	-	x	22K
	2	-	-	47k	22k
	3	-	-	22k	22k
	4	-	-	22k	47k
	5	-	-	22K	x
TYPE2 (91)	1	x	22K	-	-
	2	47k	22k	-	-
	3	22k	22k	-	-
	4	22k	47k	-	-
	5	22K	x	-	-

(Note 1) When there is no destination defined, the unit operates as the model for [*].

(Note 2) The voltage is set to higher value.

(Note 3) When the system is set up as "Reserve", it reads the data for setting up the destination from E2PROM. Set up for the destination. In addition, change of the destination shall be possible from MENU in the test mode.

MICROCOMPUTER'S TERMINAL DESCRIPTION

② CD_MOTOR, CD_LOEJ

	CD_MOTOR	CD_LOEJ
Standby	L	L
Eject	H	H
Load	H	L
Brake	H	Hi-z

③ AFS process

	RDS_AFS_M	Status
AFS LOW	L	No sound output AF search
AFS MID	L	There is sound output in AF search.
AFS HIGH	Hi-Z	Normal reception

④ CH_CLK

AM10k					AM9k				
122.4	116.5	111.1	106.2	101.7	122.4	116.5	111.1	106.2	101.7
530	1170-1180	860-930	1050-1060	540-660	522-558	864-990	1071-1116	1260-1314	567-657
670-780	1390-1410	1070-1160		790-850	666-801	1125-1215	1323-1350	1449-1512	810-855
940-1040		1280-1380		1590-1680	1224-1251	1359-1413	1521-1629		999-1062
1190-1270		1530-1580							1422-1440
1420-1520									
1690-1700									

- Other than AM: 122 [kHz]

⑤ F_SEL

ALL-Type

FSEL1	Receiving frequency
Hi-Z	Other than AM
H	For AM

MICROCOMPUTER'S TERMINAL DESCRIPTION

● SUB MICROCOMPUTER 92CD28AFG6VV1 (X34: IC700)

Pin No.	Pin Name	I/O	Application	Processing / Operation / Description
1	MRST	-	Reset	L: RESET, H: In normal condition
2	MSTOP	I	STOP signal from system μ -com(Momentary power down detection / Recovery to low power consumption mode)	H: Normal L: Stop SOC
3	REQ_S	I	REQ signal from system μ -com	L: Request
4	IPOD_RDY	I	RDY signal of IPOD authentication	
5	BSIF_ST_REQ	I	BSIF	
6	VCC	-	Power supply terminal (For PC port and PMC circuit)	
7	XT1	-	Low frequency oscillator connection terminal sub-clock 32.768kHz	
8	XT2	-	Low frequency oscillator connection terminal sub-clock 32.768kHz	
9	PWE	-	External power supply control output	L: STOP
10	DVSS	-	GND terminal	
11	DVCC1B	-	For power supply terminal and built-in SRAM	
12	RVOUT1	-	Built-in regulator 1.5V output (Flash version does not output voltage).	
13	RVIN	-	Built-in regulator power supply input (Flash version has power supply terminal).	
14	RVIN	-	Built-in regulator power supply input (Flash version has power supply terminal).	
15	RVOUT2	-	Built-in regulator 1.5V output (Flash version does not output voltage).	
16	DVCC1A	-	For power supply terminal and built-in logic	
17	DVSS	-	GND terminal	
18~22	NC	O	Not used	Output L fixed
23	CD_CCE	O	Command I/F, CD mechanism chip enable terminal	"L" during other source
24	CD_RST	O	RESET, CD mechanism RST terminal	H: Normal, L: Reset
25	NC	O	Not used	Output L fixed
26	DVSS	-	GND terminal	
27	DVCC3A	-	For power supply terminal and peripheral I/O	
28	CD_REQ	I	Command I/F Communication request terminal from mechanism DSP	H: Data request
29	CD_SRAMSTBY	O	Decoder SRAM STANDBY control	L: SRAM standby (6E**)
30	CD_DRIVEMUTE	O	CD motor drive mute output	
31	CD_PON	O	CD mechanism power supply control output	H: Power ON (6E**), Hi-z: Power OFF
32~43	NC	O	Not used	Output L fixed
44	DVSS	-	GND terminal	
45	DVCC3A	-	For power supply terminal and peripheral I/O	
46~61	NC	O	Not used	Output L fixed
62	DVSS	-	GND terminal	
63	DVCC3A	-	For power supply terminal and peripheral I/O	
64	NC	O	Not used	Output L fixed
65	ZDET_IN	I	ZDET, 0 bit mute request terminal	L: Mute request, H: While in normal

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Processing / Operation / Description
66	CD_MUTE	O	Mute request to system μ -com	L: Mute request, H: While in normal
67	REQ_M	O	REQ signal to system μ -com	L: Request
68	IPOD_RST	O	RESET	
69	BOOT	I	Terminal for writing FLASH	
69,70	NC	O	Not used	Output L fixed
71	BSIF_LRCK	-	BSIF	
72	AM1	-	Operation mode: Fixed to "1".	
73	X2	-	High frequency oscillator connection terminal Main clock 9.00MHz	
74	DVSS	-	GND terminal	
75	X1	-	High frequency oscillator connection terminal Main clock 9.00MHz	
76	DVCC3A	-	For power supply terminal and peripheral I/O	
77	USB_OC	I	USB over current detection	L: Detection, H: In normal condition
78	USB_PON	O	USB PON output	
79	USB_D+	-	USB data connection terminal	
80	USB_D-	-	USB data connection terminal	
81	AM0	-	Operation mode: Fixed to "1".	
82	CD_LOE_LIM_SW	I	CD detection terminal (Chucking SW)	L: Loading completed, H: No disc
83	DVSS	-	GND terminal	
84	DATA_M	O	Serial I/F with system μ -com (Sending)	
85	DATA_S	I	Serial I/F with system μ -com (Receiving)	
86	CLK	O	Serial I/F with system μ -com (Clock output)	f=1M or less
87	CD_SO	O	Command I/F, Serial I/F (Sending)	"L" during other source
87	FLSH_UO	O	Terminal for writing FLASH	
88	CD_SI	I	Command I/F, Serial I/F (Receiving)	
88	FLSH_UI	I	Terminal for writing FLASH	
89	CD_CLK	O	Command I/F, Serial I/F (Clock output)	f=1MHz, "L" during other source
90	ROMCOR_SDA	I/O	E2PROM I2C data I/O terminal for ROM correction	
90	IPOD_SDA	I/O	I2C iPOD authentication data I/O terminal	
91	ROMCOR_SCLK	I/O	E2PROM I2C clock output terminal for ROM correction	
91	IPOD_SCLK	I/O	I2C iPOD authentication clock output terminal	f=80kHz
92	BSIF_BCK	-	BSIF	"L" during other source
93	BSIF_DATA	-	BSIF	"L" during other source
94	BSIF_GATE	O	BSIF	
95	DVCC3A	-	For power supply terminal and peripheral I/O	
96	NC	I	Not used	
96	ROMCOR_DET	I	ROMCOR write detection	H: Writing-in
97~99	NC	I	Not used	
100	DVSS	-	GND terminal	

MICROCOMPUTER'S TERMINAL DESCRIPTION

● PANEL MICROCOMPUTER 703134AGJ018A (X16-624: IC4)

Pin No.	Pin Name	I/O	Application	Processing / Operation / Description
1~7	D14-D8	I/O	Data input/output	
8	3.3VDD	-	3.3V	
9	VSS	-		
10~17	D7-D0	I/O	Data input/output	
18	FLGCP1	O	FL tone control	Control lighting time (brightness tone) with the pulse interval GCP=FLGCP1+FLGCP2
19	NC	O		Output L fixed
20	SYS_REQ	I	System μ -com communication request input	H: During data communication
21	SC_CON	I	System μ -com communication, panel operation control	H: Panel operation
22	NC	O		Output L fixed
23	2.5VDD	-	2.5V	
24	VSS	-		
25	PWM_VOL	O	PWM output	H: ON, L: OFF
26	PWM_MULTI	O	PWM output	H: ON, L: OFF
27	KS1	I/O	Key scan output	Output L, Hi-Z: Switching
28	TDO	O	Be used during debugging	NC during normal operation
29	TDI	O	Be used during debugging	NC during normal operation
30	FL_BK	O	FL BK control	L: FL goes on, H: FL goes off
31	KS2	I/O	Key scan output	Output L, Hi-Z: Switching
32	TRST	I	Be used during debugging	H or L during debugging
33,34	KS3,KS4	I/O	Key scan output	Output L, Hi-Z: Switching
35	TMS	O	Be used during debugging	NC during normal operation
36	TCM	O	Be used during debugging	NC during normal operation
37	3.3VDD	-		
38	EVSS	-		
39	KS5	I/O	Key scan output	Output L, Hi-Z: Switching
40~42	KR1-KR3	I	Key return input	
43	FLGCP2	O	FL tone control	Control lighting time (brightness tone) with the pulse interval GCP=FLGCP1+FLGCP2
44	PAN_REQ	O	Panel communication request output	H: During data communication
45	SYS_DATA	I	Data reception from system μ -com	UART communication 500kbps
46	PAN_DATA	O	Data transmission from the panel	UART communication 500kbps
47	FL_CLK	O	FL serial communication reference clock	Reference clock 4.125MHz @66MHz
48	KR4 INT	I	Key return input (Not processed yet)	Interrupt enable
49	FL_DATA3	O	FL serial control data SI3	
50	CLK_IN2	I	Serial sync clock input	Sync to FL_CLK
51	FL_EN	O	FL skip shift control	H: Skip odd numbers L: Skip even numbers
52	FL_DATA2	O	FL serial control data SI2	

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Processing / Operation / Description
53	CLK IN1	I	Serial sync clock input	Sync to FL_CLK
54	FL_LAT	O	FL latch control	
55	FL_DATA1	O	FL serial control data SI1	
56	3.3VDD	-		
57,58	X2,X1	I	Clock input	6.6MHz Internal 66MHz
59	CVSS	-		
60	CKSEL	I	Clock generator operational mode input	Direct connection to GND
61	PSEL	I	Input of input frequency selection signal in PLL mode	VDD connection when the main clock is 5.5MHz or more and GND connection when the clock is other frequencies
62	2.5VDD	-		
63	VSS	-		
64	MODE0	I	μ-com operation mode input	Direct connection to GND
65	MODE1	I	μ-com operation mode input Used when debugging	H: While writing-in
66	PAN_RST	I	System μ-com control	Cancel in 100msec after PON_PAN ON Reset in 60usec after PON_PANOFF
67	AVDD1	I	D/A conversion reference voltage	Be connected to D3.3V
68,69	NC	I		Terminal yet to be processed
70,71	AVSS1,AVSS0	-	D/A conversion reference GND	Direct connection to GND
72	AVDD0	I	A/D conversion reference voltage	Be connected to D3.3V
73~80	NC	I	Dedicated to input	Direct connection to GND
81	2.5VDD			
82	VSS			
83	NC (TYPE)	I	Not used	Supporting switching of PULL UP_DOWN
84	TYPE1	I	Set up destination to have customization or not	H: Flash ROM, L: Mask ROM
85	NC	O	Not used	L fixed
86	REMO	I	Remote controller signal input	Detect with pulse width
87	PON_FL+B	O	FL bias power supply switch	H: ON, L: OFF
88~91	NC	O	Not used	Output L fixed
92	ROTARY1_CCW	I	Rotary 1 A input (For VOL)	1 pulse/2 clicks 15 pulses/360°
93	ROTARY1_CW	I	Rotary 1 B input (For VOL)	1 pulse/2 clicks 15 pulses/360°
94	WE	I/O	Memory data writing-in permission	Terminal yet to be processed
94	NC	O	NC when MASKROM	Output L fixed
95	OE	I/O	Memory data transmission permission	L: Send data, H: Wait Hi-Z: When starting up SW3.3
96,97	NC	O	Not used	Output L fixed
98	3.3VDD			
99	VSS			
100	FROMCHK	O	Used for implementation checking by Product Engineering	Repeat "H" and "L" before finalizing OK: H, NG: L
100	NC	O	Not used when MASKROM	Output L fixed

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Processing / Operation / Description
101	CE	I/O	Memory operation permission	L: Operate, H: Wait Hi-Z: When starting up SW3.3
102	NC	O	Not used	Output L fixed
103	MULTI CCW	I	Rotary 2 A input (For new operation)	1 pulse/2 clicks 15 pulses/360°
104	MULTI CW	I	Rotary 2 B input (For new operation)	1 pulse/2 clicks 15 pulses/360°
105	ROMCOR_SCL	I/O	For ROM correction	Input when other than writing-in (including STB) Hi-Z: When starting up SW3.3
106	ROMCOR_SDA	I/O	For ROM correction	Input when other than writing-in (including STB) Hi-Z: When starting up SW3.3
107	NC (SEL_E2P)	O	Not used	Output L fixed
108	PON_TRI_GREEN	O	Triangle green light on switch	H: ON, L: OFF On when blackout
108	NC	O	Not used (In models without blackout)	Output L fixed
109	PON_TRI_RED	O	Triangle red light on switch	H: ON, L: OFF
110,111	NC	O	Not used	L fixed
112	3.3VDD			
113	EVSS			
114	NC	O	Not used	L fixed
115	PON_RED,BLUE	O	Red and Blue key illumi light on switch	H: ON, L: OFF
116	PON_SW3.3V	I/O	Kanji ROM, ROM correction Rotary encoder power supply	L: ON, Hi-Z: OFF
117	NC	O	Not used	Output L fixed
118~123	A21-A16	O	Address output	
124	2.5VDD			
125	VSS			
126~133	A15-A8	O	Address output	
134	3.3VDD			
135	EVSS			
136~142	A7-A1	O	Address output	
143	NC	O	Not used	Output L fixed
144	D15	I/O	Data input/output	

TEST MODE

● How to enter the test mode

Press and hold the [1] and [3] keys and reset.
(While "----" is being displayed, power can be ON for 30 minutes.)

● How to clear the test mode

Reset, momentary power down, ACC OFF, Power OFF, detach the panel.

● Test mode default condition

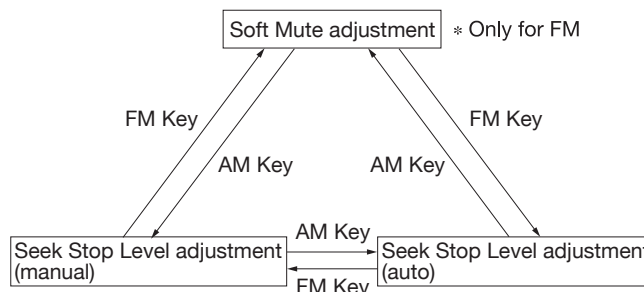
- Source is STANDBY.
- Display lights are all turned on.
- The volume is at 30 (-10dB).
- LOUD is OFF.
- CRSC is off regardless of the availability of switching function.
- SYSTEM Q is NATURAL (=FLAT).
- BEEP should always function when the key is pressed briefly.
- AUX is ON
- GUIDE (NAVI) of MENU is ATT. (J type)
- DISPLAY TYPE is TYPE C, SIDE is Display Tag, and MODE has 3 lines.
- TUNER source display shall be as shown below:
<For European models> Upper row=PS/Frequency, Middle row=Clock, Lower row=Date
<For models of destination "K" and "M"> Upper row=SNPS, Middle row=Clock, Lower row=Date
- CD/USB source display shall be as shown below:
<For all models> Upper row=P-TIME, Middle row=Clock, Lower row=Date
- SOURCE SELECT shall be "2".

● Specification of the test mode for tuner source

The frequency of 98.3MHz is received when the [4] key is pressed in the TUNER FM mode.

● TUNER Setup adjustment mode specification

1. Use [FM] / [AM] key to select TUNER band.
2. Press and hold [▶|] key for 2 seconds to enter TUNER adjustment mode. At the same time, set FM receive frequency to 98.3 MHz for K / M / E type and 83.0 MHz for J type.
3. Use [FM] / [AM] key to change between the adjustment items.



(Note) The first item shall be Soft Mute adjustment.

But, in the case of AM band, the first item shall be Seek Stop Level adjustment (auto) because there is no Soft Mute adjustment for AM band.

4. Proceed with the following steps for every adjustment item:

Soft Mute Adjustment

* This item exists only in TUNER FM. Make adjustment under the condition when VOLUME=30 and LOUD is OFF.

(Display) SMD-x____ : Adjustment values, 0~F, are shown in "x".

- a. Use [◀◀] / [▶▶] key to set the value between 0 (18dBu) and F (36dBu).
- b. After the completion of the adjustment, press and hold [▶|] key for 2 seconds to start writing the adjustment values in E2PROM. At the successful completion of the writing, "EP_WRITE" is displayed

Seek Stop Level Adjustment (Auto)

(Display) ATN_4.32V : When at Normal (Local OFF)

(Display) ATL_3.45V : When at Local (Local ON)

↖ Current receive level

- a. In the band in which Local Seek ON/OFF is selectable, Press [AUTO] / [TI] key briefly to change between Local Seek ON and OFF.
- b. Press and hold [▶|] key for 2 seconds to make the current receive level to be the seek stop level in order to start writing the adjustment values in E2PROM. At the successful completion of the writing, "EP_WRITE" is displayed. (In this step, use Local Seek ON/OFF setup to change the destination of the writing.)

TEST MODE

Seek Stop Level Adjustment (Manual)

(Display) MNN 3.98V : When at Normal (Local OFF)

(Display) MNL 4.44V : When at Local (Local ON)

↙ Adjustment values

Contents written in E2PROM as
the initial values are displayed.

- In the band in which Local Seek ON/OFF is selectable, Press [AUTO] / [TI] key briefly to change between Local Seek ON and OFF.
 - Use [◀◀] / [▶▶] key to manually adjust the seek top level between 0.00 and 4.49V (K/M), 0.00 and 4.70V (E), 0.00 and 5.00V (J), depending on the destination.
* In K/M/E type, the key keeps functioning downwards after the level becomes 0.00V but in the meantime the level will become 0.00V as it is displayed.
 - Press and hold [▶▶] key for 2 seconds to make the voltage that is adjusted in the above step to be the seek stop level and to start writing the voltage in E2PROM. At the successful completion of the writing, "EP_WRITE" is displayed. (In this step, use Local Seek ON/OFF setup to change the destination of the writing.)
5. Press [▶▶] key briefly to exit from TUNER Adjustment mode (and to keep running the Test mode).

● RDS/RBDS automatic measurement

Add the process to replace the visual inspection of PS display previously done in the production line.

When it is confirmed that the PS data has been received and that the content of the PS is "RDS_TEST", force to OFF the P-CON terminal. (The symbol, "_" indicates the blank.)

→Make this as the process dedicated for the test mode.
P-CON is recovered by Power OFF→ON.

● Special display in tuner mode

Error is found in front-end, etc. if indications below are displayed while in tuner mode.

- "TNE2P_NG".....E2PROM (inside front-end) values are still default (not determined)
- "TNCON_NG".....Cannot communicate with the front-end.

● K3I forced switching

Every time when [6] key is pressed in tuner FM mode, switched in the following order: AUTO→Forced WIDE→Forced MIDDLE→Forced NARROW→AUTO. Default status is AUTO, and displayed as shown below.

• AUTO	...	aF1	98.1
• Forced WIDE	...	wF1	98.1
• Forced MIDDLE	...	mF1	98.1
• Forced NARROW	...	nF1	98.1

● CD source test mode specification

- Jumps to the following tracks by pressing the [▶▶] key.
9→15→10→11→12→13→22→14→9 (recursive)
Note that when playing a CD-DA disc and MP3 / WMA / AAC / WAV discs with 8 files or less, the disc is played from the 1 track in the normal order.
- Pressing the [◀◀] key goes back by 1 track from the track being played.
- While in CD source, press the [1] key ([1] and [FM] keys are for CD-DA) briefly to jump to No.28.
- While in CD source, press the [2] key briefly to jump to No.14.
- While in CD source, press the [3] key briefly to display CD mechanism model name and the version.
Press the [3] key briefly again to return to the normal display. (Time code display)

6E20	V0123
SERV	V1.23
BOOT	V1.23

- While in CD source, press the [6] key ([6] and [AM] keys are for CD-DA) briefly to jump to No.15. At this time, the volume value is set to 27 (2V PRE), 28 (4V PRE).

● AUDIO adjust mode

- Press the [AUD] key briefly to enter the audio adjustment mode.
- Press the remote control [*] key and [AUD] key to enter the audio adjustment mode.
- Both AUDIO FUNCTION MODE and SETUP MODE adjustment items are included.
- By pressing [AUD] and [FM] key briefly, switch the item to be adjusted in the following order. (Only in forward rotation)
The default item shall be Fader, and then the item is forwarded in the following order: Balance→Bass Level→Middle Level→Treble Level→HPF Front→HPF Rear→LPF Sub Woofer (thereafter arbitrary).
- Continuous forwarding by remote control is prohibited.
- Fader is adjusted by the VOL knob and [◀◀] / [▶▶] keys in 3 steps: R15↔0↔F15. (Default value: 0)
- Balance is adjusted by the VOL knob and [◀◀] / [▶▶]

TEST MODE

keys in 3 steps: L15↔0↔R15. (Default value: 0)

- Bass/Middle/Treble Level are adjusted by the VOL knob and [◀◀] / [▶▶] keys in 3 steps: -8↔0↔8. (Default value: 0)
- HPF Front / Rear is adjusted by the VOL knob and [◀◀] / [▶▶] keys in 2 steps: Through↔180Hz. (or 220Hz) (Default value: Through)
- LPF Sub Woofer is adjusted by the VOL knob and [◀◀] / [▶▶] keys in 2 steps: 60Hz (or 50Hz) ↔Through. (Default value: Through)
- Sub Woofer Phase is adjusted by the VOL knob and [◀◀] / [▶▶] keys in 2 steps: Reverse↔Normal. (Default value: Normal)
- Volume Offset (other than the internal AUX) is adjusted by the VOL knob and [◀◀] / [▶▶] keys in 2 steps: -8↔0. (Default value: 0)
- Volume Offset (the internal AUX) is adjusted by the VOL knob and [◀◀] / [▶▶] keys in 3 steps: -8↔0↔+8. (Default value: 0)
- Loudness ON/OFF is adjusted by the VOL knob and [◀◀] / [▶▶] keys in 2 steps: OFF↔ON. (Default value: OFF)
- Dual Zone ON / OFF is adjusted by the VOL knob and [◀◀] / [▶▶] keys in 2 steps: OFF↔ON. (Default value: OFF)
- Bass f / Bass Q / Bass EXT / Middle f / Middle Q / Treble f are not displayed in the audio adjustment menu.
- SYSTEM Q (dB EQ) curve selection is not displayed in the audio adjustment menu.

● MENU

- Press the [FNC] key briefly to make the multi-function display and press the [▶▶] key briefly to enter the MENU.
- Press the remote control [DNPP/SBF] key and the [DIRECT] key to enter the MENU.
- Continuous forwarding by remote control is prohibited.
- The initial item in TUNER source MENU source during the Test mode shall be selectable between Seek ON and OFF. (E / E2 type)
- Only in the Test mode, it shall be made possible to show “ROM Write Mode” and “ROM Read Mode” items in the STANDBY source MENU to allow the ROM data transfer process.

● ROM data transfer

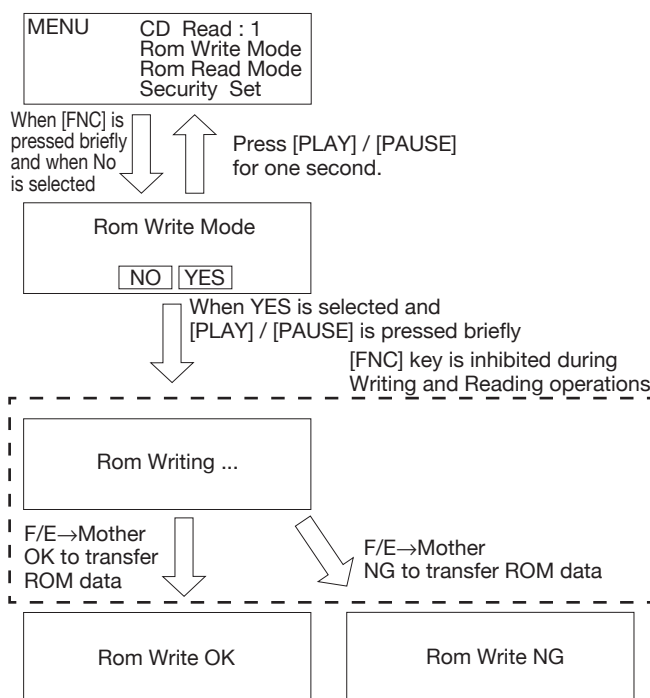
This function is used to transfer E2PROM data (installer memory) inside of the front-end to mother E2PROM (X34: IC520) of the backup, and to transfer the data back from the mother E2PROM (X34: IC520) to the E2PROM of the front-end.

How to transfer ROM data

- ① Enter the Test mode (All lights go on).
- ② Press [FNC] key briefly while all lights are on to enter in the Menu mode.
- ③ Select “ROM Read Mode (Mother→Front-end)” or “ROM Write Mode (Front end→Mother)”, and press and hold [▶▶] key for one second to turn Mode ON.

Operation	Display	Description
Start resetting by pressing “[1] key + [3] key”	All lights ON	Test mode ON
Press [FNC] key to select [Menu] mode.	“ROM_Read_Mode”	Mother→Front-end Process to transfer data
	“ROM_Write_Mode”	Front-end→Mother Process to transfer data
(In the above ROM Read Mode) Press and hold [▶▶] key (for one second) to select Yes.	“ROM_Reading...”	Mother→Front-end ROM data transfer in progress
	“ROM_Read_OK”	Mother→Front-end ROM data transfer OK
	“ROM_Read_NG”	Mother→Front-end ROM data transfer NG
(In the above ROM Write Mode) Press and hold [▶▶] key (for one second) to select Yes.	“ROM_Writing...”	Front-end→Mother ROM data transfer in progress
	“ROM_Write_OK”	Front-end→Mother ROM data transfer OK
	“ROM_Write_NG”	Front-end→Mother ROM data transfer NG

Example of detail display: Display in the case of E2PROM Write



TEST MODE

● Dual Zone

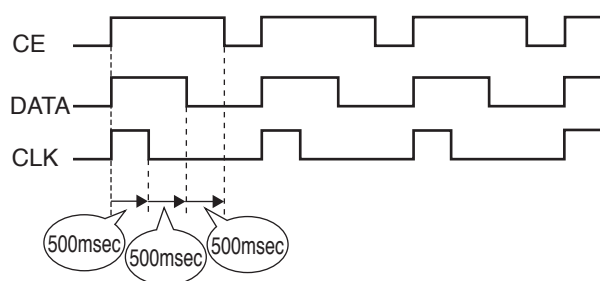
- If the [AUTO] or [TI] keys are pressed briefly while in a source other than STANDBY, 2ZONE is switched between ON / OFF.

● Backup current measurement

If reset while in Acc OFF (Back Up ON) condition, MUTE terminal goes off 2 seconds later, rather than 15 seconds. (During this time, the CD mechanism does not function.)

● OPEL communication (OPEL/OEM display supporting model)

OPEL communication line while in the test mode outputs the following. (Communication line output condition is switched every 500msec.)



● G sensor display (G-Analyzer supporting model)

Press [ATT] key briefly in the STANDBY source to change to the G-TEXT display that shows the vertical G and horizontal G conditions.

● Special displays while all lights are on

When all lights are on with STANDBY source, if the following keys are pressed, the following messages are displayed.

[FM] key	Key pressed briefly: ROM correction version is displayed (Display) SYS_ROM_R1234 (Display) PAN_ROM_R1234 (Display) BOL_ROM_R1234 When E2PROM is not installed: ROM_ERR__ When not written in: ROM_R - - - - When data not matching: ROM_R****
[>>] key	Key pressed briefly: AUDIO data initialization (Display) AUD_INIT
[<<] key	Key pressed briefly: Forced Power OFF data displayed. Press and hold: To clear the forced power OFF information. (Press and hold for 2 seconds while the forced power OFF data is displayed.) (Display) POFF_ - - - (No Forced Power OFF) SEC (Forced Power OFF because of missing Security Code) PNL (Forced Power OFF because of system μ -com and panel communication error)
[AUD] key	Key pressed briefly: iPod authentication IC installation status display (Display) iPod_ OK_ (Installation status OK) NG (Installation status NG)
[FNC] key	Key pressed briefly: Multi-function display Press and hold: Version & Service information display mode ON Refer to the Table 1.
[1]~[6] Key	Key pressed briefly: Version & Service information display mode ON Refer to the Table 1.
[>] key	Key pressed briefly: CD information display mode ON Refer to the Table 2.

Table 2-CD information display mode

[AM] key ↑	I2C communication condition and CD mechanism error log display (Display) I2C_●●_____ (Display) ERR_1-▲▲, 2-▲▲, 3-▲▲ * "OK" or "NG" is displayed for "●●". / "—" or the error code is displayed for "▲/▲".
	CD loading error log display (Display) Load_Error____ (Display) __ (1) xx __ (2) xx (Number of times is displayed for "xx".) MAX 99 (times)
	CD ejection error log display (Display) Eject_Error____ (Display) __ (1) xx __ (2) xx (Display) __ (3) xx __ (4) xx (Number of times is displayed for "xx".) MAX 99 (times)
	CD time code error count data display (missing counts) (Display) Count_Lose (Display) __CDDA_: xx (Display) __CDROM: xx (Number of times is displayed for "xx".) MAX 99 (times)
[FM] key ↓	CD time code error count data display (count not updated) (Display) Count_Stay (Display) __CDDA_: xx (Display) __CDROM: xx (Number of times is displayed for "xx".) MAX 99 (times)
	[▶] Key pressed briefly: CD information display mode OFF key Press and hold: To clear entire CD information (Press and hold for 2 seconds)

Press the **[▶||]** key briefly in the STANDBY source to reset the AUDIO setting value to the test mode default value.

1. After entering the test mode, read the manufacture code of the Flash ROM, and the FROMCHK terminal of the pin 100 repeats the “Hi→Low→Hi...” under the normal condition.
Output “Low” under the abnormal condition.
When the manufacture code is normal, press [AM] key briefly to start checking the connection at all the terminals. When the connection is normal, terminate the repetition of “Hi→Low→Hi...” At the FROMCHK terminal, and output “Hi”.
When the connection is not normal, output “Low”.
2. If the [AM] key is pressed and held for 2 seconds while all lights are on, Flash ROM data is initialized.
While the deletion is executed, “Data_Erase...” is displayed.

(Note) Do not touch anything while this is being dis-

TEST MODE

played.

At the completion of the deletion, "Erase_OK!!" is displayed.

If the "Erase_NG!!!!!!" is displayed, it indicates that the data in Flash ROM could not be deleted due to some reason.

If the same message is displayed after repeating the process by pressing and holding [AM] key, it indicates the error in Flash ROM.

● Panel combination check

In order to avoid any incorrect combination, STANDBY source displays the followings based on combination of system μ -com and panel in the test mode.

<64COL FL / FLASH ROM supporting model + 64COL FL / FLASH ROM PANEL>

<64COL FL / MASK ROM supporting model + 64COL FL / MASK ROM PANEL>

<MONO FL supporting model + MONO FL PANEL>

OK !

<64COL FL / FLASH ROM supporting model + 64COL FL / MASK ROM PANEL>

NG	
_Mother : COL	FLS
Panel : COL	MSK

NG !

<64COL FL / FLASH ROM supporting model + MONO FL PANEL>

NG	
_Mother : COL	FLS
Panel : MONO	

NG !

<64COL FL / MASK ROM supporting model + 64COL FL / FLASH ROM PANEL>

NG	
_Mother : COL	MSK
Panel : COL	FLS

NG !

<64COL FL / MASK ROM supporting model + MONO FL PANEL>

NG	
_Mother : COL	MSK
Panel : MONO	

NG !

<MONO FL supporting model + 64COL FL / FLASH ROM PANEL>

NG	
_Mother : MONO	
Panel : COL	FLS

NG !

<MONO FL supporting model + 64COL FL / MASK ROM PANEL>

NG	
_Mother : MONO	
Panel : COL	MSK

NG !

● Other

- When Power ON, do not display "CODE_NG", "CODE_OFF", and "CODE_ON".
- When the source is STANDBY, press [AUTO] / [TI] key briefly or press [0] key on the remote controller to switch between RED and GREEN of key illumi. (RED \leftrightarrow GREEN). (In models with an ILLUMI switching function)
- When the source is STANDBY, press [AUTO] / [TI] key briefly or press [0] key on the remote controller to switch between RED and GREEN of triangle illumi. (RED \leftrightarrow GREEN). (Display Blackout function supporting model)
- When the source is STANDBY, press and hold the [AUTO] or [TI] keys for 1 second to switch the PREOUT between Rear and Sub Woofer (Rear \leftrightarrow Sub Woofer). (2PREOUT model)
- When started in the test mode, duration of prohibiting LINE MUTE shall be changed from 10 seconds to 1 second.
- When in the test mode, do not write security code by security jig.
- When in the test mode, serial number is not written with a serial-number-writing jig.
- When in the test mode, when DC offset error detection is run, the detection information is not written into the E2PROM.
- When in the test mode, even if the specified time has passed, back-up memory items are not written into E2PROM.
DEMO mode shall not be operated while in the test mode, Backup/Installer Memory & CD Mechanism Information & Service Information & DC offset Error Detection Information Clear Mode, or DC offset Error Detection Information Clear Mode.
- Also, do not display DEMO ON/OFF option items in the MENU in STANDBY source in the above modes.

TEST MODE

● Clearing backup / installer memory & CD mechanism information & service information & DC offset error detection information

(Clear E2PROM data in the front end)

1. While pressing and holding the [FNC] and [ATT] keys, reset-start to start initializing the backup/installer memory data, CD mechanism information, service information and DC offset error detection information.

(While “----” is being displayed, power can be ON for 30 minutes.)

[CD mechanism information]

- Displays I2C communication condition
- Displays CD mechanism error log
- Displays CD loading error data.
- Displays CD ejection error data.
- Displays CD time code error count data (missing count).
- Displays CD time code error count data (count not updated).

[Service Information]

- Displays power ON time is displayed.
- Displays CD operation time.
- Displays number of CD EJECT times.
- Displays number of times panel was opened/closed.
- Displays forced Power OFF data.

[DC offset error detection information]

- DC offset error detection display 1
- DC offset error detection display 2

2. After the initialization process is completed, the following is displayed.

When successfully completed

E2P_CLR: ○

When finished but unsuccessful: Initialization NG

E2P_CLR: x

3. In this mode, even if the specified time has passed, the backup memory items are not written into E2PROM.
4. This mode is cancelled by resetting. (The last screen will not be retained.)

(Note) In this mode, the DC error detection display, “Protect” is not shown.

● Clearing DC offset error detection information (Clear E2PROM data in the front end)

1. Press and hold [3] and [6] keys and reset-start to go into the DC offset error display mode.
(While “----” is being displayed, power can be ON for 30 minutes.)
2. While in STANDBY source, the current DC offset error detection condition is displayed.

Upper row	DC offset error detection display 1 (To show such detection as the improper connection, and other detection) (Display) DC1_OK__ (not detected) ERR (Improper connection or other error is detected.)	
Middle row	DC offset error detection display 2 (To show the number of capacitor leaks.) (Display) DC2_0__ (not detected)	
	1	(Leak is detected once.)
	2	(Leak is detected twice.)
	3	(Leak is detected 3 times.)
	4	(Leak is detected 4 times or more.)

3. While the DC offset error detection condition is being displayed as above, press and hold [1] key for 2 seconds to clear the information about the improper connection, and other detection. Press and hold [2] key for 2 seconds to clear the information about the number of capacitor leaks. (Clear E2PROM)
4. DC offset error display mode is cancelled by resetting. (The last screen will not be retained.)

(Note) In this mode, the DC offset error detection display, “Protect” is not shown.

● FM/AM channel space switching (K / M type FM (50k↔200k), AM (9k↔10k))

- While power is OFF, press and hold [1] and [5] keys, and press [SRC] key to power ON.

● Security

- How to enter the forced POWER ON mode (all models)
While “ _ _ _ _ ” is being displayed, while simultaneously pressing [FNC] key and [4] key, press [RESET] button, With this, it is possible to turn the power on for 30 minutes only.
- How to register the security code on the “Car Audio Passport” sheet after replacing E2PROM (code security models)
 1. Enter the test mode. (Refer to “How to enter the test mode”.)
 2. Press the [FNC] key briefly to make the multi-function display and press the [▶||] key briefly to enter the

TEST MODE

MENU.

When "Security" is displayed, press [▶II] key for 1 second or longer to enter the security registration mode.

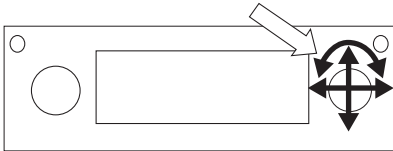
3. Enter codes with the operation knob in the right side or with the [FM] / [AM] and [I◀◀] / [▶▶] keys.

CW rotation of the operation knob, [FM] key: number up

CCW rotation of the operation knob, [AM] key: number down

[▶▶] key : cursor to right

[I◀◀] key : cursor to left



4. After inputting the code, press [▶II] key for 3 seconds or longer which causes "RE-ENTER" to be displayed. This is for "confirming" the code. Use the method in the step 3 to re-enter the code.
5. Then, press [▶II] key for 3 seconds or longer, which will display "APPROVED". This completes the security code registration

6. Release the test mode. (Refer to "How to clear the test mode".)

* **Note:** All clear cannot be used to clear the security code.

● How to clear the programmable security code (Simple security models)

1. While " _ _ _ _ " is being displayed, press [▶II] key for 3 seconds or longer while pressing the [AUTO] or [TI] keys. (This makes the " _ _ _ _ " display disappear.)
2. Input "KCAR", using the remote controller.
Press [5] key of the remote controller 2 times (Input for "K") and press [▶II] key.
Press [2] key of the remote controller 3 times (Input for "C") and press [▶II] key.
Press [2] key of the remote controller once (Input for "A") and press [▶II] key.
Press [7] key of the remote controller 2 times (Input for "R") and press [▶II] key.
3. The security is cleared and the unit enters STANDBY mode.
4. If wrong codes are input, " _ _ _ _ " will be displayed again.

DC OFFSET ERROR

● Purpose

Prevent customer's vehicle speakers damages, burnouts, and smoking.

Avoid the connected speakers to be burned out, damaged, or to smoke when DC occurs between the audio power amp. + and - outputs.

● Processing after detection

• System status

- At the detection of DC error, error data is to be saved immediately (E2PROM error log save area).
- Display the error message on the display. The system shall maintain the current condition, including the operation. Shut down audio system power supply. Set Mute to ON.

- Although switching between Power OFF and ON (ACC, BU, and Key operation) is valid, switching from Off to ON shall be error until the μ -com is reset.

* While power-on, even if the IC2VI DCErr output terminal logic recovered to normal level value, the error condition shall continue.

- Prohibit to save the backup/installer memory to E2PROM (nonvolatile memory).

● Controlling μ -com terminal

- Set Mute for all channels including for pre-out.
- Turn off power IC control system power supply. (Set AMP-Standby function to valid)
- Set P-Con output to OFF (Logic by which external AMP unit is turned off).

DC OFFSET ERROR

* The purpose is to shut down audio output. Basically, the logic sets the audio output system signal line when in Standby source.

● Key specification

- Other keys than eject and power keys are invalid.

● Display specification

- Display the “PROTECT” string and blink all characters at 1Hz.
- * Use the indication below with the highest priority (error message), and maintain the error message even when the source is changed.

Display example



● Cancel Condition

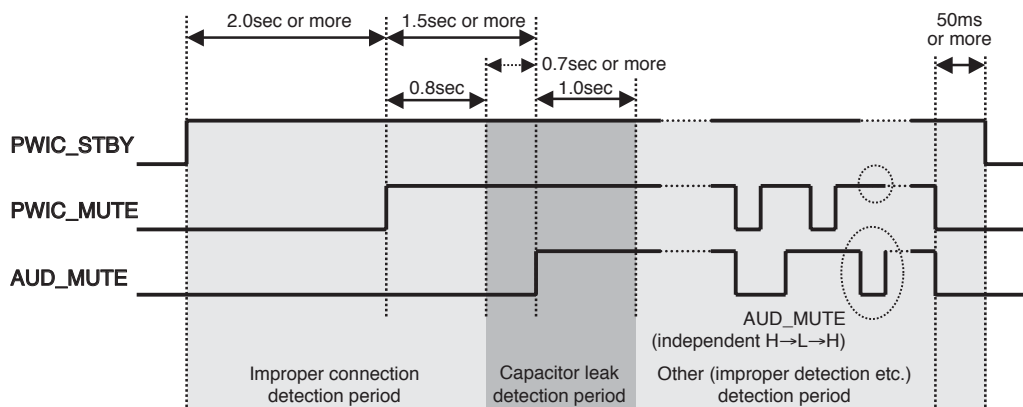
- Press the Reset terminal on the main body. Or set Back-up to OFF (Unplug and plug back in the DC connector). The history is maintained (E2PROM data is saved).
- If DC error is detected during the capacitor leak detection period, the clearing the error by the reset is limited to 4 times.
The startup is inhibited for the 5th time and later reset. (“PROTECT” display has to be blinked.)

● Note while in the test mode

- While in the test mode, even if DC leak is detected, it is not written into E2PROM.
When an error is detected, the display is enabled.

● Other

- Function for checking and clearing data in E2PROM by a given key shall be included. (Used at production dpt. and service center, etc.)



OTHER

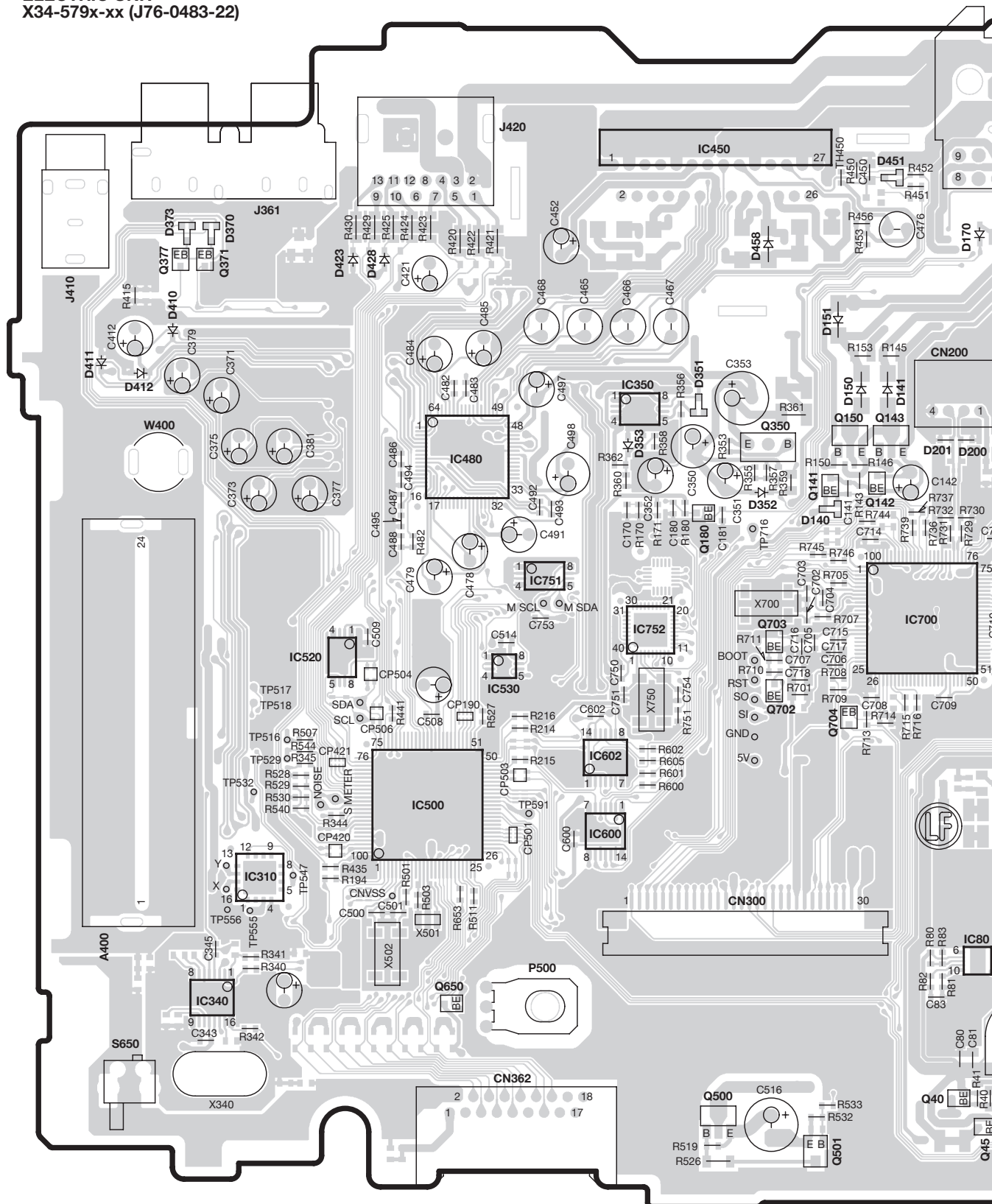
The explanations for the following items are same as those for the 06 model (U717, KDC-W7534U/W7534UY/X890/X9533U).

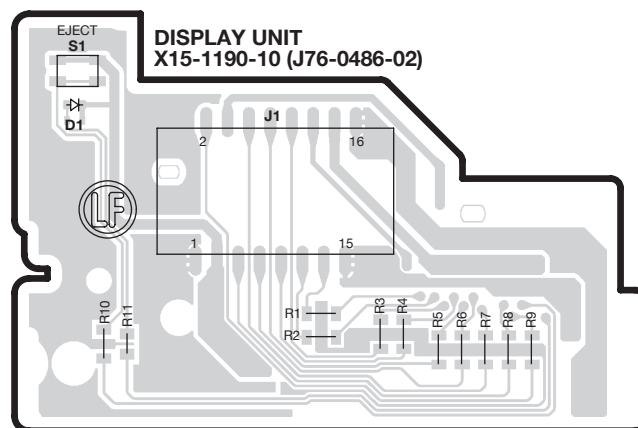
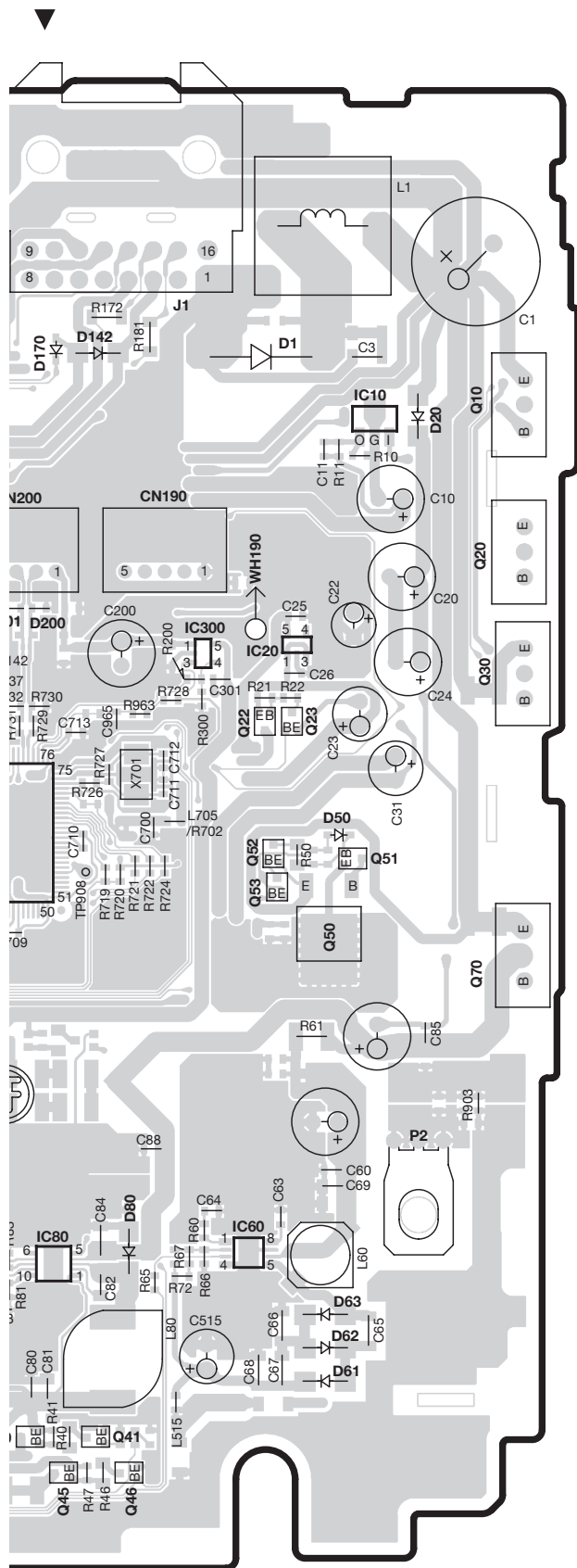
Refer to the service manuals for these models.

- CD LOAD error detection,
- CD EJECT error detection
- Installer memory specifications
- Backup memory specifications

PC BOARD (COMPONENT SIDE VIEW)

ELECTRIC UNIT
X34-579x-xx (J76-0483-22)





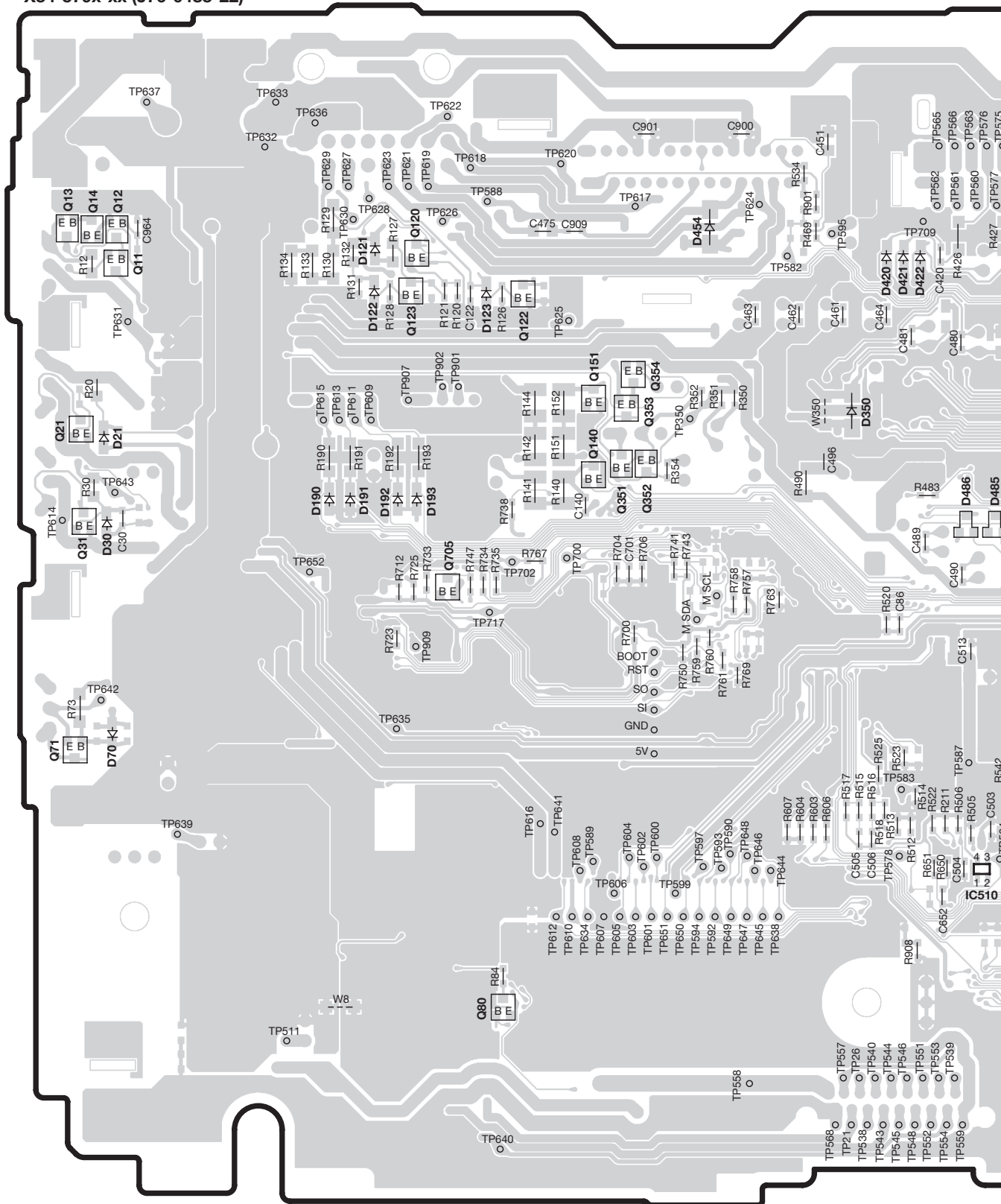
X34-579x-xx

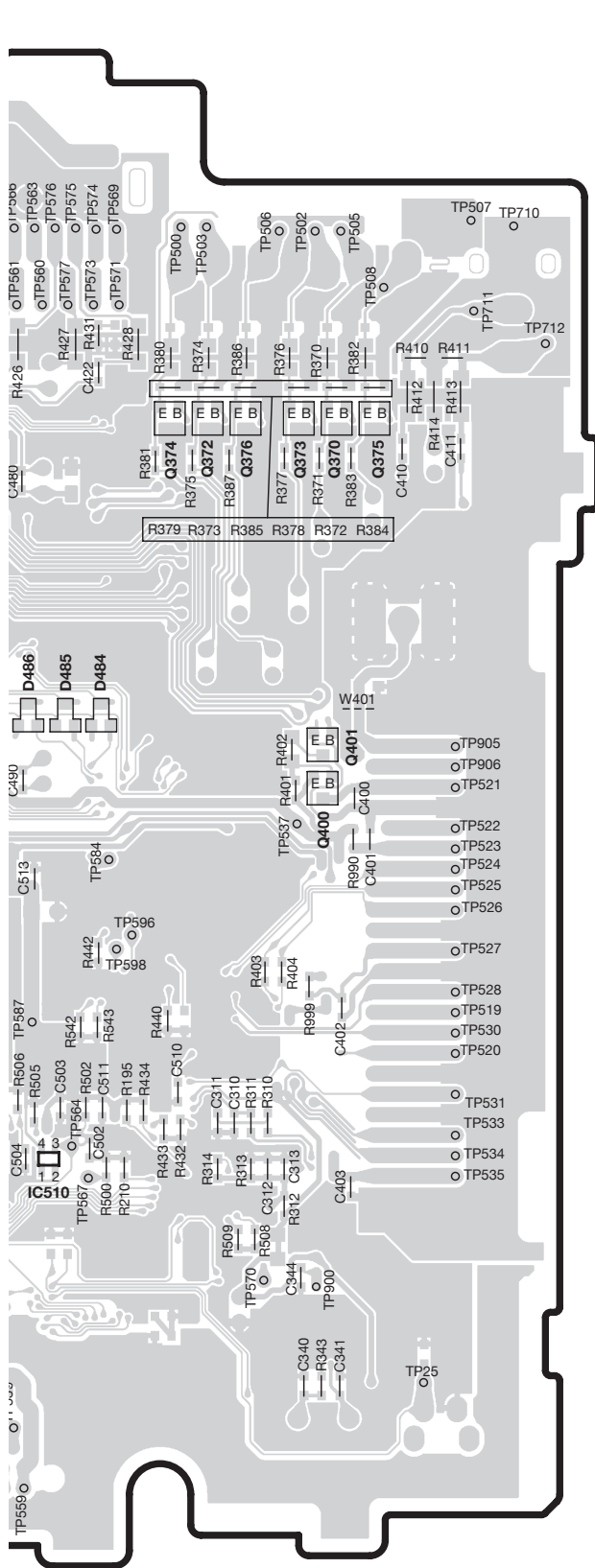
Ref. No.	Address	Ref. No.	Address
IC10	3L	Q40	6J
IC20	3K	Q41	6K
IC60	6K	Q45	7K
IC80	6K	Q46	7K
IC300	3K	Q50	5L
IC310	5G	Q51	4L
IC340	6G	Q52	4K
IC350	3I	Q53	4K
IC450	2I	Q70	5L
IC480	3H	Q141	3J
IC500	5H	Q142	3J
IC520	4G	Q143	3J
IC530	4H	Q150	3J
IC600	5I	Q180	4I
IC602	5I	Q350	3I
IC700	4J	Q371	3G
IC751	4H	Q377	3G
IC752	4I	Q500	6I
Q10	3L	Q501	7J
Q20	3L	Q650	6H
Q22	4K	Q702	5I
Q23	4L	Q703	4I
Q30	4L	Q704	5I

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

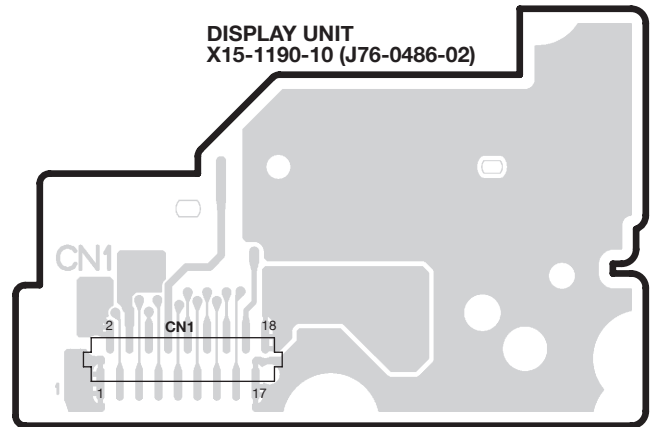
PC BOARD (FOIL SIDE VIEW)

ELECTRIC UNIT
X34-579x-xx (J76-0483-22)





DISPLAY UNIT
X15-1190-10 (J76-0486-02)



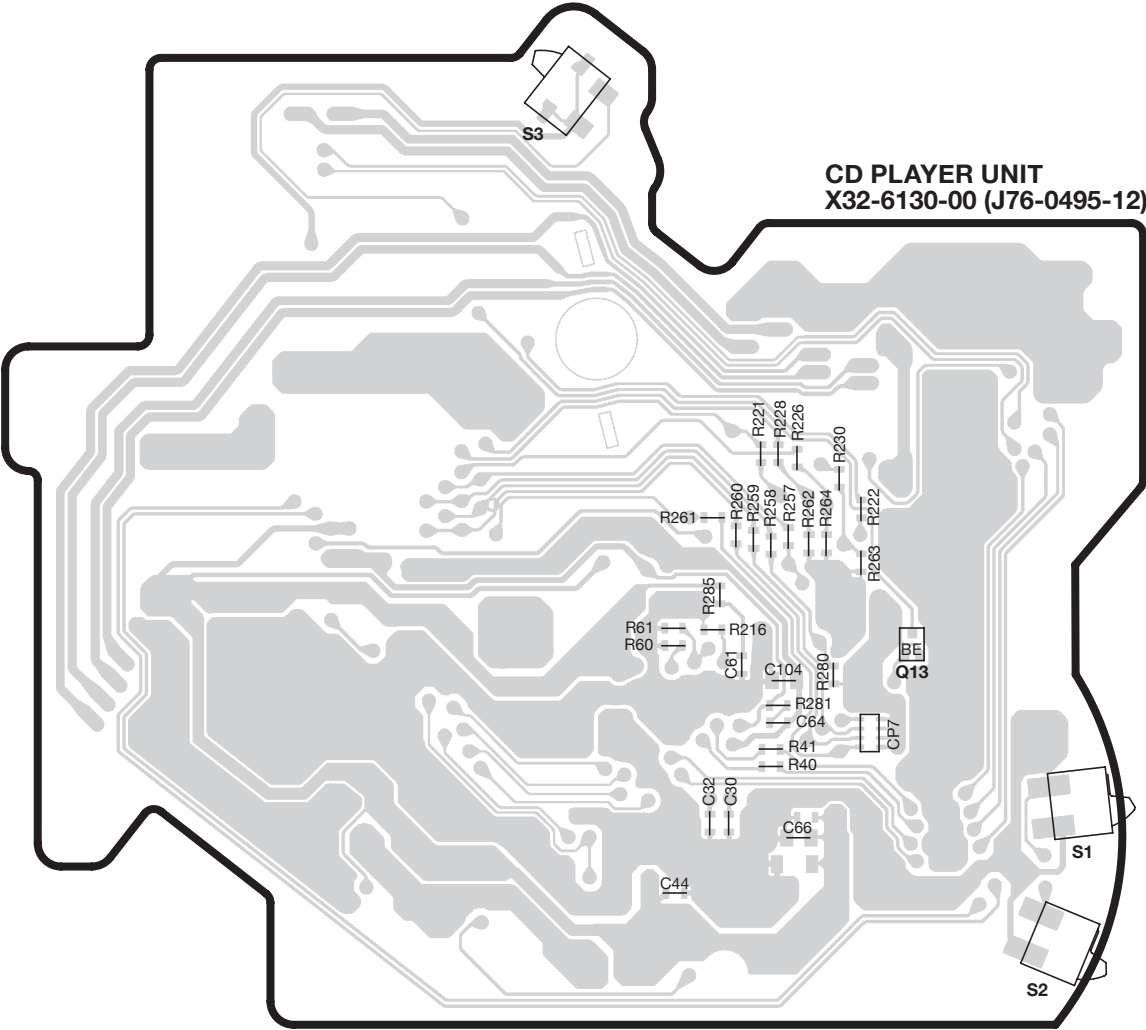
X34-579x-xx

Ref. No.	Address
IC510	5U
Q11	3Q
Q12	2P
Q13	2P
Q14	2P
Q21	3P
Q31	4P
Q71	5P
Q80	6R
Q120	2R
Q122	3R
Q123	3R
Q140	3S
Q151	3S
Q351	4S
Q352	4S
Q353	3S
Q354	3S
Q370	3V
Q372	3U
Q373	3V
Q374	3U
Q375	3V
Q376	3U
Q400	4V
Q401	4V
Q705	4R

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

KDC-MP738U/W7541U
/W7541UY/X792/X8009U

PC BOARD (COMPONENT SIDE VIEW)

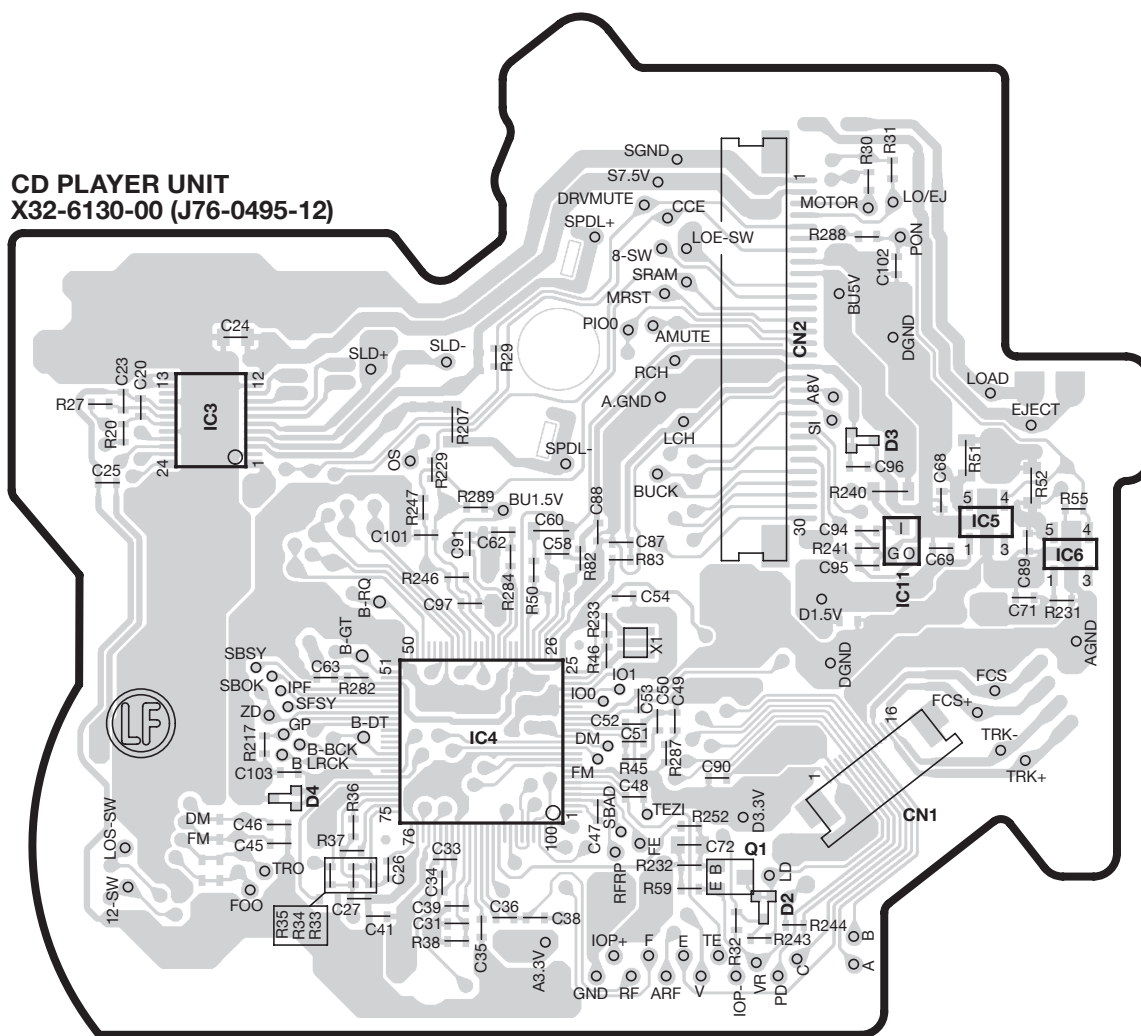


X32-6130-00

Ref. No.	Address
Q13	4AC

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

PC BOARD (FOIL SIDE VIEW)



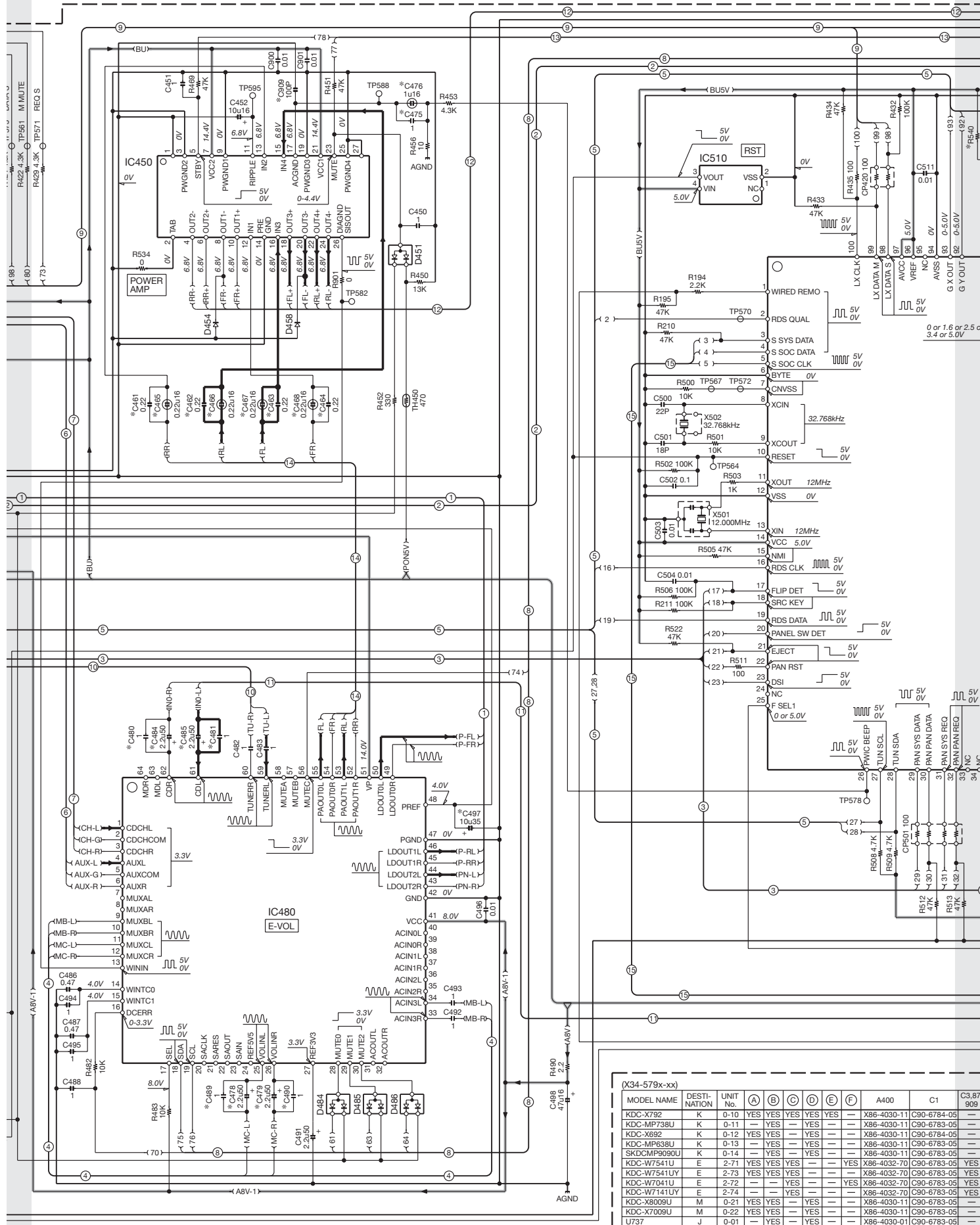
X32-6130-00

Ref. No.	Address
IC3	3AF
IC4	4AF
IC5	3AH
IC6	3AH
IC11	3AH
Q1	4AG

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

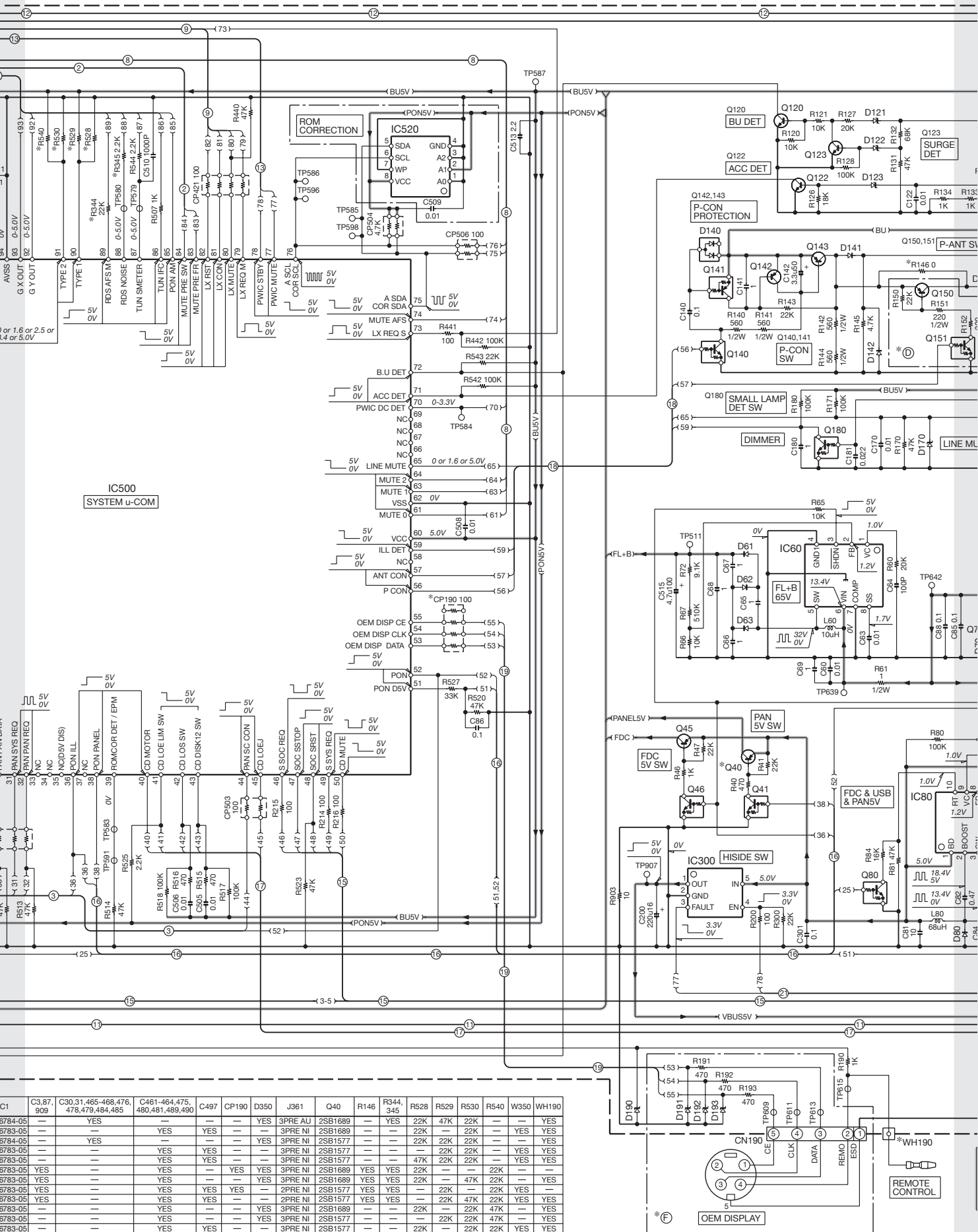


KDC-MP738U/W7541U
/W7541UY/X792/X8009U

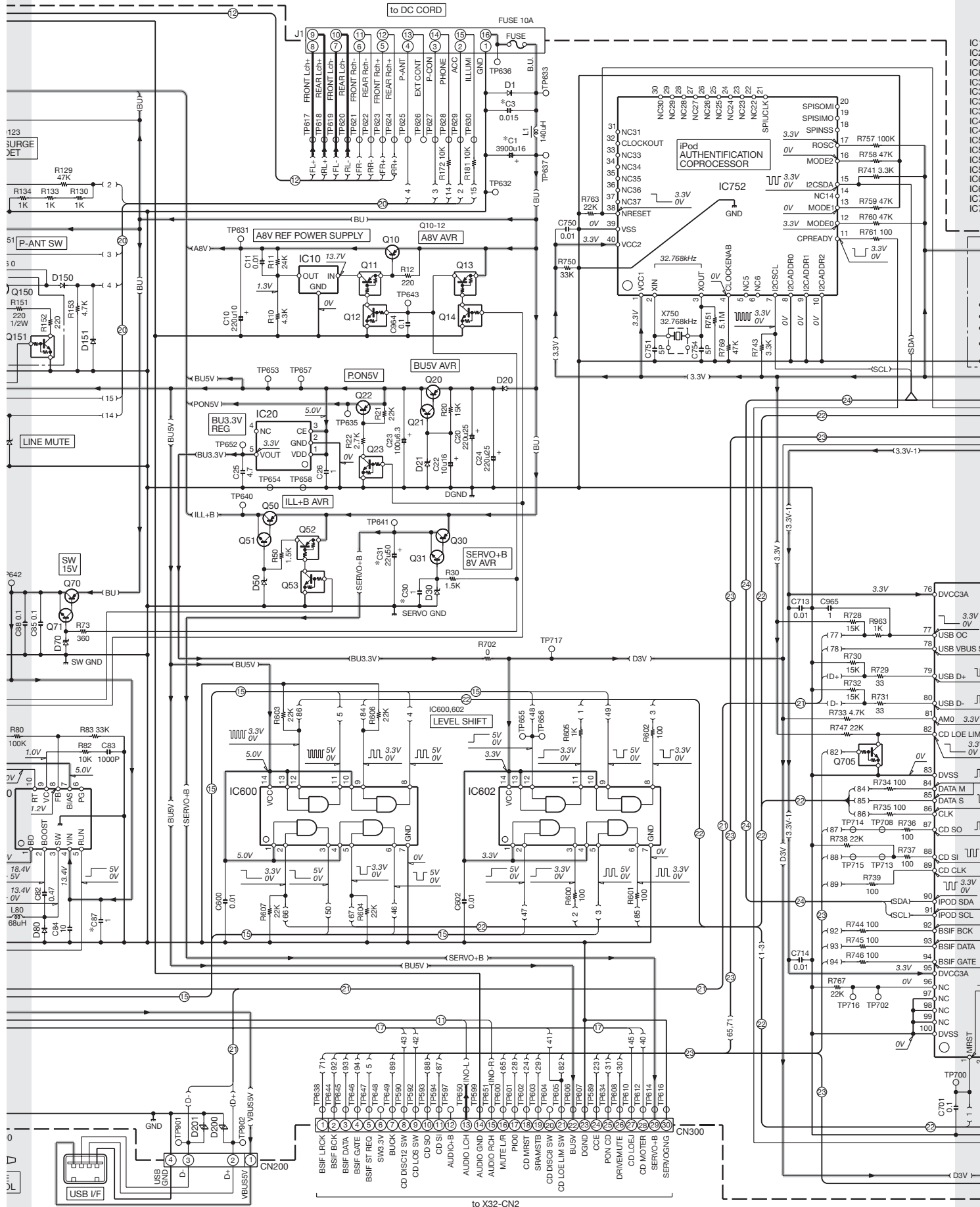


(X34-579X-xx)												
MODEL NAME	DESTI- NATION	UNIT No	(A)	(B)	(C)	(D)	(E)	(F)	A400	C1	C3 8 909	
KDC-X792	K	0-10	YES	YES	YES	YES	YES	—	X86-4030-11	C90-6784-05	—	
KDC-MP738U	K	0-11	—	YES	—	YES	—	—	X86-4030-11	C90-6783-05	—	
KDC-X692	K	0-12	YES	—	YES	—	—	—	X86-4030-11	C90-6784-05	—	
KDC-MP638U	K	0-13	—	YES	—	YES	—	—	X86-4030-11	C90-6783-05	—	
SKDCMP9090U	K	0-14	—	YES	—	YES	—	—	X86-4030-11	C90-6783-05	—	
KDC-W7541U	E	2-71	YES	YES	YES	—	—	YES	X86-4032-70	C90-6783-05	YES	
KDC-W7541UY	E	2-73	YES	YES	YES	—	—	—	X86-4032-70	C90-6783-05	YES	
KDC-W7041U	E	2-72	—	—	YES	—	—	YES	X86-4032-70	C90-6783-05	YES	
KDC-W7041UY	E	2-74	—	—	YES	—	—	—	X86-4032-70	C90-6783-05	YES	
KDC-X8090U	M	0-21	YES	YES	—	YES	—	—	X86-4030-11	C90-6783-05	—	
KDC-X7009U	M	0-22	YES	YES	—	YES	—	—	X86-4030-11	C90-6783-05	—	
UT37	J	0-01	YES	—	YES	—	YES	—	X86-4030-01	C90-6783-05	—	

KDC-MP738U/W7541U /W7541UY/X792/X8009U



KDC-MP738U/W7541U /W7541UY/X792/X8009U

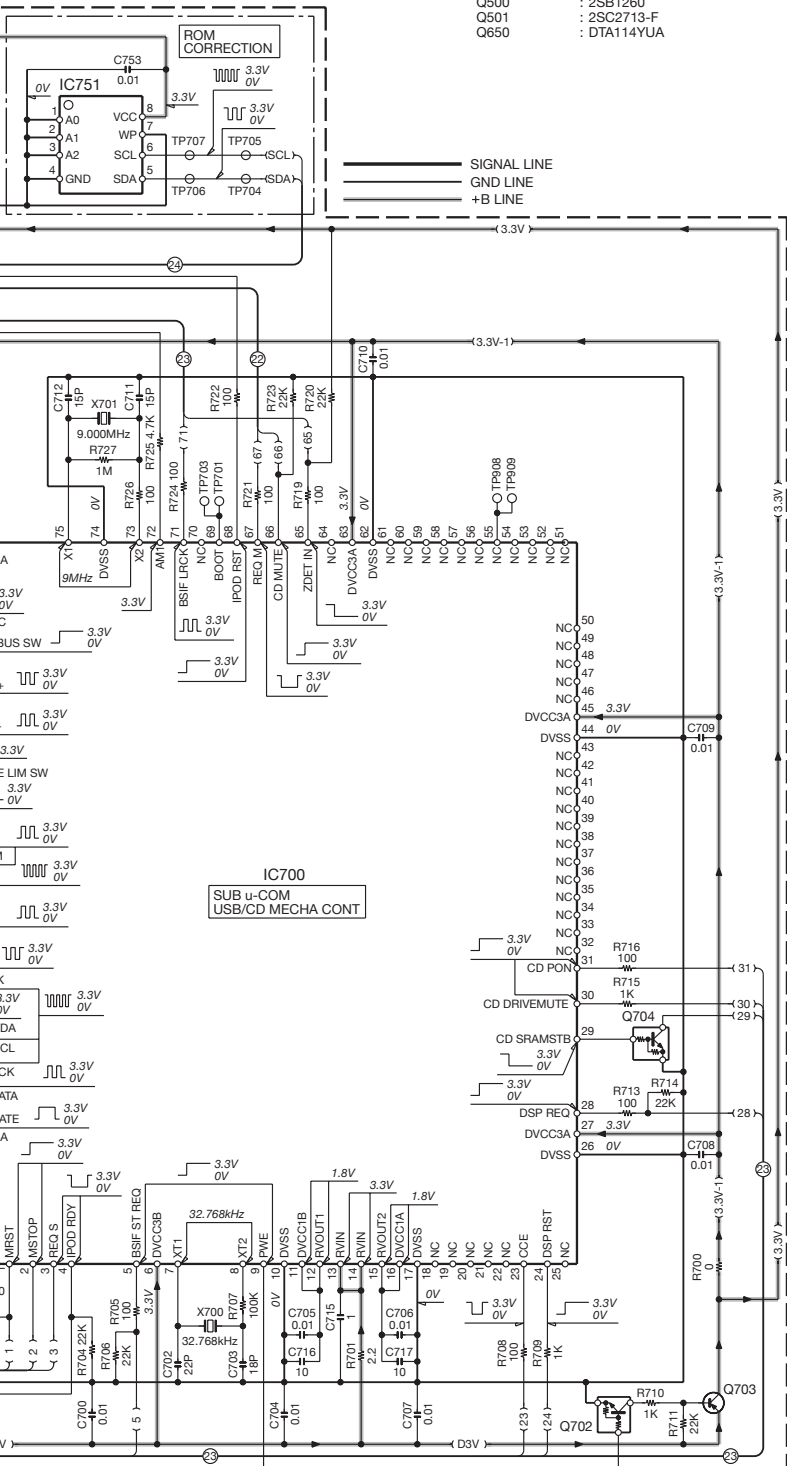


KDC-MP738U/W7541U /W7541UY/X792/X8009U

IC10 : M5237ML-CF0J
IC20 : R1114N331B-TR
IC60 : LT3489
IC80 : LT3684EMSE
IC300 : STMP52151STR
IC310 : MMA6270QR2
IC340 : E-TDA7478AD
IC350 : NJM4565V-ZB
IC450 : TB2923HQ
IC460 : E-TDA7415CB
IC500 : 30624MGP877GP
IC510 : XC6120N362N1
IC520.751 : BR24L04FV-W
IC530 : 74HC2G02DP
IC600 : 74AHC08PW
IC602 : 74LVC08APW
IC700 : 92CD28AFG6VV1
IC752 : 341S2094

D1 : S2V60-5009F46
D20,61-63 : D1FJ4
D21,353 : UDZW5.6(B)
D30 : UDZW8.2(B)
D50,352 : UDZW12(B)
D70 : UDZW15(B)
D80 : EC31QS04AG
D121,122,410-412,420-422 : UDZW6.8(B)
D123,190-193,423,428 : UDZW6.2(B)
D140,351,370,373,451,484-486 : DAP202U
D141,142,150,151,350,454,458 : 1SR154-400
D170 : UDZW4.7(B)
D200,201 : AVRL1613R3FTA

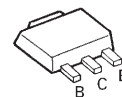
Q10,20,30,70 : KTA1046-P
Q11,13,52,353,371,377 : DTA124EUA
Q12,14,23,53,354,401 : DTC124EUA
Q21,31,51,71,120,122,123,351,352 : 2SC4081
Q22,400,703 : 2SA1577
Q40 : *
Q41,46,140,151,702,704,705 : DTC114YUA
Q45 : 2SB1689
Q50 : 2SB1184
Q80,180 : DTC144EUA
Q141 : DTA114EUA
Q142 : 2SA1576A
Q143,150 : 2SB1188(Q,R)
Q350 : 2SB1443
Q370,372-376 : DTC143TUA
Q500 : 2SB1260
Q501 : 2SC2713-F
Q650 : DTA114YUA



KDC-MP738U/W7541U/W7541UY/X792/X8009U (1/2)

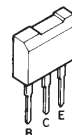
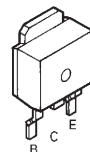
DTC114YUA
DTC143TUA
DTC143ZE
2SA1576A
2SC2713-F

2SB1188



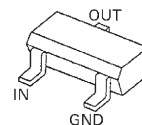
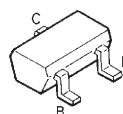
2SB1184

2SB1443



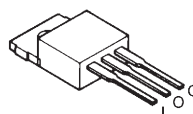
2SC4081

DTA114EUA
DTA124EUA
DTC124EUA
DTC144EUA

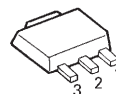


KTA1046-P

DAP202U
DA204U
DTA114YUA



M5237ML-CF0J



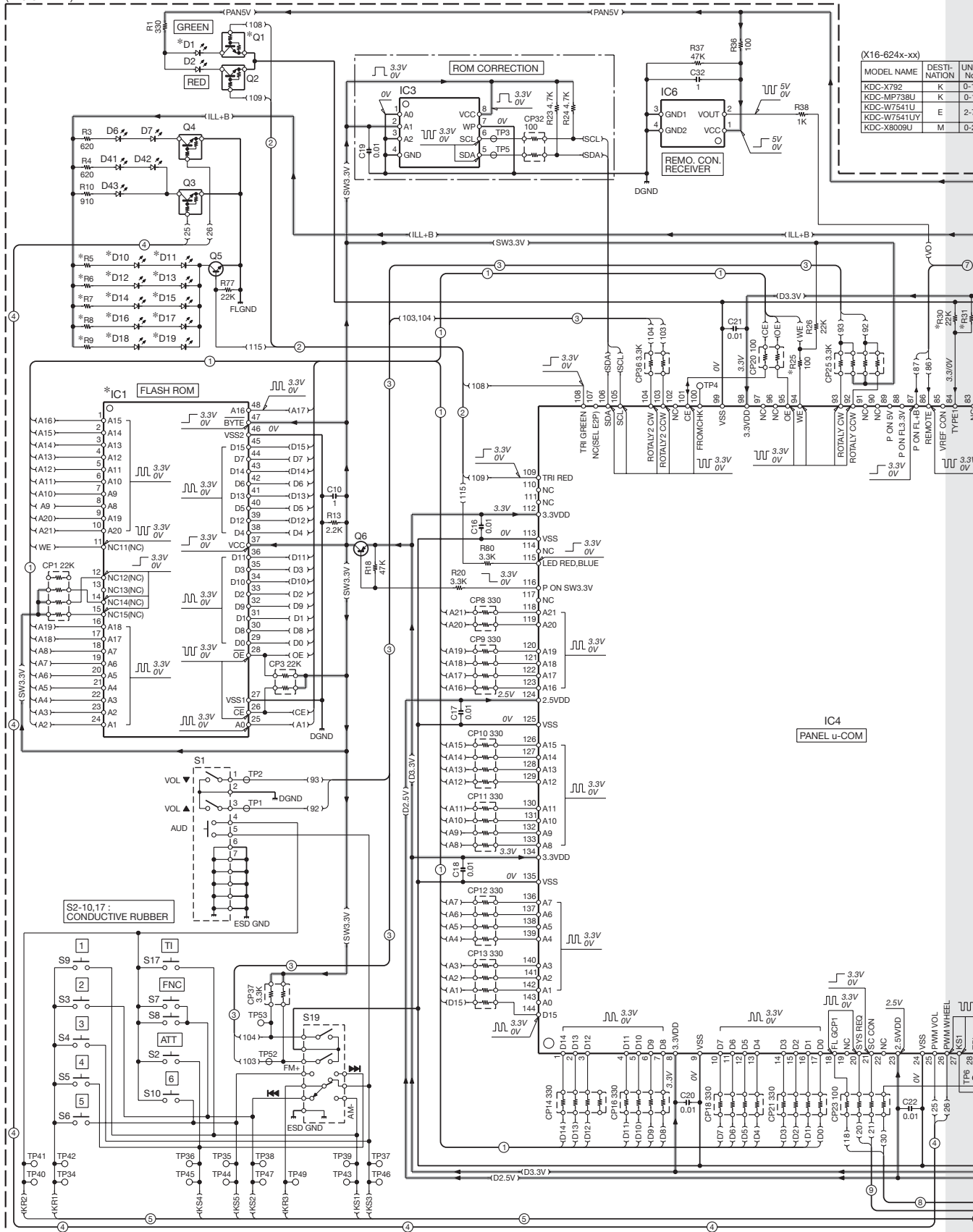
CAUTION : For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).

△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-MP738U/W7541U /W7541UY/X792/X8009U

(X16-624x-xx)



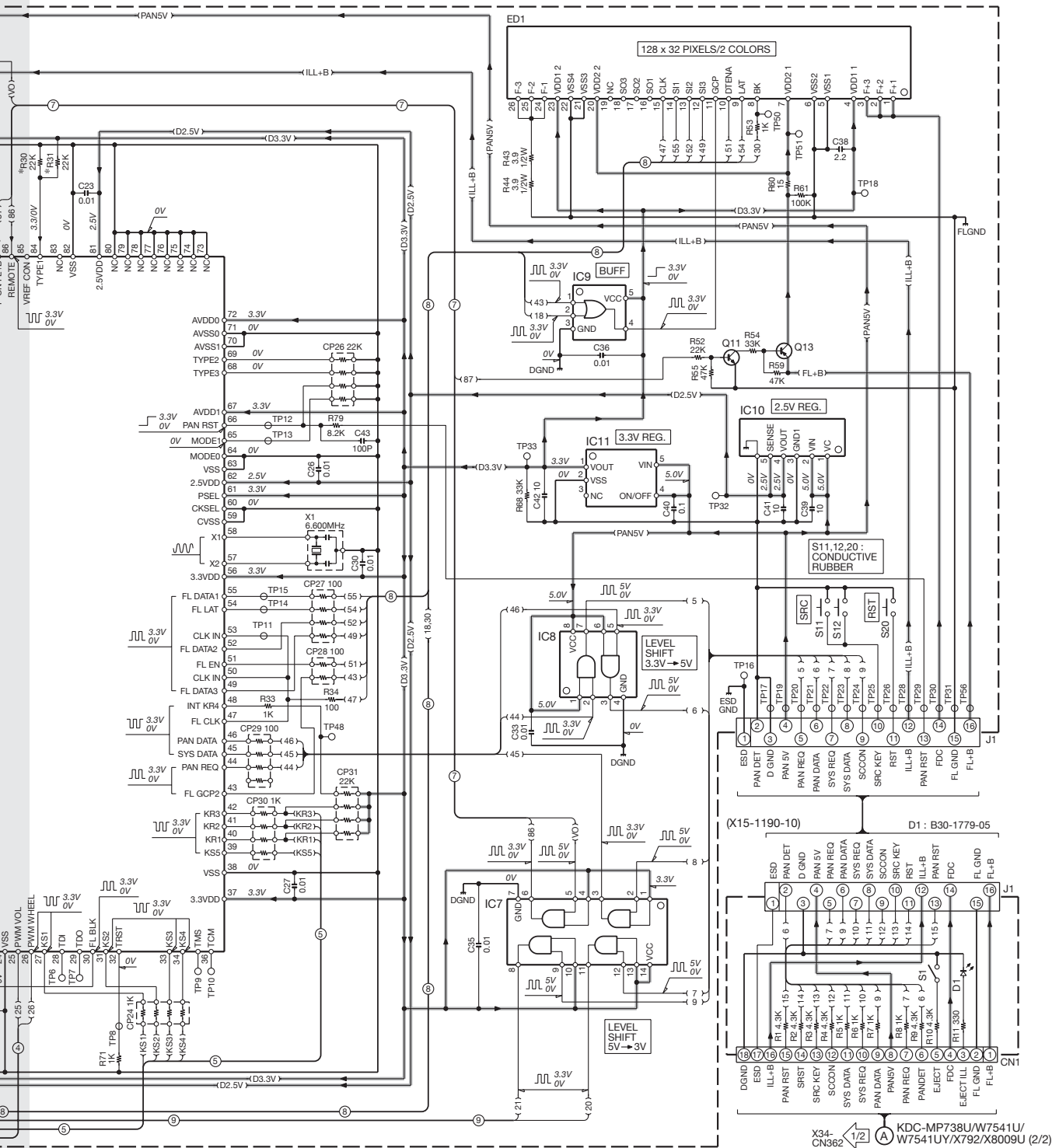
DESTINATION	UNIT No.	D1	D10-19	IC1	Q1	R5-9	R25-31	R30
K	0-10	YES	B30-1790-05(BLUE)	29L32CBT17926	YES	620	YES	—
K	0-11	—	B30-1779-05(RED)	MX233213T1927	—	620	—	YES
E	2-71	—	B30-1790-05(BLUE)	29L32CBT17926	—	620	YES	—
M	0-21	—	B30-1790-05(BLUE)	MX233213T1927	—	620	—	YES

IC1 : *
IC3 : BR24L04FY-W
IC4 : 703134AGJ018A
IC6 : PIC95603
IC7 : 74LVCO8APW
IC8 : 74HC2G08DP
IC9 : 74AHC1G32GW
IC10 : SI-3025KMMF
IC11 : S-1132B33U5T1G

Q1-4 : DTC143ZE
Q5 : SSC4081
Q6 : 2SB1689
Q11 : 2SC2713-F
Q13 : 2SB1260

D1 : B30-1780-05
D2 : B30-1566-05
D6,7,41-43 : B30-1790-05
D10-19 : *

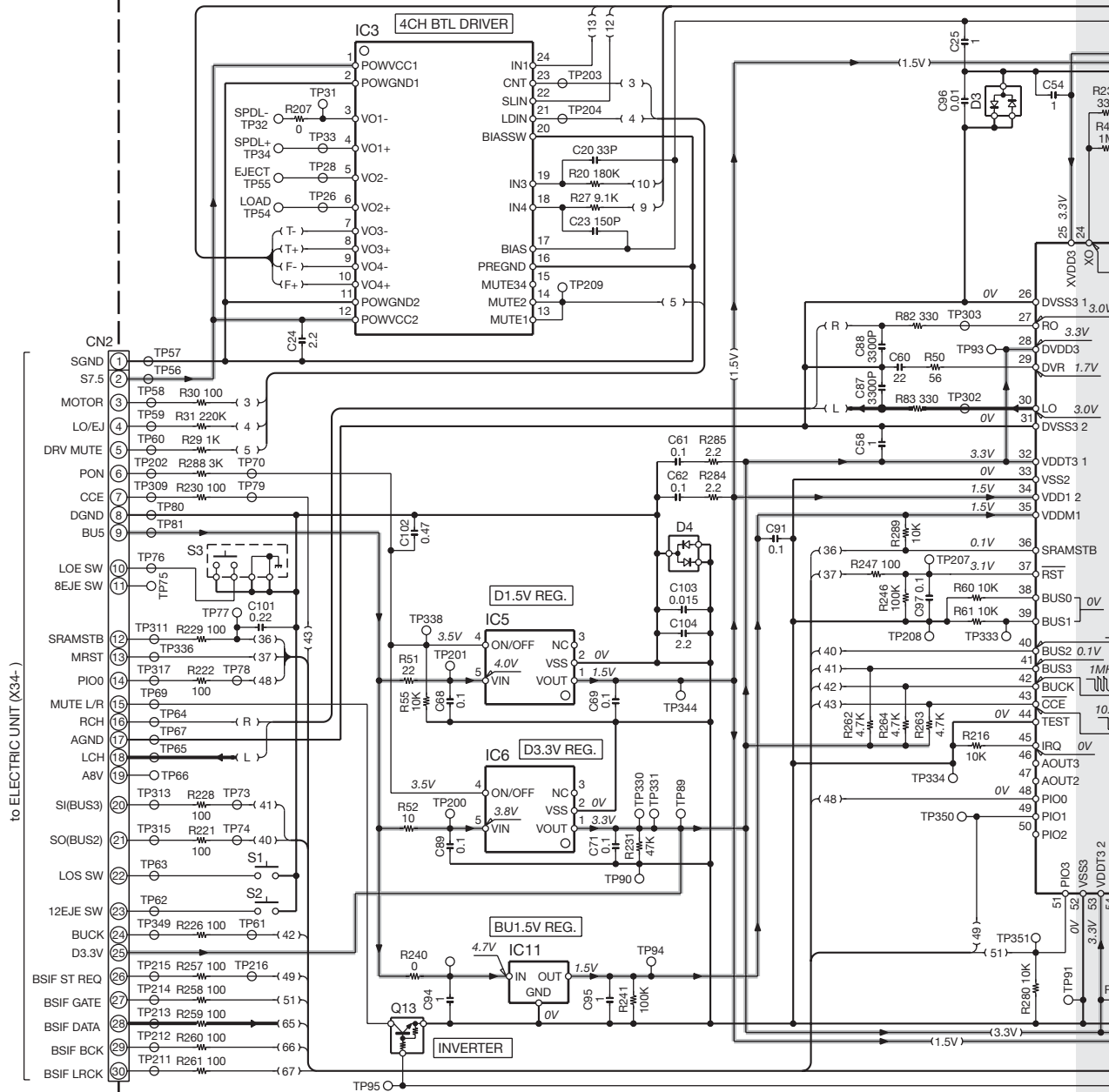
— GND LINE
— +B LINE

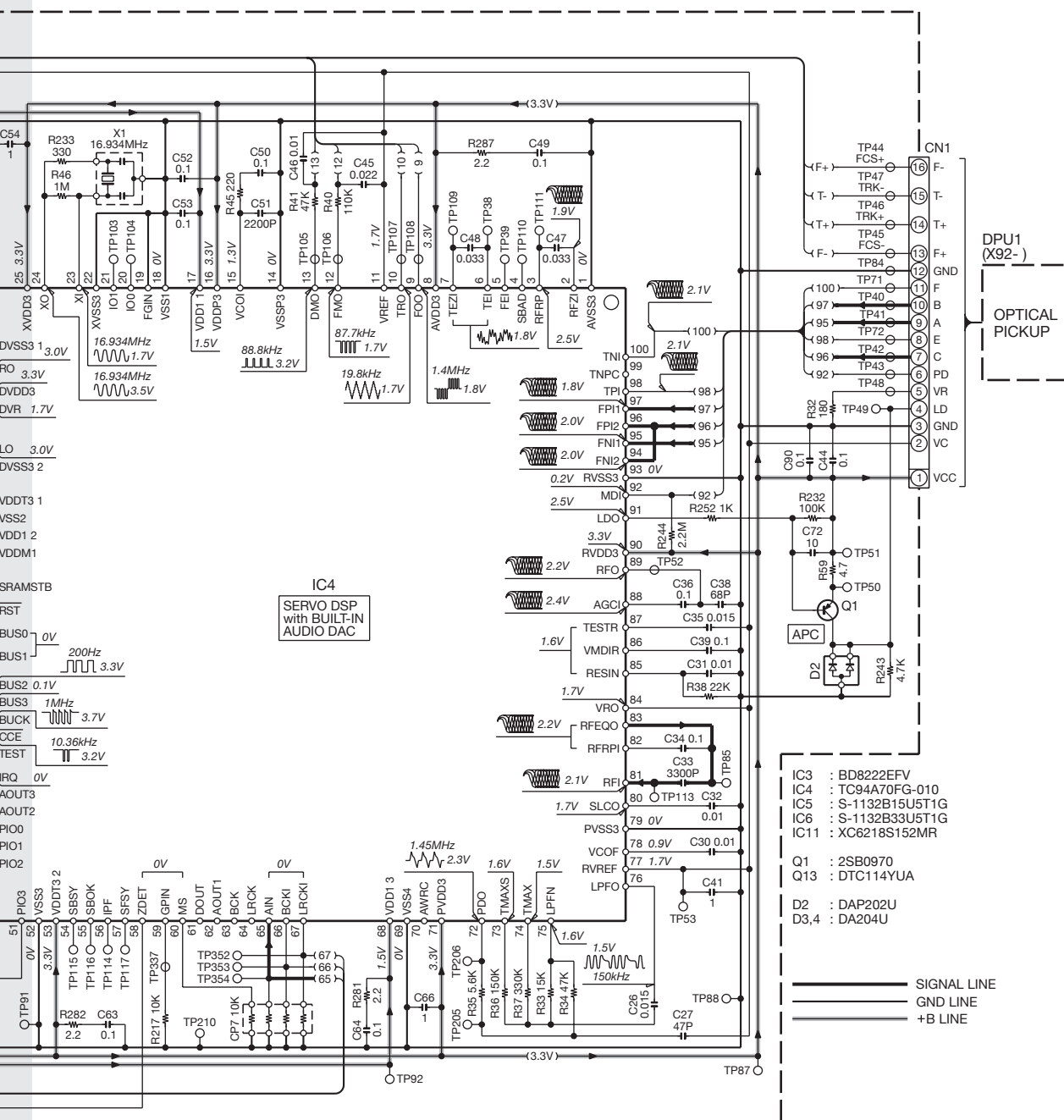


X34-
CN362 1/2 A KDC-MP738U/W7541U/
W7541UY/X792/X8009U (2/2)

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.

CD PLAYER UNIT (X32-6130-00)



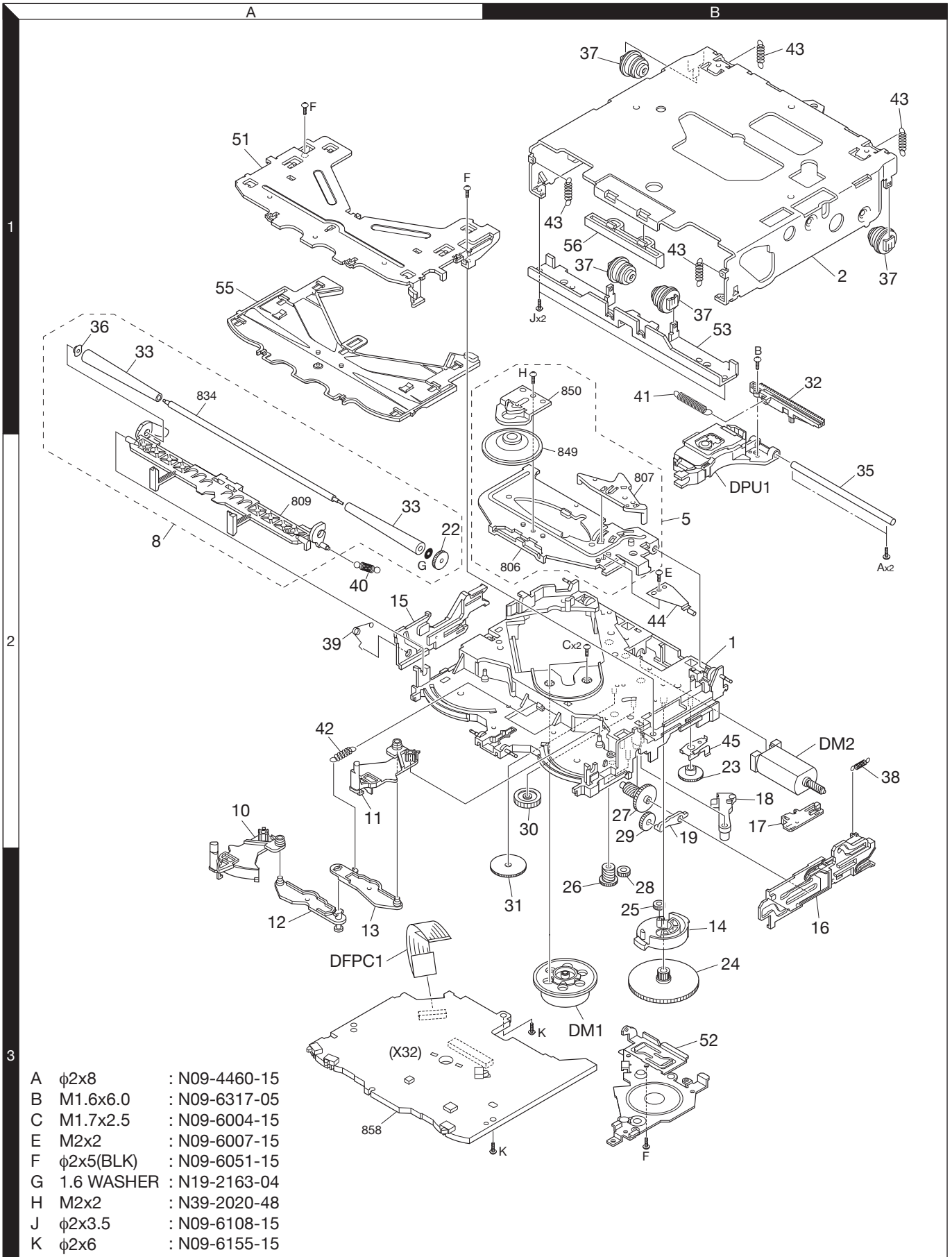


CAUTION : For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).

⚠ 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.

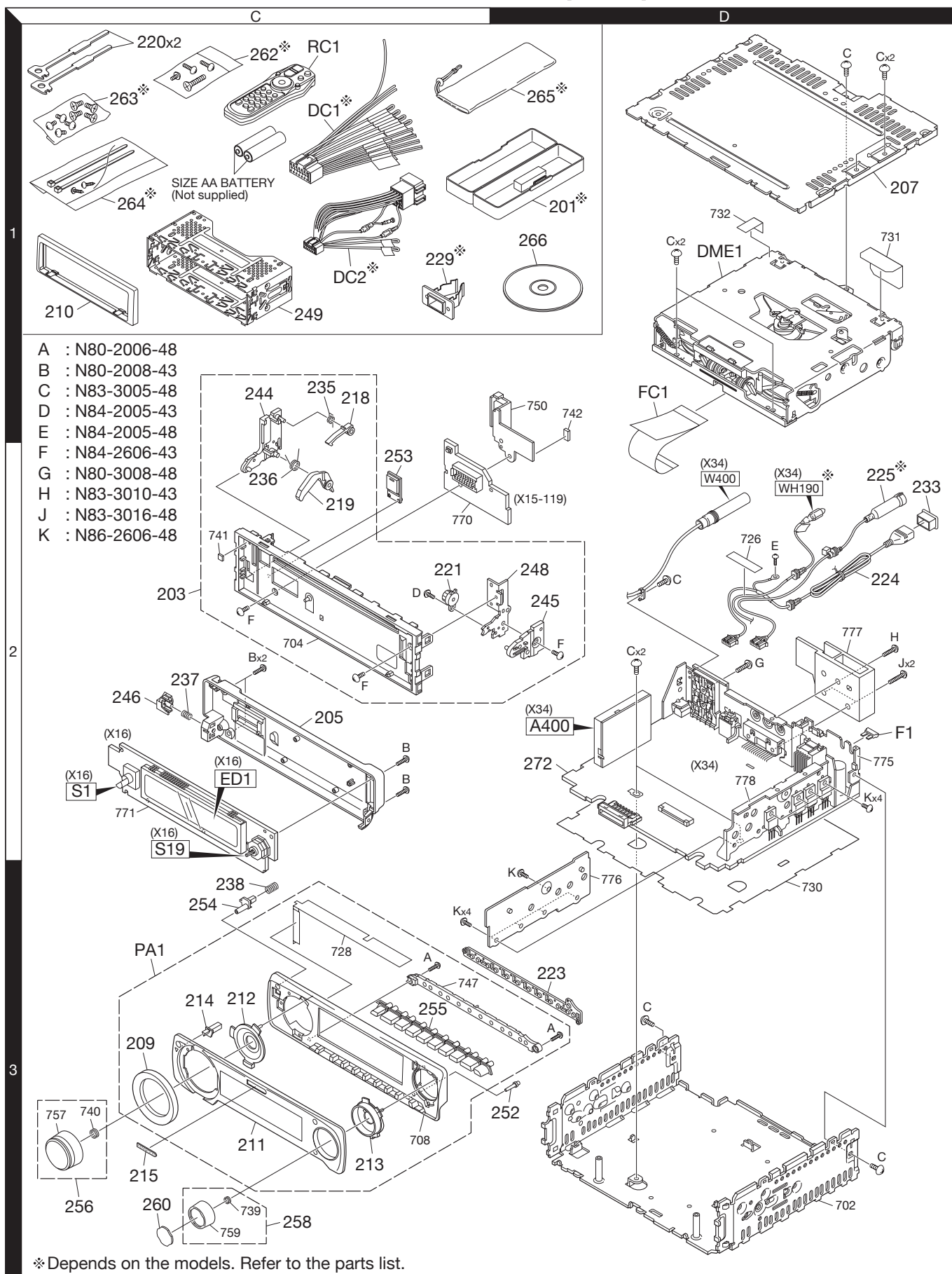
- DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

EXPLODED VIEW (CD MECHANISM)



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

EXPLODED VIEW (UNIT)



PARTS LIST

* New parts

Parts without **Parts No.** are not supplied.Les articles non mentionnés 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	Desti- nation
KDC-MP738U/W7541U/W7541UY/X792/X8009U					
201	1D		A02-2757-03	PLASTIC CABINET ASSY	M1
203	2C	*	A22-3164-02	SUB PANEL ASSY	
205	2C	*	A46-1865-01	REAR COVER	
207	1D		A52-0897-02	TOP PLATE	
PA1	3C	*	A64-4424-02	PANEL ASSY	K
PA1	3C	*	A64-4425-02	PANEL ASSY	K1
PA1	3C	*	A64-4428-02	PANEL ASSY	E1E2
PA1	3C	*	A64-4431-02	PANEL ASSY	M1
RC1	1C		A70-2085-05	REMOTE CONTROLLER ASSY(RC-547)	
-		*	B64-4048-00	INSTRUCTION MANUA (ENG.FRE.SPA)	KK1
-		*	B64-4049-00	INSTRUCTION MANUAL (ENG.)	E1E2
-		*	B64-4050-00	INSTRUCTION MANUA (FRE.GER.DUT)	E1
-		*	B64-4051-00	INSTRUCTION MANUA (ITA.SPA.POR)	E1
-		*	B64-4052-00	INSTRUCTION MANUAL (RUS.)	E2
-			B64-4053-00	INSTRUCTION MANUAL (ENG.S-CHI.)	M1
-			B64-4054-00	INSTRUCTION MANUAL (ARA.)	M1
209	3C	*	B07-3234-03	ESCUTCHEON	
210	1C	*	B07-3235-03	ESCUTCHEON	KE1E2
210	1C	*	B07-3235-03	ESCUTCHEON	M1
210	1C	*	B07-3238-03	ESCUTCHEON	K1
211	3C	*	B10-5082-01	FRONT GLASS	K
211	3C	*	B10-5083-01	FRONT GLASS	K1
211	3C	*	B10-5086-01	FRONT GLASS	E1E2
211	3C	*	B10-5089-01	FRONT GLASS	M1
212	3C	*	B19-2471-03	LIGHTING BOARD	
213	3C	*	B19-2472-03	LIGHTING BOARD	
214	3C	*	B19-2474-04	LIGHTING BOARD	
215	3C	*	B43-1518-04	BADGE	
218	1C		D10-4730-03	LEVER	
219	2C		D10-4731-03	LEVER	
220	1C		D10-7012-04	LEVER	
221	2C		D39-0255-05	DAMPER	
223	3D	*	E29-2120-03	CONDUCTIVE RUBBER	
224	2D	*	E30-6821-05	CORD WITH CONNECTOR (USB)	
225	2D	*	E30-6823-05	CORD WITH DIN CONNECTOR (OPEL)	E1
△ DC1	1C		E30-6428-05	DC CORD	KK1M1
△ DC2	1C		E30-6671-05	DC CORD (ISO)	E1E2
FC1	1D	*	E39-0974-05	FLAT CABLE (30PIN 1MM)	
229	1C	*	F19-1475-04	COVER (USB BRACKET)	K
233	2D		F29-0637-04	INSULATING COVER (USB)	
△ F1	2D		F52-0023-05	FUSE (MINI BLADE TYPE) 10A	
235	1C		G01-3171-04	TORSION COIL SPRING	
236	2C		G01-3172-04	TORSION COIL SPRING	
237	2C		G01-3173-04	COMPRESSION SPRING	
238	3C		G01-3203-04	COMPRESSION SPRING	
-		*	H54-4324-03	ITEM CARTON CASE	K
-		*	H54-4325-03	ITEM CARTON CASE	K1
-		*	H54-4328-03	ITEM CARTON CASE	E1
-		*	H54-4329-03	ITEM CARTON CASE	E2
-		*	H54-4332-03	ITEM CARTON CASE	M1
244	2C		J19-5203-03	HOLDER	

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
245	2D		J19-5204-03	HOLDER	
246	2C		J19-5205-03	HOLDER	
248	2D	*	J21-9977-03	MOUNTING HARDWARE	
249	1C		J22-0011-03	MOUNTING HARDWARE ASSY	
252	3D	*	K24-4801-04	PUSH KNOB (RESET)	
253	2C	*	K24-4802-03	PUSH KNOB (EJECT)	
254	3C	*	K24-4803-03	PUSH KNOB (RELEASE)	
255	3C	*	K25-1919-03	PUSH KNOB (PRESET)	
256	3C	*	K28-0282-14	KNOB ASSY (VOL)	KE1E2
256	3C	*	K28-0282-14	KNOB ASSY (VOL)	M1
256	3C	*	K28-0290-14	KNOB ASSY (VOL)	K1
258	3C	*	K28-0284-04	KNOB ASSY (FM/AM)	
260	3C	*	K28-0287-04	KEY TOP	KE1E2
260	3C	*	K28-0287-04	KEY TOP	M1
260	3C	*	K28-0288-04	KEY TOP	K1
262	1C	*	N99-1730-35	SCREW SET	KK1M1
263	1C		N99-1757-15	SCREW SET	KK1M1
264	1C	*	N99-1790-05	SCREW SET	K
A	3C		N80-2006-48	PAN HEAD TAPTITE SCREW	
B	2C		N80-2008-43	PAN HEAD TAPTITE SCREW	
C	1D		N83-3005-48	PAN HEAD TAPTITE SCREW	
D	2C		N84-2005-43	PAN HEAD TAPTITE SCREW	
E	2D		N84-2005-48	PAN HEAD TAPTITE SCREW	
F	2C		N84-2606-43	PAN HEAD TAPTITE SCREW	
265	1C		W01-1664-05	CARRYING CASE	K
265	1C		W01-1710-05	CARRYING CASE	K1E1E2
266	1C	*	W01-1723-05	COMPACT DISC	
272	2D	*	X34-5790-10	ELECTRIC UNIT	K
272	2D	*	X34-5790-11	ELECTRIC UNIT	K1
272	2D	*	X34-5790-21	ELECTRIC UNIT	M1
272	2D	*	X34-5792-71	ELECTRIC UNIT	E1
272	2D	*	X34-5792-73	ELECTRIC UNIT	E2
DME1	1D		X92-6130-00	CD MECHANISM ASSY (DXM-6E20W)	
DISPLAY UNIT (X15-1190-10)					
D1			B30-1779-05	LED (1608_SR)	
CN1		*	E41-2984-05	PIN ASSY	
J1			E58-1008-05	RECTANGULAR RECEPTACLE	
R1-4			RK73EB2E432J	CHIP R 4.3K J 1/4W	
R5-8			RK73EB2E102J	CHIP R 1.0K J 1/4W	
R9,10			RK73EB2E432J	CHIP R 4.3K J 1/4W	
R11			RK73FB2B331J	CHIP R 330 J 1/8W	
S1			S70-0901-05	TACT SWITCH	
SWITCH UNIT (X16-624x-xx)					
D1			B30-1780-05	LED (1608_PG)	K
D2			B30-1566-05	LED (1608,RED)	
D6,7		*	B30-1790-05	LED (1608_BLUE)	
D10-19			B30-1779-05	LED (1608_SR)	K1
D10-19		*	B30-1790-05	LED (1608_BLUE)	KE1E2
D10-19		*	B30-1790-05	LED (1608_BLUE)	M1
D41-43		*	B30-1790-05	LED (1608_BLUE)	

E1 : KDC-W7541U **E2** : KDC-W7541UY (Europe)
K : KDC-X792 **K1** : KDC-MP738U (North America)
M : KDC-X8009U (Other Areas)

△ Indicates safety critical components.

PARTS LIST

SWITCH UNIT (X16-624x-xx)

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
C10 C16-23 C26,27 C30 C32			CK73GB1A105K CK73GB1H103K CK73GB1H103K CK73GB1H103K CK73GB1A105K	CHIP C 1.0UF K CHIP C 0.010UF K CHIP C 0.010UF K CHIP C 0.010UF K CHIP C 1.0UF K	
C33 C35,36 C38 C39 C40			CK73GB1H103K CK73GB1H103K CK73FB1A225K CK73FB0J106K CK73GB0J475K	CHIP C 0.010UF K CHIP C 0.010UF K CHIP C 2.2UF K CHIP C 10UF K CHIP C 4.7UF K	
C41,42 C43			CK73FB0J106K CC73GCH1H101J	CHIP C 10UF K CHIP C 100PF J	
J1			E59-0850-05	RECTANGULAR PLUG	
X1			L78-1208-05	RESONATOR (6.6M)	
CP1 CP3 CP8 CP9-14 CP16			RK74HB1J223J RK74GA1J223J RK74GA1J331J RK74HB1J331J RK74HB1J331J	CHIP-COM 22K J 1/16W CHIP-COM 22K J 1/16W CHIP-COM 330 J 1/16W CHIP-COM 330 J 1/16W CHIP-COM 330 J 1/16W	
CP18 CP20 CP21 CP23 CP24			RK74HB1J331J RK74GA1J101J RK74HB1J331J RK74HB1J101J RK74HB1J102J	CHIP-COM 330 J 1/16W CHIP-COM 100 J 1/16W CHIP-COM 330 J 1/16W CHIP-COM 100 J 1/16W CHIP-COM 1.0K J 1/16W	
CP25 CP26 CP27 CP28 CP29			RK74HB1J332J RK74HB1J223J RK74HB1J101J RK74GA1J101J RK74HB1J101J	CHIP-COM 3.3K J 1/16W CHIP-COM 22K J 1/16W CHIP-COM 100 J 1/16W CHIP-COM 100 J 1/16W CHIP-COM 100 J 1/16W	
CP30 CP31 CP32 CP36,37 R1			RK74HB1J102J RK74HB1J223J RK74GA1J101J RK74GA1J332J RK73FB2B331J	CHIP-COM 1.0K J 1/16W CHIP-COM 22K J 1/16W CHIP-COM 100 J 1/16W CHIP-COM 3.3K J 1/16W CHIP R 330 J 1/8W	
R3-9 R3-9 R3,4 R5-9 R10			RK73EB2E621J RK73EB2E621J RK73EB2E621J RK73EB2E821J RK73EB2E911J	CHIP R 620 J 1/4W CHIP R 620 J 1/4W CHIP R 620 J 1/4W CHIP R 820 J 1/4W CHIP R 910 J 1/4W	KE1E2 M1 K1 K1
R13 R18 R20 R23,24 R25			RK73GB2A222J RK73GB2A473J RK73GB2A332J RK73GB2A472J RK73GB2A101J	CHIP R 2.2K J 1/10W CHIP R 47K J 1/10W CHIP R 3.3K J 1/10W CHIP R 4.7K J 1/10W CHIP R 100 J 1/10W	KE1E2
R26 R30 R31 R33 R34			RK73GB2A223J RK73GB2A223J RK73GB2A223J RK73GB2A102J RK73GB2A101J	CHIP R 22K J 1/10W CHIP R 22K J 1/10W CHIP R 22K J 1/10W CHIP R 1.0K J 1/10W CHIP R 100 J 1/10W	K1M1 KE1E2
R36 R37 R38 R43,44			RK73GB2A101J RK73GB2A473J RK73GB2A102J RK73PB2H3R9J	CHIP R 100 J 1/10W CHIP R 47K J 1/10W CHIP R 1.0K J 1/10W CHIP R 3.9 J 1/2W	

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
R52 R53 R54 R55 R59			RK73GB2A223J RK73GB2A102J RK73EB2E333J RK73GB2A473J RK73GB2A473J	CHIP R 22K J 1/10W CHIP R 1.0K J 1/10W CHIP R 33K J 1/4W CHIP R 47K J 1/10W CHIP R 47K J 1/10W	
R60 R61 R68 R71 R77			RK73FB2B150J RK73GB2A753J RK73GB2A333J RK73GB2A102J RK73GB2A223J	CHIP R 15 J 1/8W CHIP R 75K J 1/10W CHIP R 33K J 1/10W CHIP R 1.0K J 1/10W CHIP R 22K J 1/10W	
R79 R80 W4			RK73GB2A822J RK73GB2A332J RK73GB2A000J	CHIP R 8.2K J 1/10W CHIP R 3.3K J 1/10W CHIP R 0.0 J 1/10W	
S19			S70-0947-05	TACT SWITCH	
S1			T99-0456-15	ROTARY ENCODER	
ED1 IC1 IC1 IC3 IC4	*		JN12832A MX233213TI9Z7 29L32CBT179Z6 BR24L04FV-W 703134AGJ018A	FLUORESCENT INDICATOR TUBE ROM IC ROM IC ROM IC MICROCONTROLLER IC	K1M1 KE1E2
IC6 IC7 IC8 IC9 IC10	*		PIC95603 74LVC08APW 74HC2G08DP 74AHC1G32GW SI-3025KMNF	ANALOGUE IC MOS-IC MOS-IC MOS-IC ANALOGUE IC	
IC11 Q1-4 Q2-4 Q2-4 Q5			S-1132B33U5T1G DTC143ZE DTC143ZE DTC143ZE 2SC4081	ANALOGUE IC DIGITAL TRANSISTOR DIGITAL TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR	K K1E1E2 M1
Q6 Q11 Q13			2SB1689 2SC2713-F 2SB1260	TRANSISTOR TRANSISTOR TRANSISTOR	
CD PLAYER UNIT (X32-6130-00)					
C20 C23 C24 C25 C26			CC73GCH1H330J CC73GCH1H151J CK73FB1A225K CK73GB1A105K CK73GB1H153K	CHIP C 33PF J CHIP C 150PF J CHIP C 2.2UF K CHIP C 1.0UF K CHIP C 0.015UF K	
C27 C30-32 C33 C34 C35			CC73GCH1H470J CK73GB1H103K CK73GB1H332K CK73GB1H104K CK73GB1H153K	CHIP C 47PF J CHIP C 0.010UF K CHIP C 3300PF K CHIP C 0.10UF K CHIP C 0.015UF K	
C36 C38 C39 C41 C44			CK73GB1H104K CC73GCH1H680J CK73GB1H104K CK73GB1A105K CK73GB1H104K	CHIP C 0.10UF K CHIP C 68PF J CHIP C 0.10UF K CHIP C 1.0UF K CHIP C 0.10UF K	
C45 C46 C47,48 C49,50			CK73GB1H223K CK73GB1H103K CK73GB1H333K CK73GB1H104K	CHIP C 0.022UF K CHIP C 0.010UF K CHIP C 0.033UF K CHIP C 0.10UF K	

△Indicates safety critical components.

E1 : KDC-W7541U E2 : KDC-W7541UY (Europe)
K : KDC-X792 K1 : KDC-MP738U (North America)

44 M : KDC-X8009U (Other Areas)

PARTS LIST

CD PLAYER UNIT (X32-6130-00)

Ref. No.	Added	New	Parts No.	Description	Destination
C51			CK73GB1H222K	CHIP C 2200PF K	
C52,53			CK73GB1H104K	CHIP C 0.10UF K	
C54			CK73GB1A105K	CHIP C 1.0UF K	
C58			CK73GB1A105K	CHIP C 1.0UF K	
C60			CK73EB0J226K	CHIP C 22UF K	
C61-64			CK73GB1H104K	CHIP C 0.10UF K	
C66			CK73FB1C105K	CHIP C 1.0UF K	
C68,69			CK73GB1H104K	CHIP C 0.10UF K	
C71			CK73GB1H104K	CHIP C 0.10UF K	
C72			CK73FB0J106K	CHIP C 10UF K	
C87,88			CK73GB1H332K	CHIP C 3300PF K	
C89-91			CK73GB1H104K	CHIP C 0.10UF K	
C94,95			CK73GB1A105K	CHIP C 1.0UF K	
C96			CK73GB1H103K	CHIP C 0.010UF K	
C97			CK73GB1H104K	CHIP C 0.10UF K	
C101			CK73GB1C224K	CHIP C 0.22UF K	
C102			CK73GB1A474K	CHIP C 0.47UF K	
C103			CK73GB1H153K	CHIP C 0.015UF K	
C104			CK73FB1A225K	CHIP C 2.2UF K	
CN1			E41-2612-05	FLAT CABLE CONNECTOR	
CN2			E41-2630-05	FLAT CABLE CONNECTOR	
X1			L78-1221-05	RESONATOR (16.93MHZ)	
CP7			RK74GB1J103J	CHIP-COM 10K J 1/16W	
R20			RK73GB2A184J	CHIP R 180K J 1/10W	
R27			RK73GB2A912J	CHIP R 9.1K J 1/10W	
R29			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R30			RK73GB2A101J	CHIP R 100 J 1/10W	
R31			RK73GB2A224J	CHIP R 220K J 1/10W	
R32			RK73GB2A181J	CHIP R 180 J 1/10W	
R33			RK73GB2A153J	CHIP R 15K J 1/10W	
R34			RK73GB2A473J	CHIP R 47K J 1/10W	
R35			RK73GB2A562J	CHIP R 5.6K J 1/10W	
R36			RK73GB2A154J	CHIP R 150K J 1/10W	
R37			RK73GB2A334J	CHIP R 330K J 1/10W	
R38			RK73GB2A223J	CHIP R 22K J 1/10W	
R40			RK73GB2A114J	CHIP R 110K J 1/10W	
R41			RK73GB2A473J	CHIP R 47K J 1/10W	
R45			RK73GB2A221J	CHIP R 220 J 1/10W	
R46			RK73GB2A105J	CHIP R 1.0M J 1/10W	
R50			RK73GB2A560J	CHIP R 56 J 1/10W	
R51			RK73EB2E220J	CHIP R 22 J 1/4W	
R52			RK73EB2E100J	CHIP R 10 J 1/4W	
R55			RK73GB2A103J	CHIP R 10K J 1/10W	
R59			RK73GB2A4R7J	CHIP R 4.7 J 1/10W	
R60,61			RK73GB2A103J	CHIP R 10K J 1/10W	
R82,83			RK73GB2A331J	CHIP R 330 J 1/10W	
R207			RK73EB2E000J	CHIP R 0.0 J 1/4W	
R216,217			RK73GB2A103J	CHIP R 10K J 1/10W	
R221,222			RK73GB2A101J	CHIP R 100 J 1/10W	
R226			RK73GB2A101J	CHIP R 100 J 1/10W	
R228-230			RK73GB2A101J	CHIP R 100 J 1/10W	
R231			RK73GB2A473J	CHIP R 47K J 1/10W	
R232			RK73GB2A104J	CHIP R 100K J 1/10W	

Ref. No.	Added	New	Parts No.	Description	Destination
R233			RK73GB2A331J	CHIP R 330 J 1/10W	
R240			RK73EB2E000J	CHIP R 0.0 J 1/4W	
R241			RK73GB2A104J	CHIP R 100K J 1/10W	
R243			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R244			RK73GB2A225J	CHIP R 2.2M J 1/10W	
R246			RK73GB2A104J	CHIP R 100K J 1/10W	
R247			RK73GB2A101J	CHIP R 100 J 1/10W	
R252			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R257-261			RK73GB2A101J	CHIP R 100 J 1/10W	
R262-264			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R280			RK73GB2A103J	CHIP R 10K J 1/10W	
R281,282			RK73GB2A2R2J	CHIP R 2.2 J 1/10W	
R284,285			RK73GB2A2R2J	CHIP R 2.2 J 1/10W	
R287			RK73GB2A2R2J	CHIP R 2.2 J 1/10W	
R288			RK73GB2A302J	CHIP R 3.0K J 1/10W	
R289			RK73GB2A103J	CHIP R 10K J 1/10W	
S1,2			S68-0863-05	PUSH SWITCH	
S3			S68-0862-05	PUSH SWITCH	
D2			DAP202U	DIODE	
D3,4			DA204U	DIODE	
IC3			BD8222EFV	ANALOGUE IC	
IC4			TC94A70FG-010	MOS-IC	
IC5			S-1132B15U5T1G	ANALOGUE IC	
IC6			S-1132B33U5T1G	ANALOGUE IC	
IC11			XC6218S152MR	MOS-IC	
Q1			2SB0970	TRANSISTOR	
Q13			DTC114YUA	DIGITAL TRANSISTOR	
ELECTRIC UNIT (X34-579x-xx)					
C1			C90-6783-05	ERECTRO 3900 16WV	K1E1E2 M1 K E1E2
C1			C90-6783-05	ERECTRO 3900 16WV	
C1			C90-6784-05	ELECTRO 3900UF 16WV	
C3			C93-1470-05	CHIP C 1500PF K	
C10			CD04AY1A221M	ELECTRO 220UF 10WV	
C11			CK73GB1H103K	CHIP C 0.010UF K	K K
C20			C90-6851-05	ELECTRO 220UF 25WV	
C22			CD04BA1C100M	ELECTRO 10UF 16WV	
C23			CD04BA0J101M	ELECTRO 100UF 6.3WV	
C24			C90-6851-05	ELECTRO 220UF 25WV	
C25			CK73GB0J475K	CHIP C 4.7UF K	
C26			CK73GB1A105K	CHIP C 1.0UF K	
C30			CK73GB1A105K	CHIP C 1.0UF K	
C31			CD04AY1H220M	ELECTRO 22UF 50WV	
C60			CK73GB1H103K	CHIP C 0.010UF K	
C63			CK73GB1H103K	CHIP C 0.010UF K	* * * * * * * * * *
C64			CC73GCH1H101J	CHIP C 100PF J	
C65			C93-1457-05	CHIP C 1UF K	
C66,67			C93-0059-05	CERAMIC 1UF K	
C68			C93-1457-05	CHIP C 1UF K	
C69			CK73FB1C105K	CHIP C 1.0UF K	
C81			CK73FB0J106K	CHIP C 10UF K	
C82			CK73FB1E474K	CHIP C 0.47UF K	
C83			CK73GB1H102K	CHIP C 1000PF K	
C84			CK73EB1C106K	CHIP C 10UF K	

E1 : KDC-W7541U E2 : KDC-W7541UY (Europe)
K : KDC-X792 K1 : KDC-MP738U (North America)
M : KDC-X8009U (Other Areas)

△ Indicates safety critical components.

PARTS LIST

ELECTRIC UNIT (X34-579x-xx)

Ref. No.	Ad	New	Parts No.	Description	Destination	Ref. No.	Ad	New	Parts No.	Description	Destination
C85,86 C87 C88 C122 C140			CK73GB1C104K CK73FB1C105K CK73GB1C104K CK73GB1H103K CK73GB1H104K	CHIP C 0.10UF K CHIP C 1.0UF K CHIP C 0.10UF K CHIP C 0.010UF K CHIP C 0.10UF K	E1E2	C491 C492-495 C496 C497 C498			CD04AS1H2R2M CK73GB1A105K CK73GB1H103K CD04AS1V100M CD04AS1C470M	ELECTRO 2.2UF 50WV CHIP C 1.0UF K CHIP C 0.010UF K ELECTRO 10UF 35WV ELECTRO 47UF 16WV	K1
C141 C142 C170 C180 C181			CK73GB1A105K CD04AS1H3R3M CK73GB1H103K CK73GB1A105K CK73GB1H223K	CHIP C 1.0UF K ELECTRO 3.3UF 50WV CHIP C 0.010UF K CHIP C 1.0UF K CHIP C 0.022UF K		C500 C501 C502 C503-506 C508,509			CC73GCH1H220J CC73GCH1H180J CK73GB1C104K CK73GB1H103K CK73GB1H103K	CHIP C 22PF J CHIP C 18PF J CHIP C 0.10UF K CHIP C 0.010UF K CHIP C 0.010UF K	
C200 C301 C310-312 C313 C340,341			CD04BF1C221M CK73GB1C104K CK73GB1C104K CK73GB1A105K CC73GCH1H270J	ELECTRO 220UF 16WV CHIP C 0.10UF K CHIP C 0.10UF K CHIP C 1.0UF K CHIP C 27PF J	K K KE1E2	C510 C511 C513 C514 C515		*	CK73GB1H102K CK73GB1H103K CK73GB0J225K CK73GB1H103K CD04AY2A4R7M	CHIP C 1000PF K CHIP C 0.010UF K CHIP C 2.2UF K CHIP C 0.010UF K ELECTRO 4.7UF 100WV	
C343 C344 C345 C350 C350			CK73GB1H103K CK73GB0J225K CC73GCH1H271J CD04AS1C470M CD04AS1C470M	CHIP C 0.010UF K CHIP C 2.2UF K CHIP C 270PF J ELECTRO 47UF 16WV ELECTRO 47UF 16WV	KE1E2 KE1E2 KE1E2 KE1E2 M1	C600 C602 C652 C700 C701			CK73GB1H103K CK73GB1H103K CK73GB1H103K CK73GB1H103K CK73GB1C104K	CHIP C 0.010UF K CHIP C 0.010UF K CHIP C 0.010UF K CHIP C 0.010UF K CHIP C 0.10UF K	
C351 C351 C352 C352 C353			CD04AS1C220M CD04AS1C220M CD04AS1V100M CD04AS1V100M CD04AJ1C101M	ELECTRO 22UF 16WV ELECTRO 22UF 16WV ELECTRO 10UF 35WV ELECTRO 10UF 35WV ELECTRO 100UF 16WV	KE1E2 M1 KE1E2 M1 KE1E2	C702 C703 C704-710 C711,712 C713,714			CC73GCH1H220J CC73GCH1H180J CK73GB1H103K CC73GCH1H150J CK73GB1H103K	CHIP C 22PF J CHIP C 18PF J CHIP C 0.010UF K CHIP C 15PF J CHIP C 0.010UF K	
C353 C371 C373 C375 C377			CD04AJ1C101M CD04AS1V100M CD04AS1V100M CD04AS1V100M CD04AS1V100M	ELECTRO 100UF 16WV ELECTRO 10UF 35WV ELECTRO 10UF 35WV ELECTRO 10UF 35WV ELECTRO 10UF 35WV	M1	C715 C716,717 C750 C751 C753			CK73GB1A105K CK73FB0J106K CK73GB1H103K CC73GCH1H050C CK73GB1H103K	CHIP C 1.0UF K CHIP C 10UF K CHIP C 0.010UF K CHIP C 5.0PF C CHIP C 0.010UF K	
C379 C381 C400-403 C410,411 C412			CD04AS1V100M CD04AS1V100M CK73GB1H103K CK73GB1A105K CD04AS0J470M	ELECTRO 10UF 35WV ELECTRO 10UF 35WV CHIP C 0.010UF K CHIP C 1.0UF K ELECTRO 47UF 6.3WV		C754 C900,901 C909 C964 C965			CC73GCH1H050C CK73GB1H103K CC73GCH1H101J CK73GB1C104K CK73GB1A105K	CHIP C 5.0PF C CHIP C 0.010UF K CHIP C 100PF J CHIP C 0.10UF K CHIP C 1.0UF K	E1E2
C420 C421 C422 C450,451 C452			CK73GB1A105K CD04AS0J470M CK73GB1A105K CK73FB1C105K CD04BA1C100M	CHIP C 1.0UF K ELECTRO 47UF 6.3WV CHIP C 1.0UF K CHIP C 1.0UF K ELECTRO 10UF 16WV	Δ	CN190 CN200 CN300 CN362 J1		*	E41-1702-05 E41-1701-05 E41-2630-05 E40-9747-05 E58-1003-05	PIN ASSY PIN ASSY FLAT CABLE CONNECTOR PIN ASSY RECTANGULAR RECEPTACLE	E1
C461-464 C461-464 C465-468 C475 C475			CK73GB1C224K CK73GB1C224K C90-6768-05 CK73FB1C105K CK73FB1C105K	CHIP C 0.22UF K CHIP C 0.22UF K ELECTRO 0.22UF 16WV CHIP C 1.0UF K CHIP C 1.0UF K	K1E1E2 M1 K K1E1E2 M1	J361 J361 J361 J410 J420		*	E63-0953-05 E63-0953-05 E63-0958-05 E11-0625-05 E56-0855-05	PIN JACK PIN JACK PIN JACK PHONE JACK CYLINDRICAL RECEPTACLE	K1E1E2 M1 K
C476 C478,479 C480-483 C480-483 C482,483			C90-6765-05 CD04AS1H2R2M CK73GB1A105K CK73GB1A105K CK73GB1A105K	ELECTRO 1UF 16WV ELECTRO 2.2UF 50WV CHIP C 1.0UF K CHIP C 1.0UF K CHIP C 1.0UF K	K K K1E1E2 M1 K	W400 WH190 WH190		*	E30-6803-05 E30-6822-05 E30-6822-05	CORD WITH PLUG (FM/AM ANT) WIRING HARNESS (REMO) WIRING HARNESS (REMO)	KK1E2 M1
C484,485 C486,487 C488 C488-490 C488-490			CD04AS1H2R2M CK73GB1A474K CK73GB1A105K CK73GB1A105K CK73GB1A105K	ELECTRO 2.2UF 50WV CHIP C 0.47UF K CHIP C 1.0UF K CHIP C 1.0UF K CHIP C 1.0UF K	K K K K1E1E2 M1	Δ L1 L60 L80 L515 X340		*	L33-2436-05 L33-2464-05 L33-2297-05 L92-0639-05 L77-2002-05	CHOKE COIL ASSY SMALL FIXED INDUCTOR SMALL FIXED INDUCTOR CHIP FERRITE CRYSTAL RESONATOR	KE1E2
						X501			L78-0872-05	RESONATOR (12MHZ)	

E1 : KDC-W7541U E2 : KDC-W7541UY (Europe)
K : KDC-X792 K1 : KDC-MP738U (North America)
46 M : KDC-X8009U (Other Areas)

ΔIndicates safety critical components.

PARTS LIST

ELECTRIC UNIT (X34-579x-xx)

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation	Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
X502			L77-2921-05	CRYSTAL RESONATOR (32.768KHZ)		R150			RK73GB2A223J	CHIP R 22K J 1/10W	KK1M1
X700			L77-2921-05	CRYSTAL RESONATOR (32.768KHZ)		R151,152			RK73PB2H221J	CHIP R 220 J 1/2W	KK1M1
X701			L77-2964-05	CRYSTAL RESONATOR (9.00MHZ)		R153			RK73FB2B472J	CHIP R 4.7K J 1/8W	
X750			L77-2921-05	CRYSTAL RESONATOR (32.768KHZ)		R170			RK73GB2A473J	CHIP R 47K J 1/10W	
						R171			RK73GB2A104J	CHIP R 100K J 1/10W	
C	2D		N83-3005-48	PAN HEAD TAPTITE SCREW		R172			RK73EB2E103J	CHIP R 10K J 1/4W	
G	2D		N80-3008-48	PAN HEAD TAPTITE SCREW		R180			RK73GB2A104J	CHIP R 100K J 1/10W	
H	2D		N83-3010-43	PAN HEAD TAPTITE SCREW		R181			RK73EB2E103J	CHIP R 10K J 1/4W	
J	2D		N83-3016-48	PAN HEAD TAPTITE SCREW		R190			RK73EB2E102J	CHIP R 1.0K J 1/4W	
K	3D		N86-2606-48	BINDING HEAD TAPTITE SCREW		R191-193			RK73EB2E471J	CHIP R 470 J 1/4W	E1
CP190			RK74HB1J101J	CHIP-COM 100 J 1/16W	E1	R194			RK73GB2A222J	CHIP R 2.2K J 1/10W	
CP420			RK74GA1J101J	CHIP-COM 100 J 1/16W		R195			RK73GB2A473J	CHIP R 47K J 1/10W	
CP421			RK74HB1J101J	CHIP-COM 100 J 1/16W		R200			RK73GB2A101J	CHIP R 100 J 1/10W	
CP501			RK74HB1J101J	CHIP-COM 100 J 1/16W		R210			RK73GB2A473J	CHIP R 47K J 1/10W	
CP503			RK74GA1J101J	CHIP-COM 100 J 1/16W		R211			RK73GB2A104J	CHIP R 100K J 1/10W	
CP504			RK74GA1J472J	CHIP-COM 4.7K J 1/16W		R214-216			RK73GB2A101J	CHIP R 100 J 1/10W	
CP506			RK74GA1J101J	CHIP-COM 100 J 1/16W		R300			RK73GB2A223J	CHIP R 22K J 1/10W	
R10			RK73GH2A432D	CHIP R 4.3K D 1/10W		R310,311			RK73GB2A102J	CHIP R 1.0K J 1/10W	K
R11			RK73GH2A243D	CHIP R 24K D 1/10W		R312			RK73GH2A111D	CHIP R 110 D 1/10W	K
R12			RK73FB2B221J	CHIP R 220 J 1/8W		R313			RK73GH2A241D	CHIP R 240 D 1/10W	K
R20			RK73FB2B153J	CHIP R 15K J 1/8W		R314			RK73GB2A223J	CHIP R 22K J 1/10W	K
R21			RK73GB2A223J	CHIP R 22K J 1/10W		R340-342			RK73GB2A222J	CHIP R 2.2K J 1/10W	KE1E2
R22			RK73GB2A272J	CHIP R 2.7K J 1/10W		R343			RK73GB2A102J	CHIP R 1.0K J 1/10W	KE1E2
R30			RK73FB2B152J	CHIP R 1.5K J 1/8W		R344			RK73GB2A223J	CHIP R 22K J 1/10W	KE1E2
R40			RK73FB2B471J	CHIP R 470 J 1/8W		R345			RK73GB2A222J	CHIP R 2.2K J 1/10W	KE1E2
R41			RK73GB2A223J	CHIP R 22K J 1/10W		R350			RK73GB2A2R2J	CHIP R 2.2 J 1/10W	KE1E2
R46			RK73FB2B102J	CHIP R 1.0K J 1/8W		R350			RK73GB2A2R2J	CHIP R 2.2 J 1/10W	M1
R47			RK73GB2A223J	CHIP R 22K J 1/10W		R351			RK73GB2A332J	CHIP R 3.3K J 1/10W	KE1E2
R50			RK73FB2B152J	CHIP R 1.5K J 1/8W		R351			RK73GB2A332J	CHIP R 3.3K J 1/10W	M1
R60			RK73GB2A203J	CHIP R 20K J 1/10W		R352			RK73GB2A2R2J	CHIP R 2.2 J 1/10W	KE1E2
R61			RK73PB2H1R0J	CHIP R 1.0 J 1/2W		R352			RK73GB2A2R2J	CHIP R 2.2 J 1/10W	M1
R65			RK73GB2A103J	CHIP R 10K J 1/10W		R353			RK73GB2A221J	CHIP R 220 J 1/10W	KE1E2
R66			RK73GH2A103D	CHIP R 10K D 1/10W		R353			RK73GB2A221J	CHIP R 220 J 1/10W	M1
R67		*	RK73GH2A514D	CHIP R 510K D 1/10W		R354-356			RK73GB2A102J	CHIP R 1.0K J 1/10W	KE1E2
R72			RK73GH2A912D	CHIP R 9.1K D 1/10W		R354-356			RK73GB2A102J	CHIP R 1.0K J 1/10W	M1
R73			RK73EB2E361J	CHIP R 360 J 1/4W		R357			RK73GB2A513J	CHIP R 51K J 1/10W	KE1E2
R80			RK73GH2A104D	CHIP R 100K D 1/10W		R357			RK73GB2A513J	CHIP R 51K J 1/10W	M1
R81			RK73GH2A473D	CHIP R 47K D 1/10W		R358			RK73GB2A472J	CHIP R 4.7K J 1/10W	KE1E2
R82			RK73GB2A103J	CHIP R 10K J 1/10W		R358			RK73GB2A472J	CHIP R 4.7K J 1/10W	M1
R83			RK73GH2A333D	CHIP R 33K D 1/10W		R359			RK73FB2B102J	CHIP R 1.0K J 1/8W	KE1E2
R84			RK73GH2A163D	CHIP R 16K D 1/10W		R359			RK73FB2B102J	CHIP R 1.0K J 1/8W	M1
R120,121			RK73GB2A103J	CHIP R 10K J 1/10W		R360			RK73GB2A473J	CHIP R 47K J 1/10W	KE1E2
R126			RK73GB2A183J	CHIP R 18K J 1/10W		R360			RK73GB2A473J	CHIP R 47K J 1/10W	M1
R127			RK73FB2B203J	CHIP R 20K J 1/8W		R361			RK73PB2H220J	CHIP R 22 J 1/2W	KE1E2
R128			RK73GB2A104J	CHIP R 100K J 1/10W		R361			RK73PB2H220J	CHIP R 22 J 1/2W	M1
R129			RK73EB2E473J	CHIP R 47K J 1/4W		R362			RK73GB2A222J	CHIP R 2.2K J 1/10W	KE1E2
R130			RK73EB2E102J	CHIP R 1.0K J 1/4W		R362			RK73GB2A222J	CHIP R 2.2K J 1/10W	M1
R131			RK73GB2A473J	CHIP R 47K J 1/10W		R370			RK73FB2B181J	CHIP R 180 J 1/8W	
R132			RK73FB2B683J	CHIP R 68K J 1/8W		R371			RK73GB2A331J	CHIP R 330 J 1/10W	
R133,134			RK73EB2E102J	CHIP R 1.0K J 1/4W		R372,373			RK73GB2A223J	CHIP R 22K J 1/10W	
R140-142			RK73PB2H561J	CHIP R 560 J 1/2W		R374			RK73FB2B181J	CHIP R 180 J 1/8W	
R143			RK73GB2A223J	CHIP R 22K J 1/10W		R375			RK73GB2A331J	CHIP R 330 J 1/10W	
R144			RK73PB2H561J	CHIP R 560 J 1/2W		R376			RK73FB2B181J	CHIP R 180 J 1/8W	
R145			RK73FB2B472J	CHIP R 4.7K J 1/8W		R377			RK73GB2A331J	CHIP R 330 J 1/10W	
R146			RK73GB2A000J	CHIP R 0.0 J 1/10W	E1E2	R378,379			RK73GB2A223J	CHIP R 22K J 1/10W	

E1 : KDC-W7541U E2 : KDC-W7541UY (Europe)
K : KDC-X792 K1 : KDC-MP738U (North America)
M : KDC-X8009U (Other Areas)

△ Indicates safety critical components.

PARTS LIST

ELECTRIC UNIT (X34-579x-xx)

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
R380 R381 R382 R383 R384,385			RK73FB2B181J RK73GB2A331J RK73FB2B181J RK73GB2A331J RK73GB2A223J	CHIP R 180 J 1/8W CHIP R 330 J 1/10W CHIP R 180 J 1/8W CHIP R 330 J 1/10W CHIP R 22K J 1/10W	
R386 R387 R401 R402 R403,404			RK73FB2B181J RK73GB2A331J RK73GB2A223J RK73FB2B821J RK73GB2A471J	CHIP R 180 J 1/8W CHIP R 330 J 1/10W CHIP R 22K J 1/10W CHIP R 820 J 1/8W CHIP R 470 J 1/10W	
R410,411 R412,413 R414 R415 R420-424			RK73GB2A123J RK73EB2E100J RK73EB2E4R7J RK73GB2A102J RK73EB2E432J	CHIP R 12K J 1/10W CHIP R 10 J 1/4W CHIP R 4.7 J 1/4W CHIP R 1.0K J 1/10W CHIP R 4.3K J 1/4W	
R425 R426 R427 R428 R429			RK73EB2E101J RK73EB2E100J RK73EB2E4R7J RK73EB2E100J RK73EB2E432J	CHIP R 100 J 1/4W CHIP R 10 J 1/4W CHIP R 4.7 J 1/4W CHIP R 10 J 1/4W CHIP R 4.3K J 1/4W	
R430 R431 R432 R433,434 R435			RK73EB2E101J RK73GB2A102J RK73GB2A104J RK73GB2A473J RK73GB2A101J	CHIP R 100 J 1/4W CHIP R 1.0K J 1/10W CHIP R 100K J 1/10W CHIP R 47K J 1/10W CHIP R 100 J 1/10W	
R440 R441 R442 R450 R451			RK73GB2A473J RK73GB2A101J RK73GB2A104J RK73GB2A133J RK73GB2A473J	CHIP R 47K J 1/10W CHIP R 100 J 1/10W CHIP R 100K J 1/10W CHIP R 13K J 1/10W CHIP R 47K J 1/10W	
R452 R453 R456 R469 R482,483			RK73GB2A331J RK73GB2A432J RK73GB2A100J RK73GB2A473J RK73GB2A103J	CHIP R 330 J 1/10W CHIP R 4.3K J 1/10W CHIP R 10 J 1/10W CHIP R 47K J 1/10W CHIP R 10K J 1/10W	
R490 R500,501 R502 R503 R505			RK73EB2E2R2J RK73GB2A103J RK73GB2A104J RK73GB2A102J RK73GB2A473J	CHIP R 2.2 J 1/4W CHIP R 10K J 1/10W CHIP R 100K J 1/10W CHIP R 1.0K J 1/10W CHIP R 47K J 1/10W	
R506 R507 R508,509 R511 R512-514			RK73GB2A104J RK73GB2A102J RK73GB2A472J RK73GB2A101J RK73GB2A473J	CHIP R 100K J 1/10W CHIP R 1.0K J 1/10W CHIP R 4.7K J 1/10W CHIP R 100 J 1/10W CHIP R 47K J 1/10W	
R515,516 R517,518 R519,520 R522,523 R525			RK73GB2A471J RK73GB2A104J RK73GB2A473J RK73GB2A473J RK73GB2A222J	CHIP R 470 J 1/10W CHIP R 100K J 1/10W CHIP R 47K J 1/10W CHIP R 47K J 1/10W CHIP R 2.2K J 1/10W	
R526 R527 R528 R529 R530			RK73EB2E333J RK73GB2A333J RK73GB2A223J RK73GB2A473J RK73GB2A223J	CHIP R 33K J 1/4W CHIP R 33K J 1/10W CHIP R 22K J 1/10W CHIP R 47K J 1/10W CHIP R 22K J 1/10W	K KK1M1

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
R530 R532 R533 R534 R540			RK73GB2A473J RK73GB2A473J RK73GB2A223J RK73GB2A000J RK73GB2A223J	CHIP R 47K J 1/10W CHIP R 47K J 1/10W CHIP R 22K J 1/10W CHIP R 0.0 J 1/10W CHIP R 22K J 1/10W	E2 E1E2
R540 R542 R543 R544 R600-602			RK73GB2A473J RK73GB2A104J RK73GB2A223J RK73GB2A222J RK73GB2A101J	CHIP R 47K J 1/10W CHIP R 100K J 1/10W CHIP R 22K J 1/10W CHIP R 2.2K J 1/10W CHIP R 100 J 1/10W	M1
R603,604 R605 R606,607 R650 R651			RK73GB2A223J RK73GB2A102J RK73GB2A223J RK73GB2A471J RK73GB2A104J	CHIP R 22K J 1/10W CHIP R 1.0K J 1/10W CHIP R 22K J 1/10W CHIP R 470 J 1/10W CHIP R 100K J 1/10W	
R653 R700 R701 R702 R704			RK73GB2A102J RK73GB2A000J RK73FB2B2R2J RK73GB2A000J RK73GB2A223J	CHIP R 1.0K J 1/10W CHIP R 0.0 J 1/10W CHIP R 2.2 J 1/8W CHIP R 0.0 J 1/10W CHIP R 22K J 1/10W	
R705 R706 R707 R708 R709,710			RK73GB2A101J RK73GB2A223J RK73GB2A104J RK73GB2A101J RK73GB2A102J	CHIP R 100 J 1/10W CHIP R 22K J 1/10W CHIP R 100K J 1/10W CHIP R 100 J 1/10W CHIP R 1.0K J 1/10W	
R711 R713 R714 R715 R716			RK73GB2A223J RK73GB2A101J RK73GB2A223J RK73GB2A102J RK73GB2A101J	CHIP R 22K J 1/10W CHIP R 100 J 1/10W CHIP R 22K J 1/10W CHIP R 1.0K J 1/10W CHIP R 100 J 1/10W	
R719 R720 R721,722 R723 R724			RK73GB2A101J RK73GB2A223J RK73GB2A101J RK73GB2A223J RK73GB2A101J	CHIP R 100 J 1/10W CHIP R 22K J 1/10W CHIP R 100 J 1/10W CHIP R 22K J 1/10W CHIP R 100 J 1/10W	
R725 R726 R727 R728 R729			RK73GB2A472J RK73GB2A101J RK73GB2A105J RK73GB2A153J RK73GB2A330J	CHIP R 4.7K J 1/10W CHIP R 100 J 1/10W CHIP R 1.0M J 1/10W CHIP R 15K J 1/10W CHIP R 33 J 1/10W	
R730 R731 R732 R733 R734-737			RK73GB2A153J RK73GB2A330J RK73GB2A153J RK73GB2A472J RK73GB2A101J	CHIP R 15K J 1/10W CHIP R 33 J 1/10W CHIP R 15K J 1/10W CHIP R 4.7K J 1/10W CHIP R 100 J 1/10W	
R738 R739 R741 R743 R744-746			RK73GB2A223J RK73GB2A101J RK73GB2A332J RK73GB2A332J RK73GB2A101J	CHIP R 22K J 1/10W CHIP R 100 J 1/10W CHIP R 3.3K J 1/10W CHIP R 3.3K J 1/10W CHIP R 100 J 1/10W	
R747 R750 R751 R757 R758-760			RK73GB2A223J RK73GB2A333J RK73GB2A515J RK73GH2A104D RK73GB2A473J	CHIP R 22K J 1/10W CHIP R 33K J 1/10W CHIP R 5.1M J 1/10W CHIP R 100K D 1/10W CHIP R 47K J 1/10W	

△Indicates safety critical components.

E1 : KDC-W7541U E2 : KDC-W7541UY (Europe)
K : KDC-X792 K1 : KDC-MP738U (North America)

48 M : KDC-X8009U (Other Areas)

PARTS LIST

ELECTRIC UNIT (X34-579x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination	Ref. No.	Add	New	Parts No.	Description	Destination
R761			RK73GB2A101J	CHIP R 100 J 1/10W		IC300			STMP52151STR	MOS-IC	
R763			RK73GB2A223J	CHIP R 22K J 1/10W		IC310		*	MMA6270QR2	ANALOGUE IC	K
R767			RK73GB2A223J	CHIP R 22K J 1/10W		IC340			E-TDA7478AD	ANALOGUE IC	KE1E2
R769			RK73GB2A473J	CHIP R 47K J 1/10W		IC350			NJM4565V-ZB	ANALOGUE IC	KE1E2
R901			RK73GB2A000J	CHIP R 0.0 J 1/10W		IC350			NJM4565V-ZB	ANALOGUE IC	M1
R903			RK73GB2A100J	CHIP R 10 J 1/10W		IC450			TB2923HQ	ANALOGUE IC	
R908			RK73GB2A100J	CHIP R 10 J 1/10W		IC480			E-TDA7415CB	ANALOGUE IC	
R963			RK73GB2A102J	CHIP R 1.0K J 1/10W		IC500		*	30624MGPB77GP	MICROCONTROLLER IC	
R990			RK73GB2A1R5J	CHIP R 1.5 J 1/10W		IC510			XC6120N362N1	MOS-IC	
R999			RK73GB2A2R2J	CHIP R 2.2 J 1/10W		IC520			BR24L04FV-W	ROM IC	
W350			R92-2053-05	CHIP R 0 OHM J 1/8W	K1	IC530			74HC2G02DP	MOS-IC	
W401			R92-2053-05	CHIP R 0 OHM J 1/8W		IC600			74AHCT08PW	MOS-IC	
S650			S74-0809-05	MICRO SWITCH		IC602			74LVC08APW	MOS-IC	
D1			S2V60-5009F46	DIODE		IC700		*	92CD28AFG6VW1	MICROCONTROLLER IC	
D20		*	D1FJ4	DIODE		IC751			BR24L04FV-W	ROM IC	
D21			UDZW5.6 (B)	ZENER DIODE		IC752			341S2094	MICROPROCESSOR IC	
D30			UDZW8.2 (B)	ZENER DIODE		Q10			KTA1046-P	TRANSISTOR	
D50			UDZW12 (B)	ZENER DIODE		Q11			DTA124EUA	DIGITAL TRANSISTOR	
D61-63		*	D1FJ4	DIODE		Q12			DTC124EUA	DIGITAL TRANSISTOR	
D70		*	UDZW15 (B)	ZENER DIODE		Q13			DTA124EUA	DIGITAL TRANSISTOR	
D80			EC31QS04AG	DIODE		Q14			DTC124EUA	DIGITAL TRANSISTOR	
D121,122			UDZW6.8 (B)	ZENER DIODE		Q20			KTA1046-P	TRANSISTOR	
D123			UDZW6.2 (B)	ZENER DIODE		Q21			2SC4081	TRANSISTOR	
D140			DAP202U	DIODE		Q22			2SA1577	TRANSISTOR	
D141,142			1SR154-400	DIODE		Q23			DTC124EUA	DIGITAL TRANSISTOR	
D150,151			1SR154-400	DIODE		Q30			KTA1046-P	TRANSISTOR	
D170			UDZW4.7 (B)	ZENER DIODE		Q31			2SC4081	TRANSISTOR	
D190			UDZW6.2 (B)	ZENER DIODE	KK1E2	Q40			2SB1689	TRANSISTOR	
D190			UDZW6.2 (B)	ZENER DIODE	M1	Q41			DTC114YUA	DIGITAL TRANSISTOR	
D190-193			UDZW6.2 (B)	ZENER DIODE	E1	Q45			2SB1689	TRANSISTOR	
D200,201			AVRL1613R3FTA	VARIATOR		Q46			DTC114YUA	DIGITAL TRANSISTOR	
D350			1SR154-400	DIODE	KE1E2	Q50			2SB1184	TRANSISTOR	
D350			1SR154-400	DIODE	M1	Q51			2SC4081	TRANSISTOR	
D351			DAP202U	DIODE	KE1E2	Q52			DTA124EUA	DIGITAL TRANSISTOR	
D351			DAP202U	DIODE	M1	Q53			DTC124EUA	DIGITAL TRANSISTOR	
D352			UDZW12 (B)	ZENER DIODE	KE1E2	Q70			KTA1046-P	TRANSISTOR	
D352			UDZW12 (B)	ZENER DIODE	M1	Q71			2SC4081	TRANSISTOR	
D353			UDZW5.6 (B)	ZENER DIODE	KE1E2	Q80			DTC144EUA	DIGITAL TRANSISTOR	
D353			UDZW5.6 (B)	ZENER DIODE		Q120			2SC4081	TRANSISTOR	
D353			UDZW5.6 (B)	ZENER DIODE	M1	Q122,123			2SC4081	TRANSISTOR	
D370			DAP202U	DIODE		Q140			DTC114YUA	DIGITAL TRANSISTOR	
D373			DAP202U	DIODE		Q141			DTA114EUA	DIGITAL TRANSISTOR	
D410-412			UDZW6.8 (B)	ZENER DIODE		Q142			2SA1576A	TRANSISTOR	
D420-422			UDZW6.8 (B)	ZENER DIODE		Q143			2SB1188 (Q,R)	TRANSISTOR	
D423			UDZW6.2 (B)	ZENER DIODE		Q150			2SB1188 (Q,R)	TRANSISTOR	KK1M1
D428			UDZW6.2 (B)	ZENER DIODE		Q151			DTC114YUA	DIGITAL TRANSISTOR	KK1M1
D451			DAP202U	DIODE		Q180			DTC144EUA	DIGITAL TRANSISTOR	
D454			1SR154-400	DIODE		Q350			2SB1443	TRANSISTOR	KE1E2
D458			1SR154-400	DIODE		Q350			2SB1443	TRANSISTOR	M1
D484-486			DAP202U	DIODE		Q351,352			2SC4081	TRANSISTOR	KE1E2
IC10			M5237ML-CF0J	ANALOGUE IC		Q351,352			2SC4081	TRANSISTOR	M1
IC20			R1114N331B-TR	ANALOGUE IC (3.3V LF)		Q353			DTA124EUA	DIGITAL TRANSISTOR	KE1E2
IC60		*	LT3489	ANALOGUE IC		Q353			DTA124EUA	DIGITAL TRANSISTOR	M1
IC80			LT3684EMSE	ANALOGUE IC		Q354			DTC124EUA	DIGITAL TRANSISTOR	KE1E2
						Q354			DTC124EUA	DIGITAL TRANSISTOR	M1

E1 : KDC-W7541U E2 : KDC-W7541UY (Europe)
K : KDC-X792 K1 : KDC-MP738U (North America)
M : KDC-X8009U (Other Areas)

△ Indicates safety critical components.

PARTS LIST

ELECTRIC UNIT (X34-579x-xx)

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
Q370 Q371 Q372-376 Q377 Q400			DTC143TUA DTA124EUA DTC143TUA DTA124EUA 2SA1577	DIGITAL TRANSISTOR DIGITAL TRANSISTOR DIGITAL TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR	
Q401 Q500 Q501 Q650 Q702			DTC124EUA 2SB1260 2SC2713-F DTA114YUA DTC114YUA	DIGITAL TRANSISTOR TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR DIGITAL TRANSISTOR	
Q703 Q704,705 TH450			2SA1577 DTC114YUA PRF18BE471QS2	TRANSISTOR DIGITAL TRANSISTOR POSITIVE RESISTOR	
A400 A400			X86-4030-11 X86-4032-70	FRONT-END UNIT FRONT-END UNIT	KK1M1 E1E2
CD MECHANISM ASSY (X92-6130-00) (DXM-6E20W)					
1 2	2B 1B		A10-5328-31 A10-5329-11	CHASSIS CHASSIS	
5 8 10 11 12	2B 2A 2A 2A 3A		D10-4910-13 D10-4911-23 D10-4906-33 D10-4907-33 D10-4908-03	ARM ASSY LEVER ASSY ARM ARM ARM	
13 14 15 16 17	3A 3B 2A 3B 2B		D10-4909-03 D10-4915-03 D10-4916-23 D10-4914-22 D10-4588-13	ARM ARM SLIDER SLIDER SLIDER	
18 19 22 23 24	2B 2B 2A 2B 3B		D10-4917-04 D10-4596-24 D13-2151-04 D13-2152-04 D13-2153-04	ARM ARM GEAR GEAR GEAR	
25 26 27 28 29	3B 3B 2B 3B 2B		D13-2154-04 D13-2155-04 D13-2156-14 D13-2157-04 D13-2158-04	GEAR WORM GEAR GEAR GEAR	
30 31 32 33 35	2B 3B 1B 2A 2B		D13-2168-04 D13-2171-04 D13-2400-23 D14-0759-04 D21-2382-04	GEAR GEAR RACK (GEAR) ROLLER SHAFT	
36 37	1A 1B		D23-0954-04 D39-0271-05	RETAINER DAMPER	
38 39 40 41 42	2B 2A 2A 1B 2A		G01-3072-04 G01-3073-04 G01-3074-04 G01-4615-04 G01-3076-04	EXTENSION SPRING TORSION COIL SPRING EXTENSION SPRING EXTENSION SPRING EXTENSION SPRING	
43 44 45	1B 2B 2B		G01-3077-14 G02-1399-14 G02-1547-14	EXTENSION SPRING FLAT SPRING FLAT SPRING	

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
51 52 53 55 56	1A 3B 1B 1A 1B		J22-0473-21 J22-0474-12 J22-0519-13 J90-1138-41 J90-1023-03	MOUNTING HARDWARE MOUNTING HARDWARE MOUNTING HARDWARE GUIDE GUIDE	
DFPC1	3A		J86-0039-05	FPC (LEAD FREE)	
A B C E F	2B 1B 2B 2B 1A		N09-4460-15 N09-6317-05 N09-6004-15 N09-6007-15 N09-6051-15	TAPTITE SCREW (PT 2X8) TAPTITE SCREW (PT 1.7X6) MACHINE SCREW (M1.7X2.5) MACHINE SCREW (PAN M2X2) TAPTITE SCREW (BIND P 2X5)	
G H J K	2A 1B 1B 3B		N19-2163-04 N39-2020-48 N09-6108-15 N09-6155-15	FLAT WASHER (1.6X6X0.25) PAN HEAD MACHINE SCREW TAPTITE SCREW (M2X3.5) SEMS (TAPTITE SCREW) (PT 2X6)	
DM1 DM2	3B 2B		T42-1066-14 T42-1067-14	DC MOTOR (SPINDLE) DC MOTOR (LOADING/SLED)	
DPU1	2B		X93-2130-01	OPTICAL PICKUP ASSY	

E1 : KDC-W7541U E2 : KDC-W7541UY (Europe)
K : KDC-X792 K1 : KDC-MP738U (North America)
50 M : KDC-X8009U (Other Areas)

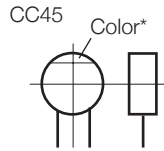
△Indicates safety critical components.

PARTS LIST

CAPACITORS

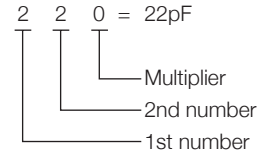
CC 45 TH 1H 220 J
1 2 3 4 5 6

- 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

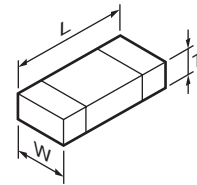
• Voltage rating

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	3150	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

• 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		

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

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

SPECIFICATIONS (KDC-MP738U/X792)

SPECIFICATIONS (KDC-W7541U/W7541UY)

FM tuner section

Frequency range (50 kHz space).....87.5 MHz – 108.0 MHz
Usable sensitivity (S/N = 26dB)..... 0.7 μ V/75 Ω
Quieting Sensitivity (S/N = 46dB)..... 1.6 μ V/75 Ω
Frequency response (\pm 3.0 dB) 30 Hz – 15 kHz
Signal to Noise ratio (MONO)65 dB
Selectivity (DIN) (\pm 400 kHz)..... \geq 80 dB
Stereo separation (1 kHz).....35 dB

MW tuner section

Frequency range (9 kHz space)..... 531 kHz – 1611 kHz
Usable sensitivity (S/N = 20dB)..... 25 μ V

LW tuner section

Frequency range 153 kHz – 281 kHz
Usable sensitivity (S/N = 20dB)..... 45 μ V

CD player section

Laser diode.....GaAIAs
Digital filter (D/A)..... 8 Times Over Sampling
D/A Converter..... 24 Bit
Spindle speed500 – 200 rpm (CLV)
Wow & FlutterBelow Measurable Limit
Frequency response (\pm 1 dB) 10 Hz – 20 kHz
Total harmonic distortion (1 kHz).....0.008 %
Signal to Noise ratio (1 kHz) 110 dB
Dynamic range93 dB
MP3 decode..... Compliant with MPEG-1/2 Audio Layer-3
WMA decode..... Compliant with Windows Media Audio
AAC decodeAAC-LC “.m4a” files

USB Interface

USB StandardUSB1.1/ 2.0
Maximum Supply current500 mA
File System FAT16/ 32
MP3 decode..... Compliant with MPEG-1/2 Audio Layer-3
WMA decode..... Compliant with Windows Media Audio
AAC decodeAAC-LC “.m4a” files

Audio section

Maximum output power 50 W x 4
Output power (DIN 45324, +B=14.4V) 30 W x 4
Speaker Impedance4 – 8 Ω
Tone action
Bass 100 Hz \pm 8 dB
Middle1 kHz \pm 8 dB
Treble10 kHz \pm 8 dB
Preout level / Load (CD) 4000 mV/10 k Ω
Preout impedance \leq 600 Ω

Auxiliary input

Frequency response (\pm 1 dB) 20 Hz – 20 kHz
Input Maximum Voltage..... 1200 mV
Input Impedance 100 k Ω

General

Operating voltage (11 – 16V allowable) 14.4 V
Current consumption..... 10 A
Installation Size (W x H x D)182 x 53 x 155 mm
Weight1.40 kg

SPECIFICATIONS (KDC-X8009U)

FM tuner section

Frequency range (50 kHz space).....87.5 MHz – 108.0 MHz
Frequency range (200 kHz space).....87.9 MHz – 107.9 MHz
Usable sensitivity (S/N = 30dB).....9.3dBf (0.8 μ V /75 Ω)
Quieting Sensitivity (S/N = 50dB).....15.2dBf (1.6 μ V /75 Ω)
Frequency response (\pm 3.0 dB)30 Hz – 15 kHz
Signal to Noise ratio (MONO)70 dB
Selectivity (\pm 400 kHz) \geq 80 dB
Stereo separation (1 kHz)40 dB

AM tuner section

Frequency range (9 kHz space).....531 kHz – 1611 kHz
Frequency range (10 kHz space).....530 kHz – 1700 kHz
Usable sensitivity (S/N = 20dB).....28 dB μ (25 μ V)

CD player section

Laser diode.....GaAlAs
Digital filter (D/A).....8 Times Over Sampling
D/A Converter.....24 Bit
Spindle speed500 – 200 rpm (CLV)
Wow & FlutterBelow Measurable Limit
Frequency response (\pm 1 dB)10 Hz – 20 kHz
Total harmonic distortion (1 kHz).....0.008 %
Signal to Noise ratio (1 kHz)110 dB
Dynamic range93 dB
MP3 decode.....Compliant with MPEG-1/2 Audio Layer-3
WMA decode.....Compliant with Windows Media Audio
AAC decodeAAC-LC “.m4a” files

USB Interface

USB StandardUSB1.1/ 2.0
Maximum Supply current500 mA
File SystemFAT16/ 32
MP3 decode.....Compliant with MPEG-1/2 Audio Layer-3
WMA decode.....Compliant with Windows Media Audio
AAC decodeAAC-LC “.m4a” files

Audio section

Maximum output power50 W x 4
Full Bandwidth Power (at less than 1% THD)22 W x 4
Speaker Impedance4 – 8 Ω
Tone action
Bass100 Hz \pm 8 dB
Middle1 kHz \pm 8 dB
Treble10 kHz \pm 8 dB
Preout level / Load (CD)4000 mV/10 k Ω
Preout impedance \leq 600 Ω

Auxiliary input

Frequency response (\pm 1 dB)20 Hz – 20 kHz
Input Maximum Voltage.....1200 mV
Input Impedance100 k Ω

General

Operating voltage (11 – 16V allowable)14.4 V
Current consumption.....10 A
Installation Size (W x H x D)182 x 53 x 155 mm
Weight1.4 kg

DANGER:

Please do not look at the laser beam directly during repair or operation check.

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