

CD RECEIVER

# KDC-MP738U/W7541U /W7541UY/X792/X8009U

# KENWOOD

Kenwood Corporation

## SERVICE MANUAL

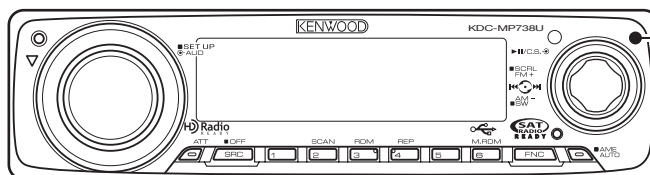
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B53-0628-00 (N) 429

### 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

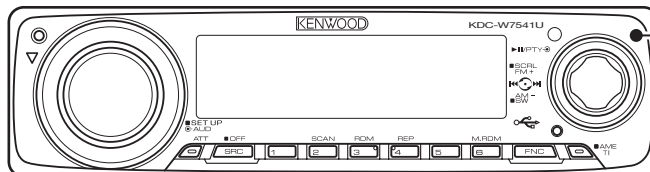
### CD MECHANISM EXTENSIONCORD (30P) : E39-1014-05

KDC-MP738U  
(K type)



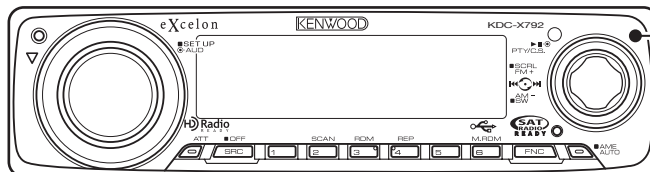
Panel assy  
(A64-4425-02)

KDC-W7541U  
KDC-W7541UY  
(E type)



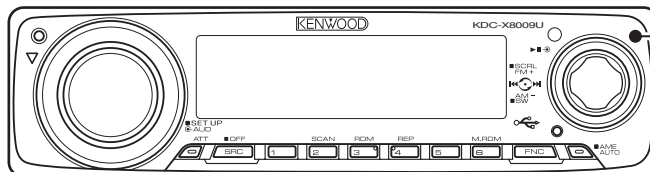
Panel assy  
(A64-4428-02)

KDC-X792  
(K type)



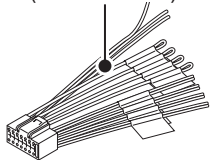
Panel assy  
(A64-4424-02)

KDC-X8009U  
(M type)

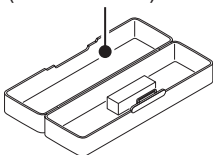


Panel assy  
(A64-4431-02)

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



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



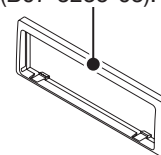
Remote controller assy  
(A70-2085-05)



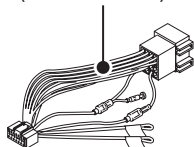
SIZE AA BATTERY  
(Not supplied)



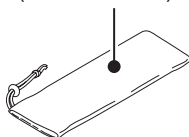
Escutcheon  
(B07-3238-03): KDC-MP738U  
(B07-3235-03): K,E,M type



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



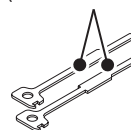
Carrying case  
(W01-1664-05): KDC-X792  
(W01-1710-05): K,E type



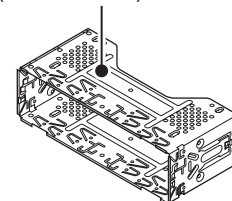
Compact disc  
(W01-1723-05)



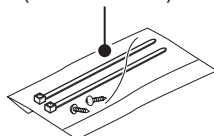
Lever  
(D10-7012-04) x2



Mounting hardware assy  
(J22-0011-03)



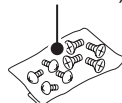
Screw set (KDC-X792)  
(N99-1790-05)



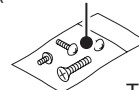
Cover (KDC-X792)  
(F19-1475-04)



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



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

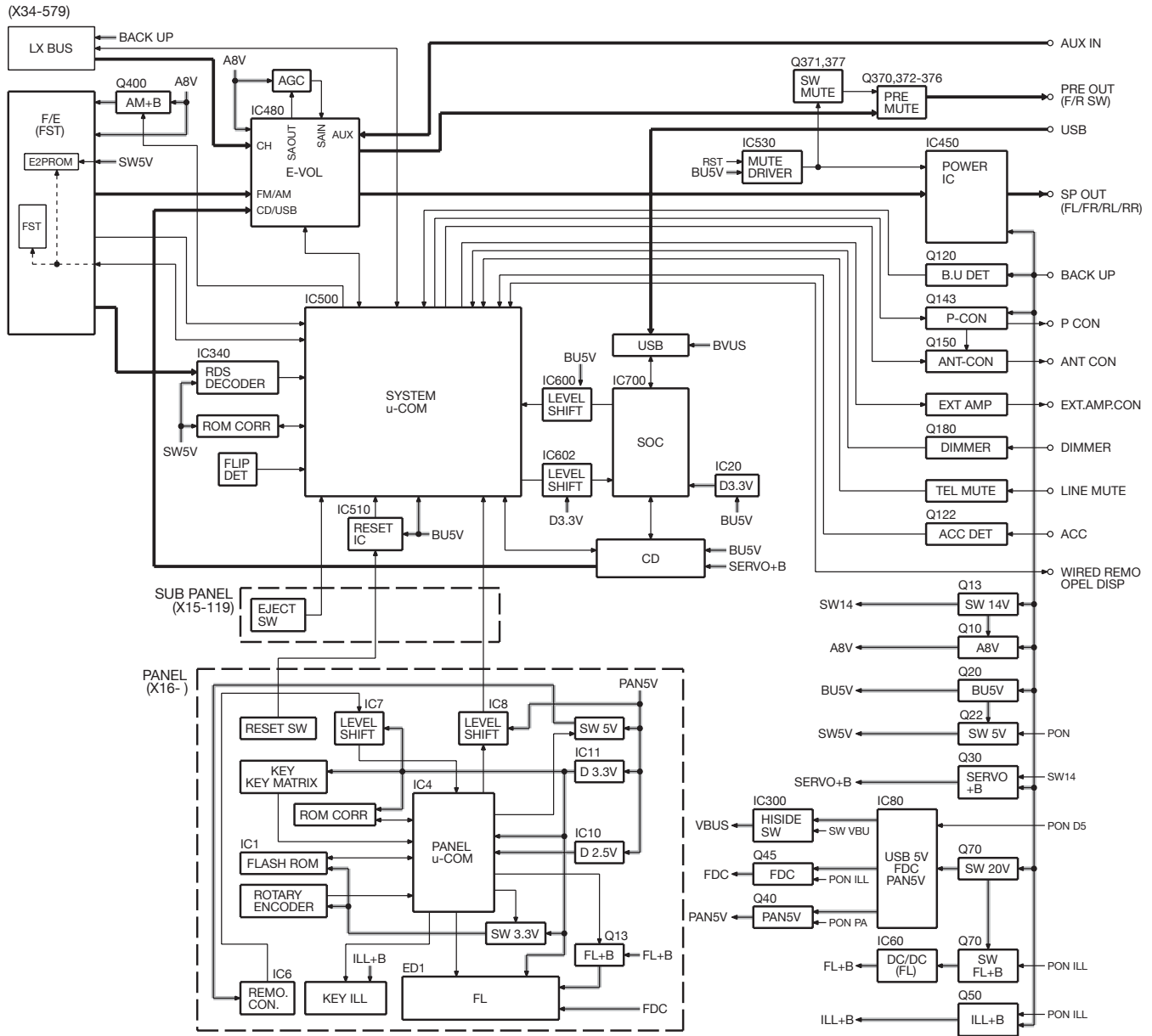


This product uses Lead Free solder.

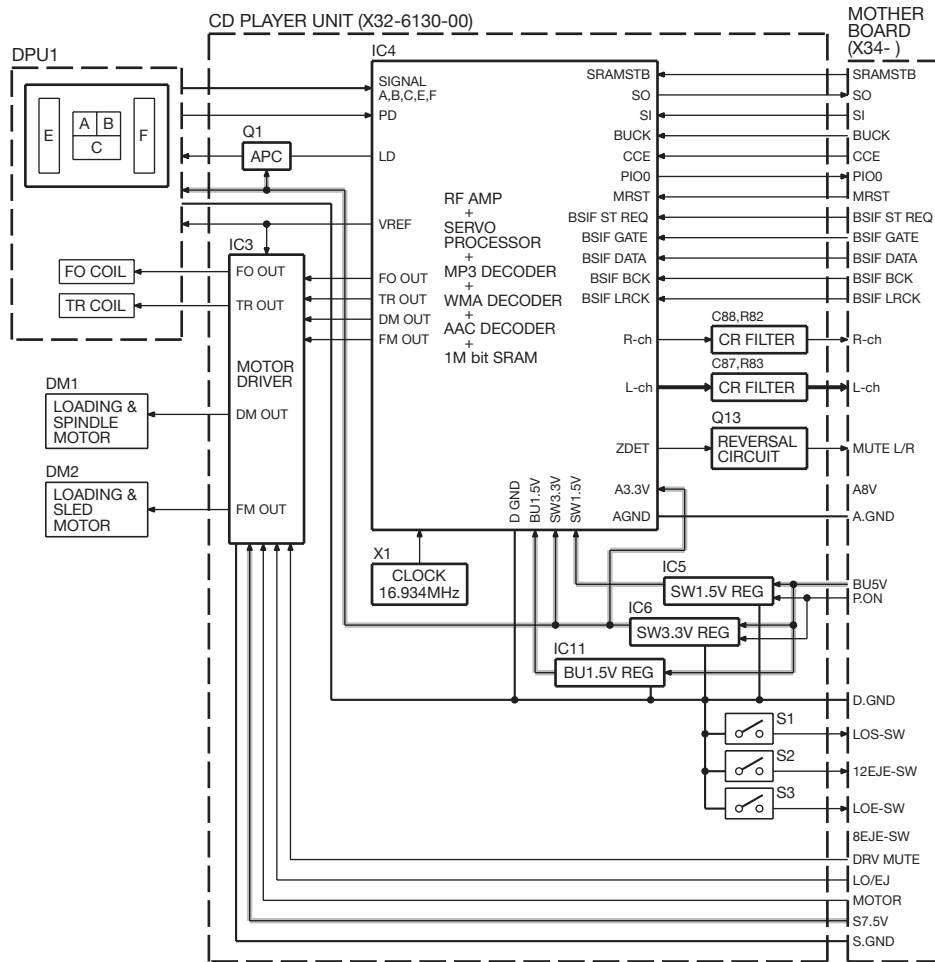
This product complies with the **RoHS** directive for the European market.



# BLOCK DIAGRAM



# 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 $\mu$ -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 $\mu$ -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 ( $\mu$ -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 ( $\mu$ -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 ( $\mu$ -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 $\mu$ -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 $\mu$ -com $\rightarrow$ SOC data		400k
4	S_SOC_DATA	I	SOC $\rightarrow$ System $\mu$ -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 $\mu$ -com $\rightarrow$ Panel data		UART MAX500k
30	PAN_PAN_DATA	I	Panel $\rightarrow$ System $\mu$ -com data		UART MAX500k
31	PAN_SYS_REQ	O	System $\mu$ -com $\rightarrow$ Panel communication request		
32	PAN_PAN_REQ	I	Panel $\rightarrow$ System $\mu$ -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 dismantled/opened.
37	NC	O	Not used		Output L fixed
38	PON_PANEL	I/O	Power supply for panel $\mu$ -com Required for panel authentication		H: ON, Hi-Z: OFF Turn OFF when panel is dismantled/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 $\mu$ -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 $\mu$ -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 $\mu$ -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 $\mu$ -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 $\mu$ -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 $\mu$ -com(Momentary power down detection / Recovery to low power consumption mode)	H: Normal L: Stop SOC
3	REQ_S	I	REQ signal from system $\mu$ -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 $\mu$ -com	L: Mute request, H: While in normal
67	REQ_M	O	REQ signal to system $\mu$ -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 $\mu$ -com (Sending)	
85	DATA_S	I	Serial I/F with system $\mu$ -com (Receiving)	
86	CLK	O	Serial I/F with system $\mu$ -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 $\mu$ -com communication request input	H: During data communication
21	SC_CON	I	System $\mu$ -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 $\mu$ -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

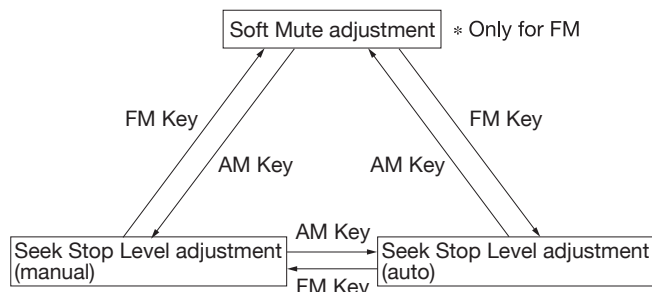
- Source is STANDBY.
- Display lights are all turned on.
- The volume is at 30 (-10dB).
- LOUD is OFF.
- CRSC is off regardless of the availability of switching function.
- SYSTEM Q is NATURAL (=FLAT).
- BEEP should always function when the key is pressed briefly.
- AUX is ON
- GUIDE (NAVI) of MENU is 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.

- 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. 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.
  - c. 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

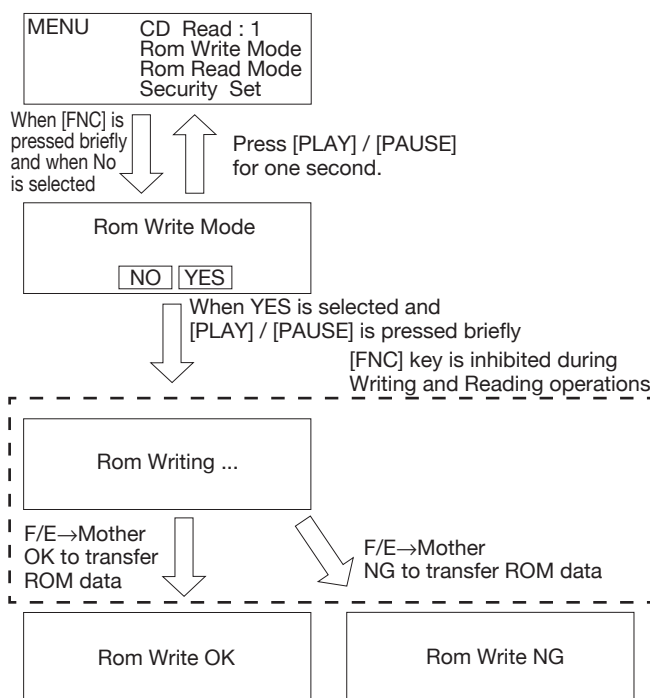
This function is used to transfer E2PROM data (installer memory) inside of the front-end to mother E2PROM (X34: IC520) of the backup, and to transfer the data back from the mother E2PROM (X34: IC520) to the E2PROM of the front-end.

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

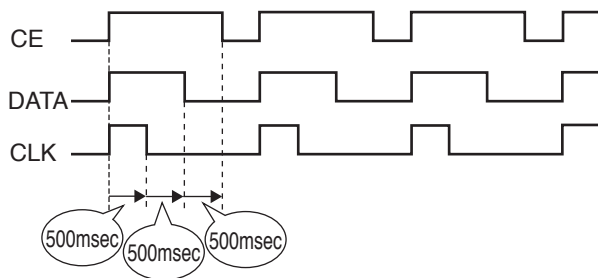
- If the [AUTO] or [TI] keys are pressed briefly while in a source other than STANDBY, 2ZONE is switched between ON / OFF.

## ● 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 $\mu$ -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.

# TEST MODE

Table 1-Version & Service information display mode

[AM] key  ↑	[1] key	Key pressed briefly: Version is displayed (Display) C0713WK_SYS1.23 (Display) STYPE: xx_PAN1.11 (Display) PTYPE: x_MEM3.21a *1 STYPE indicates system μ-com destination, and PTYPE indicates panel μ-com destination, and show real-time condition of the destination terminal *2 The “a” at the end of Version code of MEM indicates 64 Color Flash, the “b” does 64 Color Mask, and the “c” does Mono.
	[2] key	Key pressed briefly: Serial No. is displayed (8 digits) (Display) SNO_XXXXXXXX
	[3] key	Key pressed briefly: Power ON time is displayed. Press and hold: To clear Power ON time (Press and hold for 2 seconds while the Power ON time is displayed.) (Display) PonTim_0Hxx_ (00~50 is displayed for “xx”. When less than 1 hour, display by increment of 10 minutes.) xxxxxx (00001-10922 is displayed for “xxxxxx”). MAX 10922 (hours)
	[4] key	Key pressed briefly: CD operation time is displayed. Press and hold: To clear CD operation time (Press and hold for 2 seconds while the CD operation time is displayed.) (Display) CDTim_0Hxx_ (00~50 is displayed for “xx”. When less than 1 hour, display by increment of 10 minutes.) xxxxxx (00001-10922 is displayed for “xxxxxx”). MAX 10922 (hours)
	[5] key	Key pressed briefly: Number of CD EJECT times is displayed. Press and hold: To clear CD EJECT times (Press and hold for 2 seconds while the CD EJECT time is displayed.) (Display) EjeCnt_XXXXX MAX 65535 (times)
	[6] key	Key pressed briefly: Number of times panel is opened/closed is displayed. Press and hold: To clear PANEL open/close count (Press and hold for 2 seconds while the PANEL open/close time is displayed.) (Display) PnCnT_XXXXX MAX 65535 (times)
[▶ ] key	Key pressed briefly: Invalid Press and hold: To clear the service information that is being displayed. (Press and hold for 2 seconds while each service information is displayed.)	
[FNC] key	Key pressed briefly: Version & Service information display mode OFF	

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 Key pressed briefly: CD information display mode OFF Press and hold: To clear entire CD information (Press and hold for 2 seconds)

## ● Initializing AUDIO-related setting value

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

## ● Flash ROM check (Flash ROM installation panel)

- 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”.
- 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↔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↔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↔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 [▶|] key for 1 second or longer to enter the security registration mode.

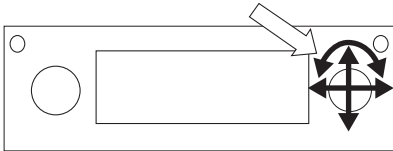
3. Enter codes with the operation knob in the right side or with the [FM] / [AM] and [◀◀] / [▶▶] keys.

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

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

[▶▶] key : cursor to right

[◀◀] key : cursor to left



4. After inputting the code, press [▶|] 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 [▶|] 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 [▶|] 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 [▶|] key.  
Press [2] key of the remote controller 3 times (Input for “C”) and press [▶|] key.  
Press [2] key of the remote controller once (Input for “A”) and press [▶|] key.  
Press [7] key of the remote controller 2 times (Input for “R”) and press [▶|] 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  $\mu$ -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 $\mu$ -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).

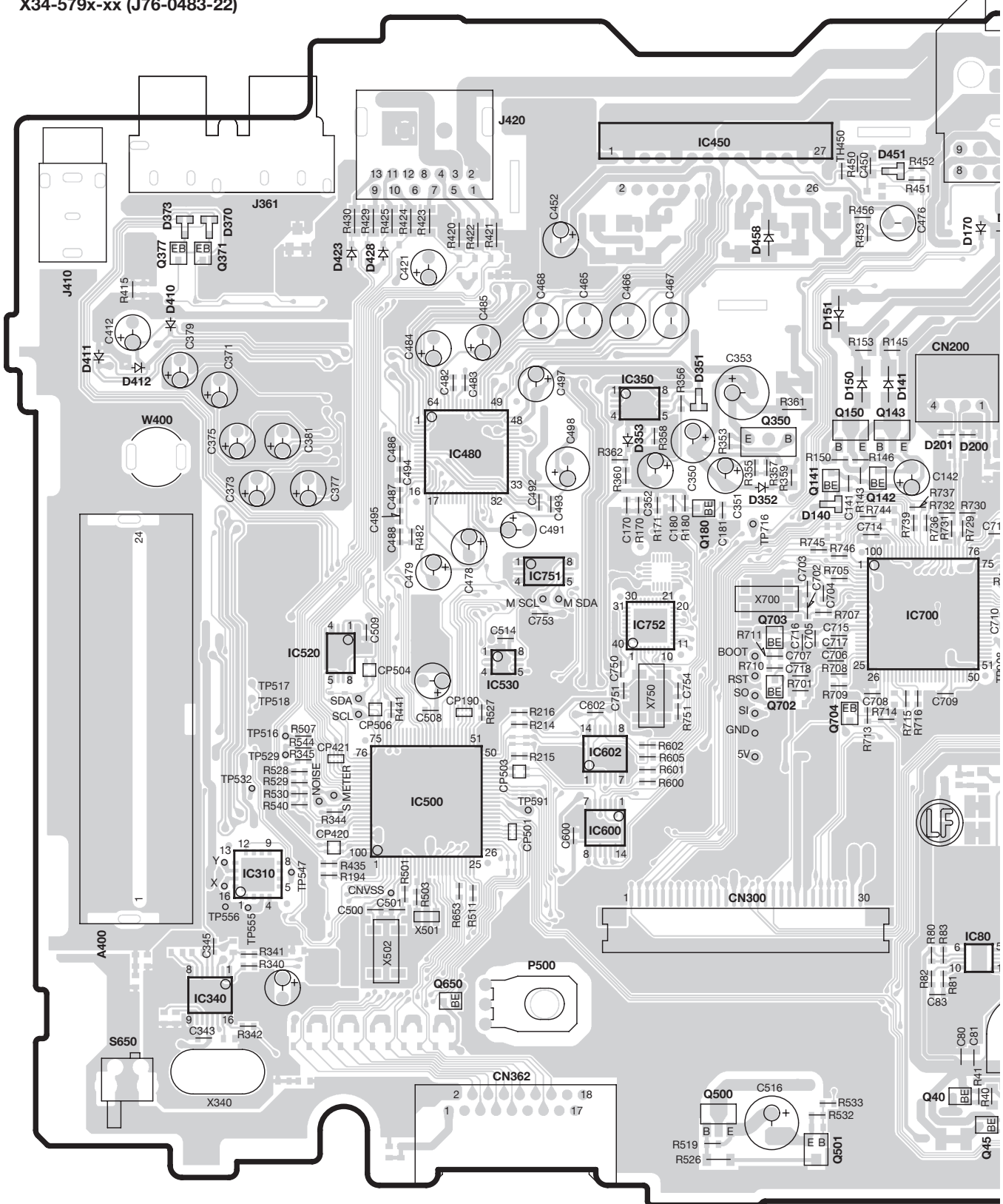






# PC BOARD (COMPONENT SIDE VIEW)

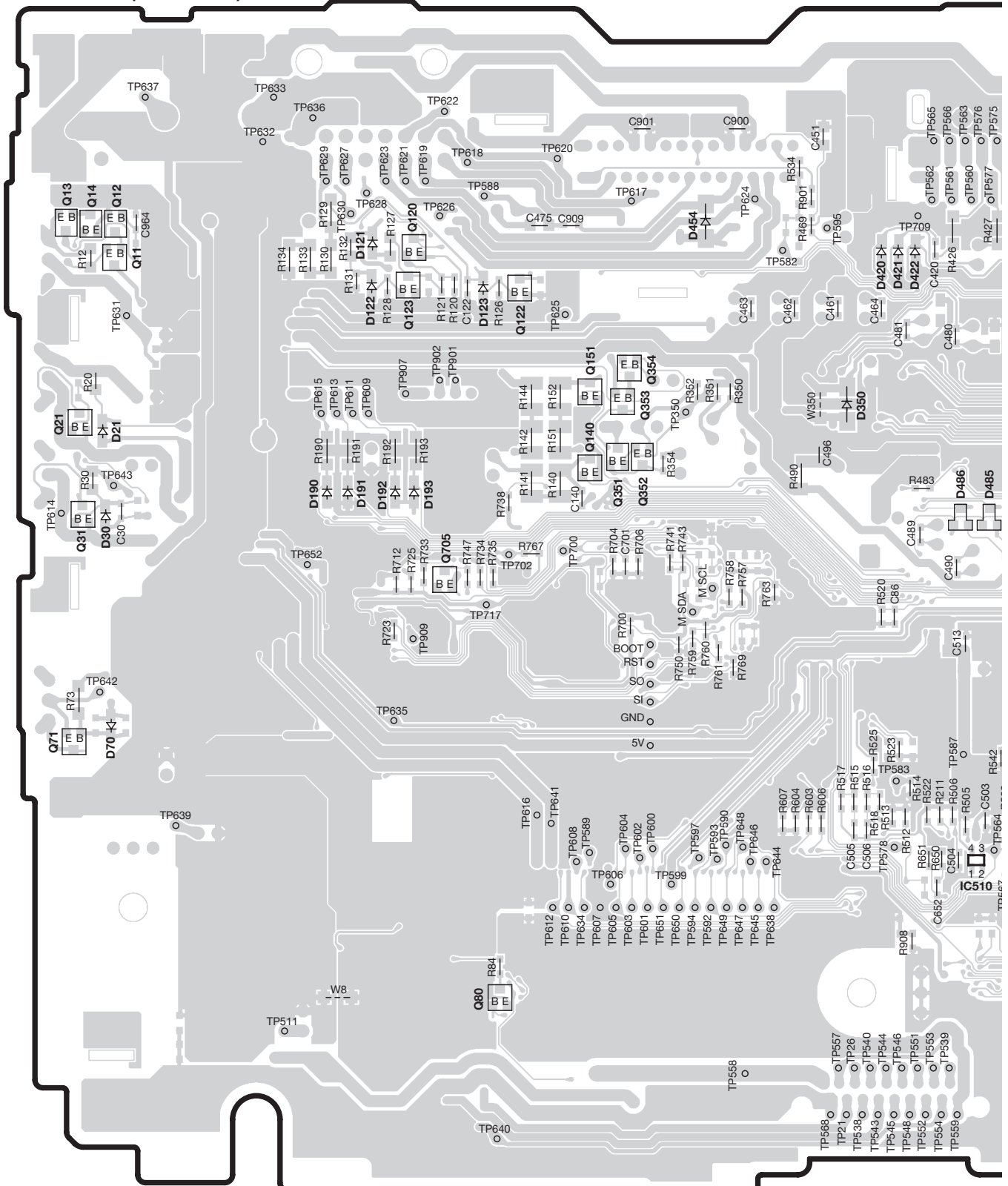
ELECTRIC UNIT  
X34-579x-xx (J76-0483-22)





# PC BOARD (FOIL SIDE VIEW)

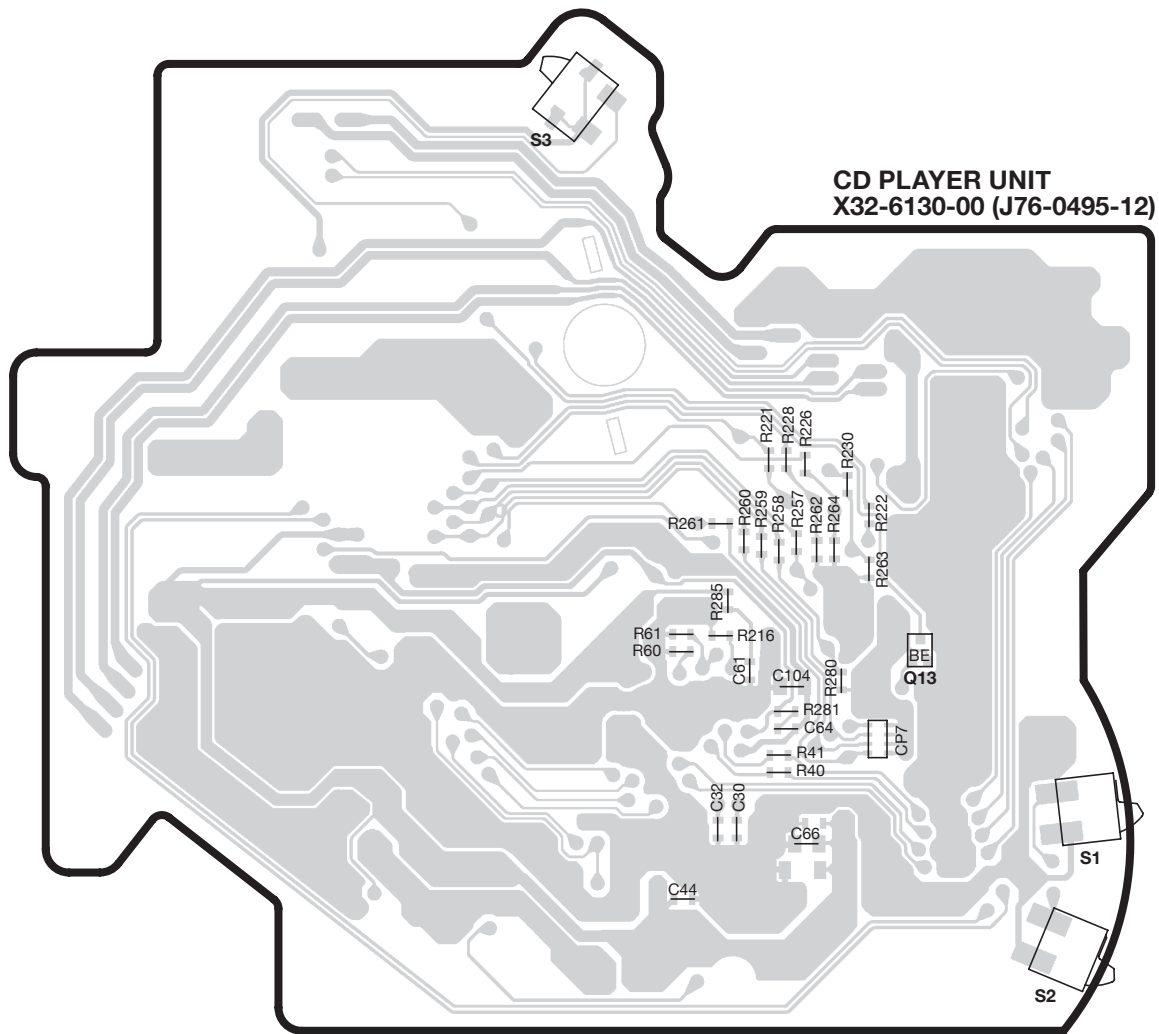
ELECTRIC UNIT  
X34-579x-xx (J76-0483-22)





KDC-MP738U/W7541U  
/W7541UY/X792/X8009U

## PC BOARD (COMPONENT SIDE VIEW)



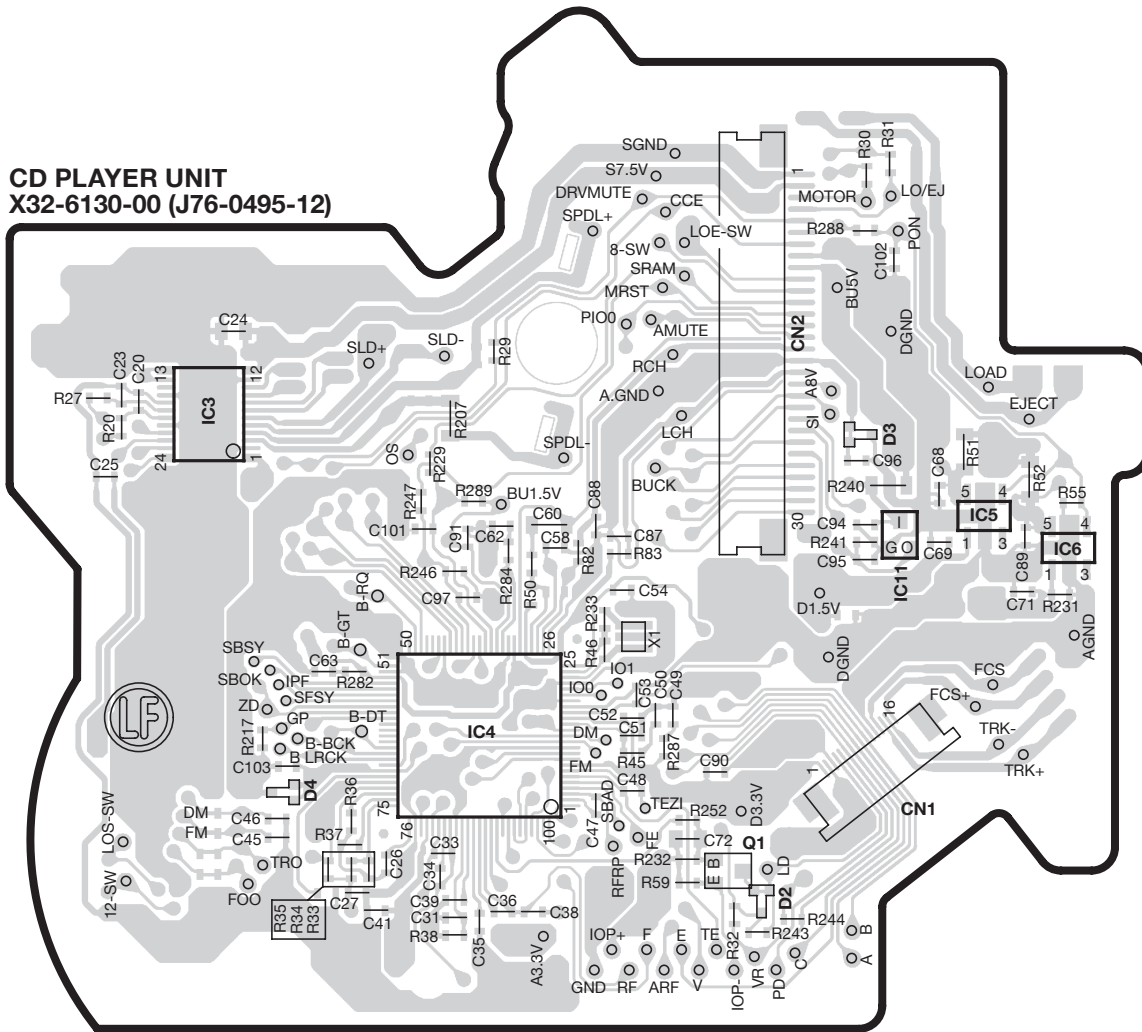
### X32-6130-00

Ref. No.	Address
Q13	4AC

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



# PC BOARD (FOIL SIDE VIEW)



**CD PLAYER UNIT**  
**X32-6130-00 (J76-0495-12)**

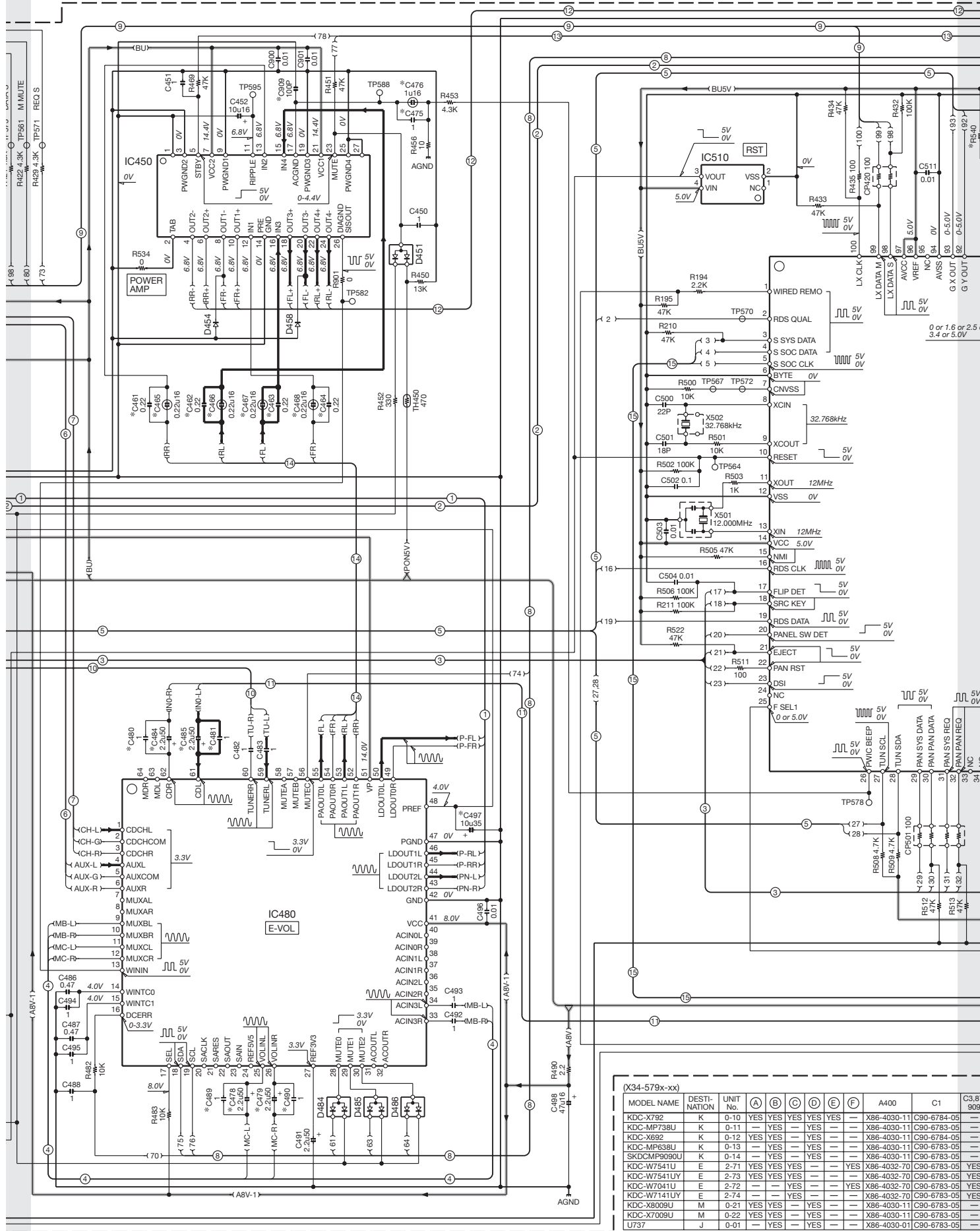
**X32-6130-00**

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.





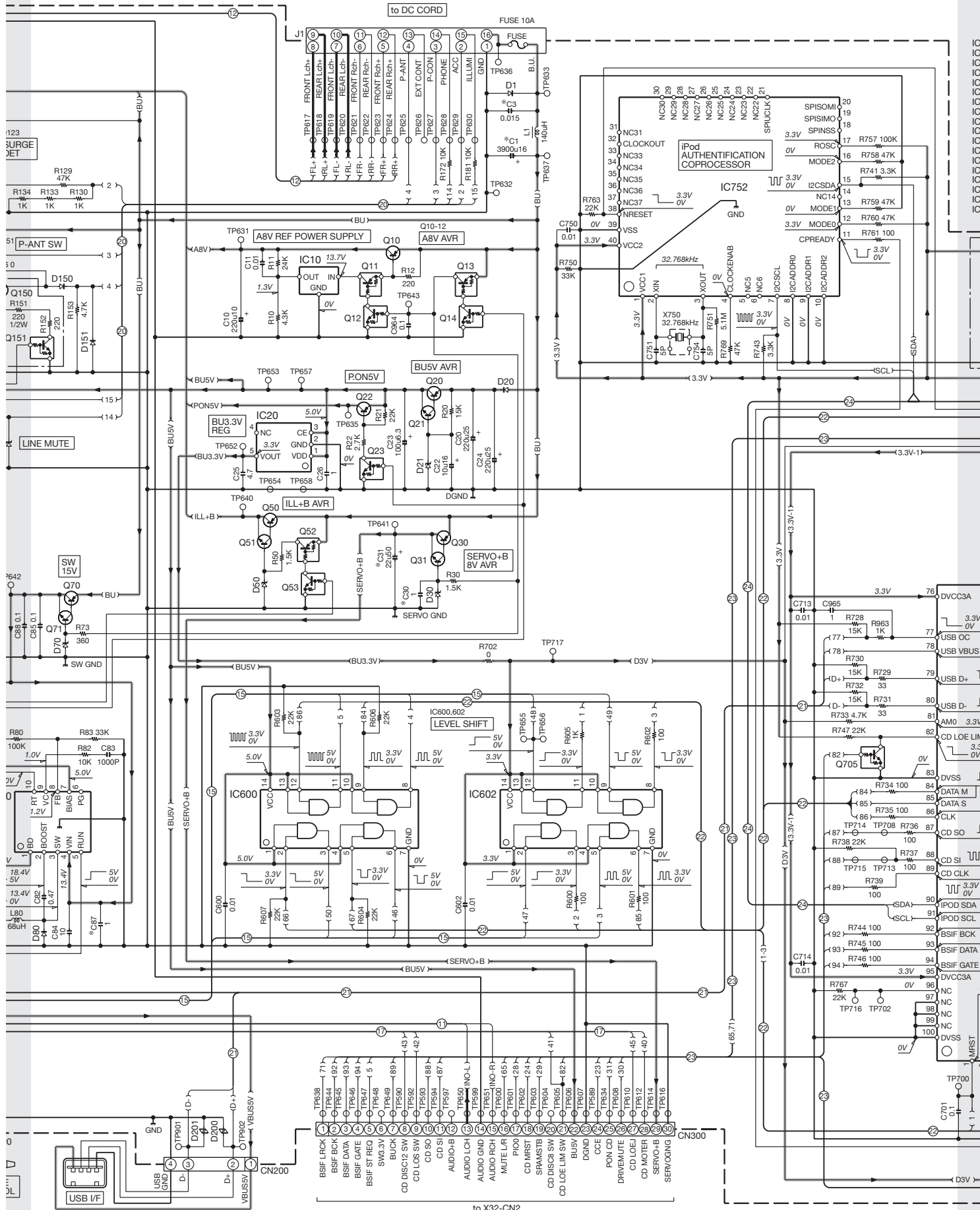


(X34-579x-xx)

MODEL NAME	DESTINATION	UNIT No.	(A)	(B)	(C)	(D)	(E)	(F)	A400	C1	C3,87,909
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	—	—	YES	X86-4032-70	C90-6783-05	YES
KDC-W7141UY	E	2-72	—	—	YES	—	—	YES	X86-4032-70	C90-6783-05	YES
KDC-X8009U	M	0-21	YES	YES	—	—	—	—	X86-4030-11	C90-6783-05	—
KDC-X7009U	M	0-22	YES	YES	—	—	—	—	X86-4030-11	C90-6783-05	—
U737	J	0-01	—	YES	—	YES	—	—	X86-4030-01	C90-6783-05	—

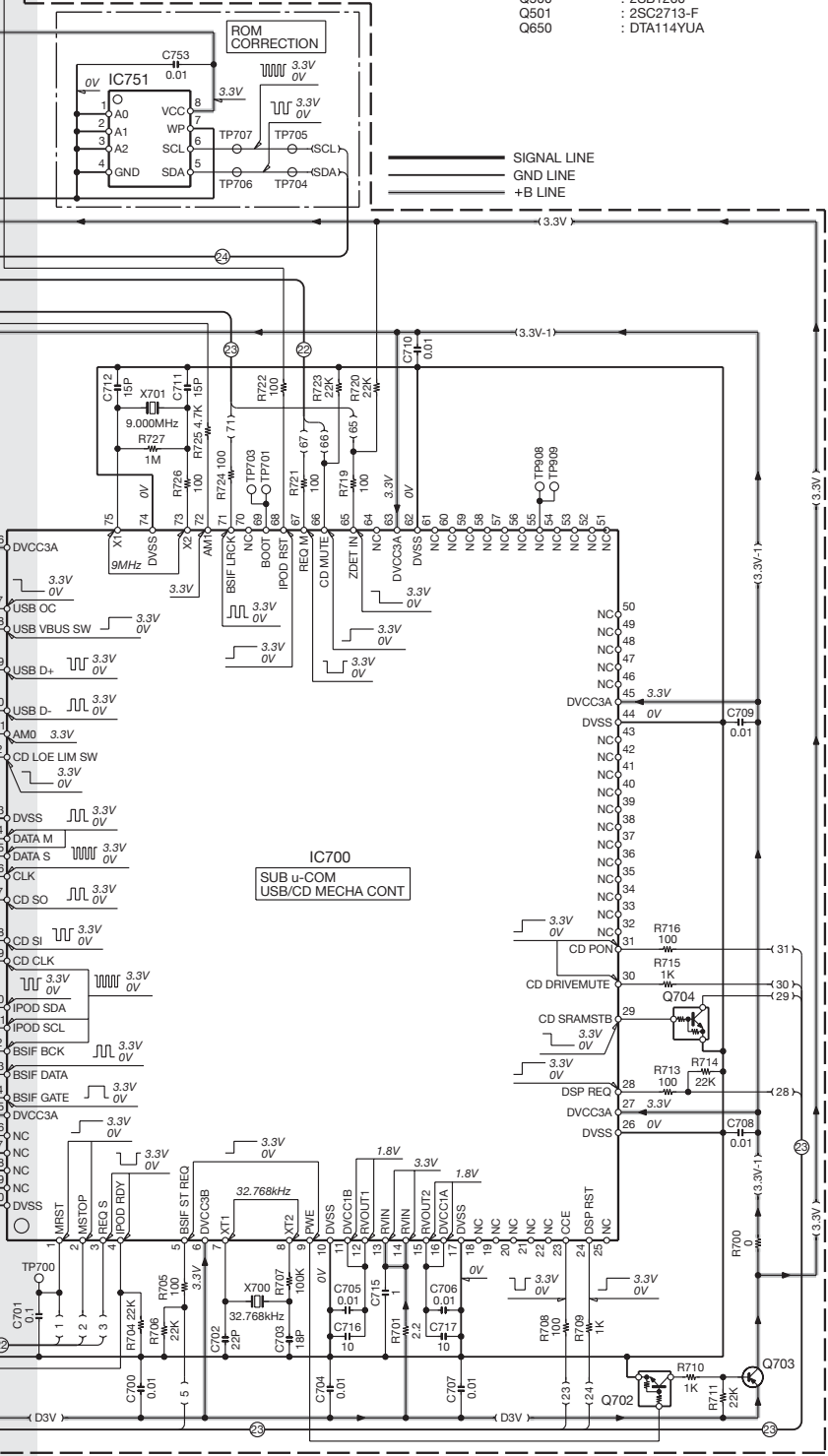


# KDC-MP738U/W7541U /W7541UY/X792/X8009U



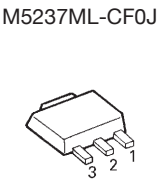
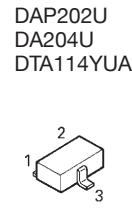
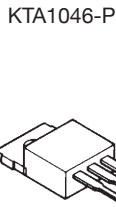
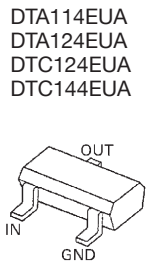
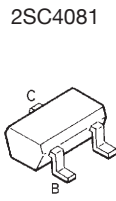
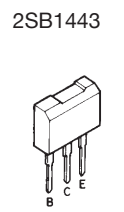
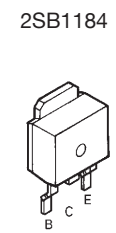
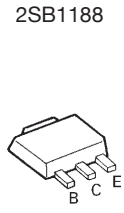
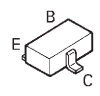
# KDC-MP738U/W7541U /W7541UY/X792/X8009U

IC10 : M5237ML-CF0J	D1 : S2V60-5009F46	Q10,20,30,70 : KTA1046-P
IC20 : R1114N331B-TR	D20,61-63 : D1FJ4	Q11,13,52,353,371,377
IC60 : LT3489	D21,353 : UDZW5.6(B)	: DTA124EUA
IC80 : LT3684EMSE	D30 : UDZW8.2(B)	Q12,14,23,53,354,401
IC300 : STMP52151STR	D50,352 : UDZW12(B)	: DTC124EUA
IC310 : MMA6270QR2	D70 : UDZW15(B)	Q21,31,51,71,120,122,
IC340 : E-TDA478AD	D80 : EC31GS04AG	123,351,352 : 2SC4081
IC350 : NJM4565V-ZB	D121,122,410-412,	Q22,400,703 : 2SA1577
IC450 : TB2923HQ	420-422 : UDZW6.8(B)	* : 2SC2713-F
IC480 : E-TDA7415CB	D123,190-193,423,428	Q40 : *
IC500 : 30624MGP877GP	: UDZW6.2(B)	Q41,46,140,151,702,704,705
IC510 : XC6120N362N1	D140,351,370,373,451,	: DTC114YUA
IC520,751 : BR24L04FV-W	484-486 : DAP202U	Q45 : 2SB1689
IC530 : 74HC2G02DP	D141,142,150,151,350,	Q50 : 2SB1184
IC600 : 74AHC08PW	454,458 : 1SR154-400	Q80,180 : DTC144EUA
IC602 : 74LVC08APW	D170 : UDZW4.7(B)	Q141 : DTA114EUA
IC700 : 92CD28AF66V1	D200,201 : AVRL1613R3FTA	Q142 : 2SA1576A
IC752 : 341S2094		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



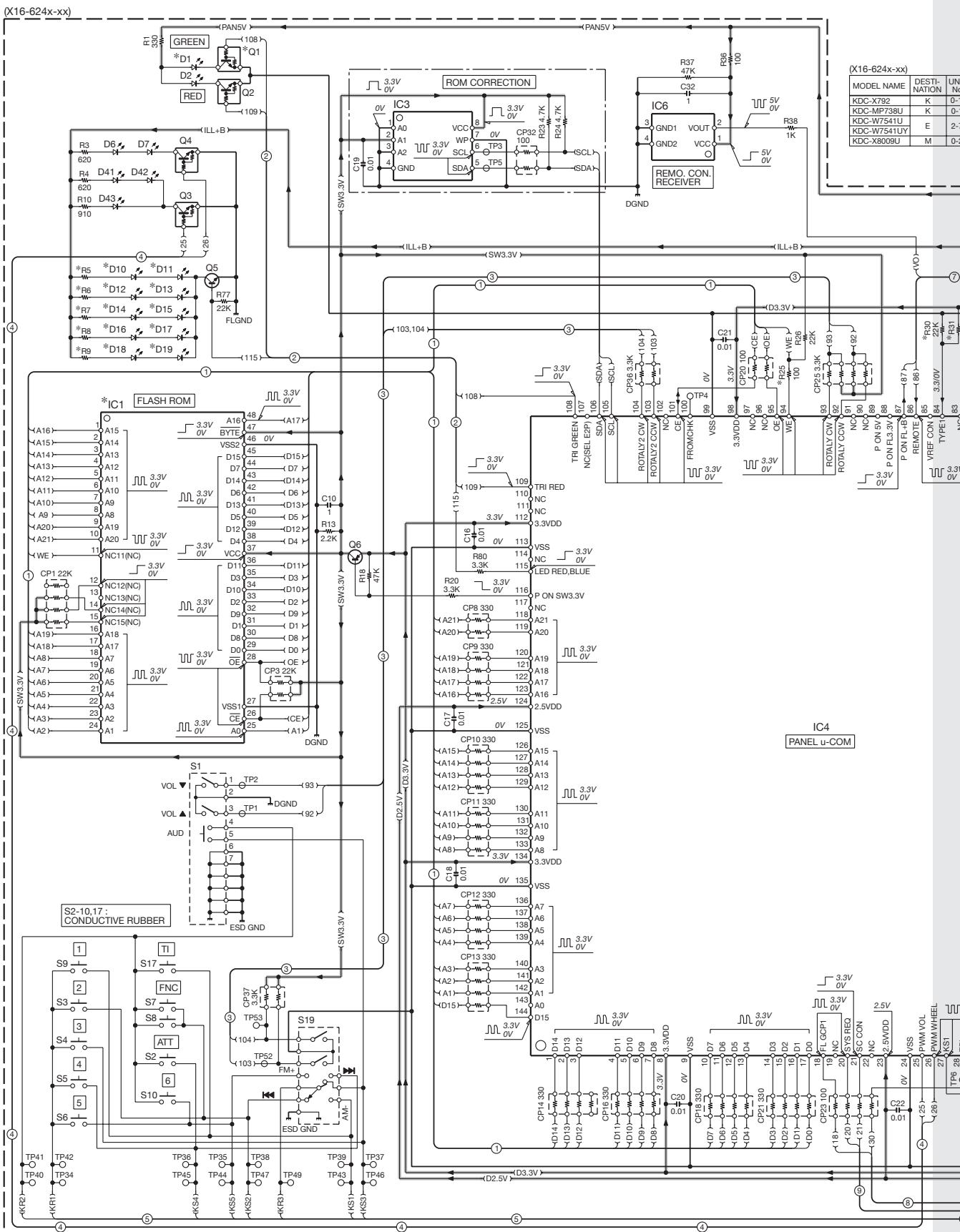
**CAUTION :** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).

△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.

1  
2  
3  
4  
5  
6  
7

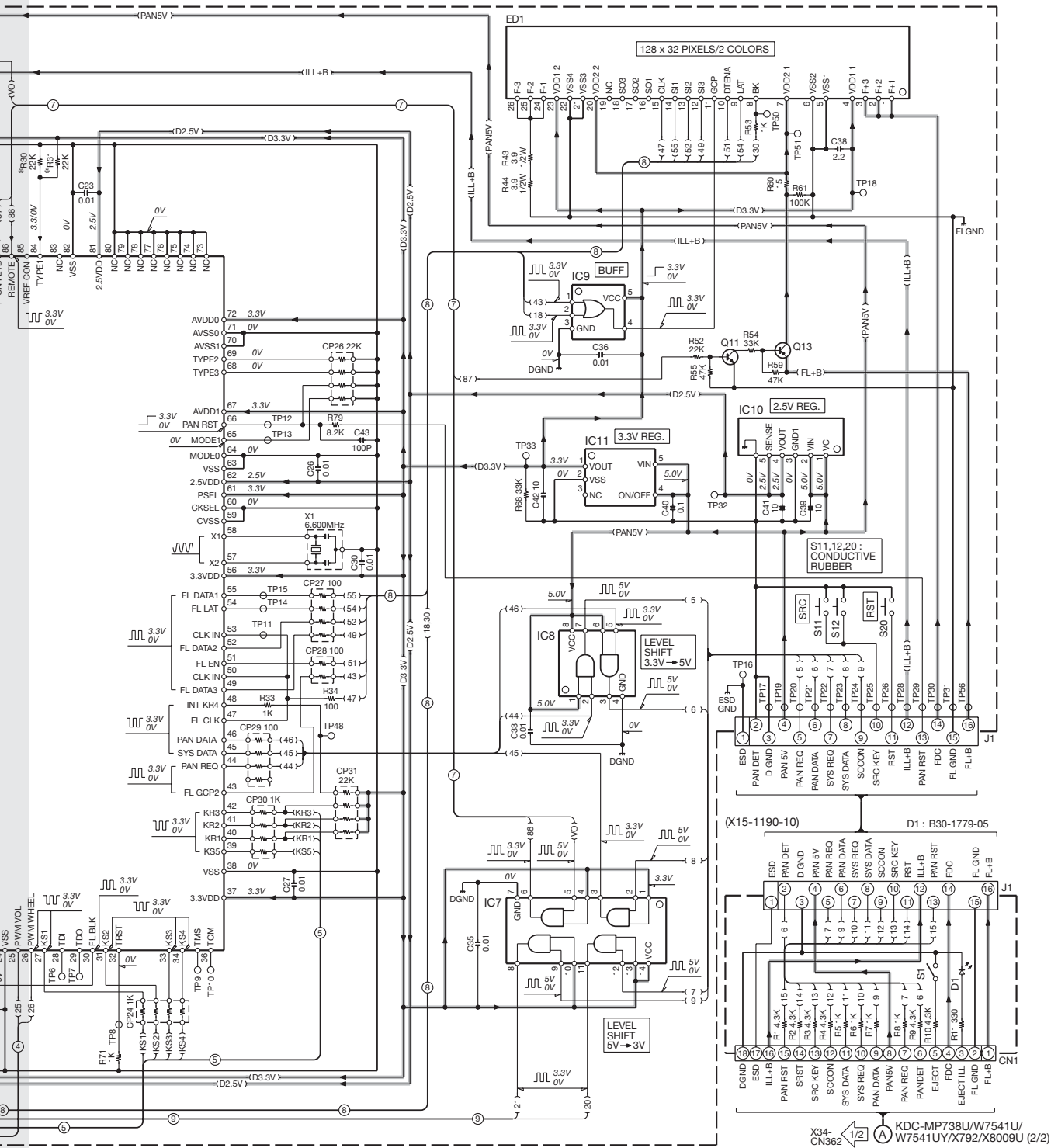
# KDC-MP738U/W7541U /W7541UY/X792/X8009U



# KDC-MP738U/W7541U /W7541UY/X792/X8009U

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	—	820	—	YES
N	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 : 74LVC08APW
- IC8 : 74HC2G08DP
- IC9 : 74AHC1G32GW
- IC10 : SI-3025KMMF
- IC11 : S-1132B33U5T1G
- Q1-4 : DTC143ZE
- Q6 : 2SC4081
- Q6 : 2SB1889
- Q11 : 2SC2173-F
- Q13 : 2SB1260
- D1 : B30-1780-05
- D2 : B30-1566-05
- D6,7,41-43 : B30-1790-05
- D10-19 : \*



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.



1

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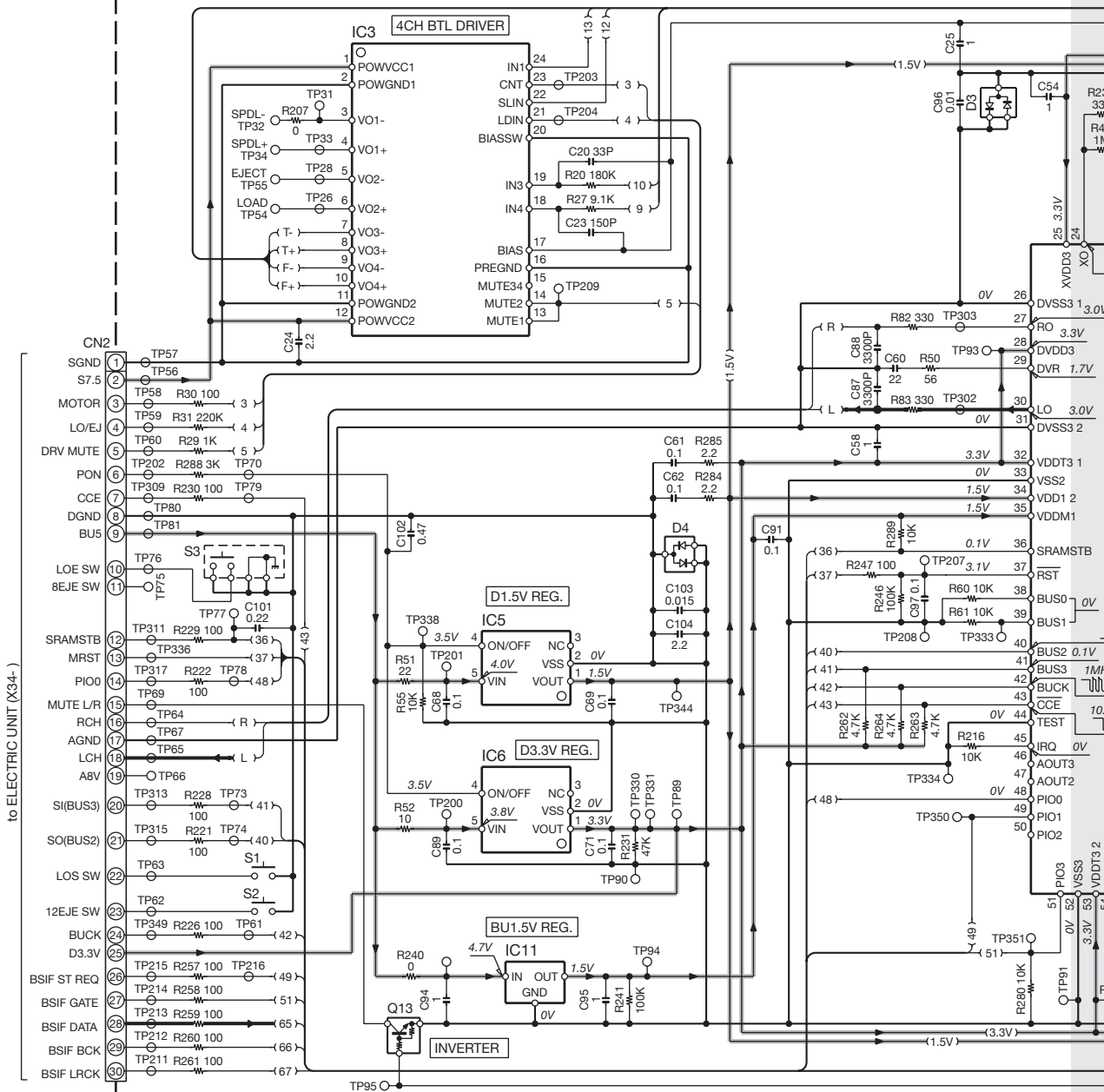
4

5

6

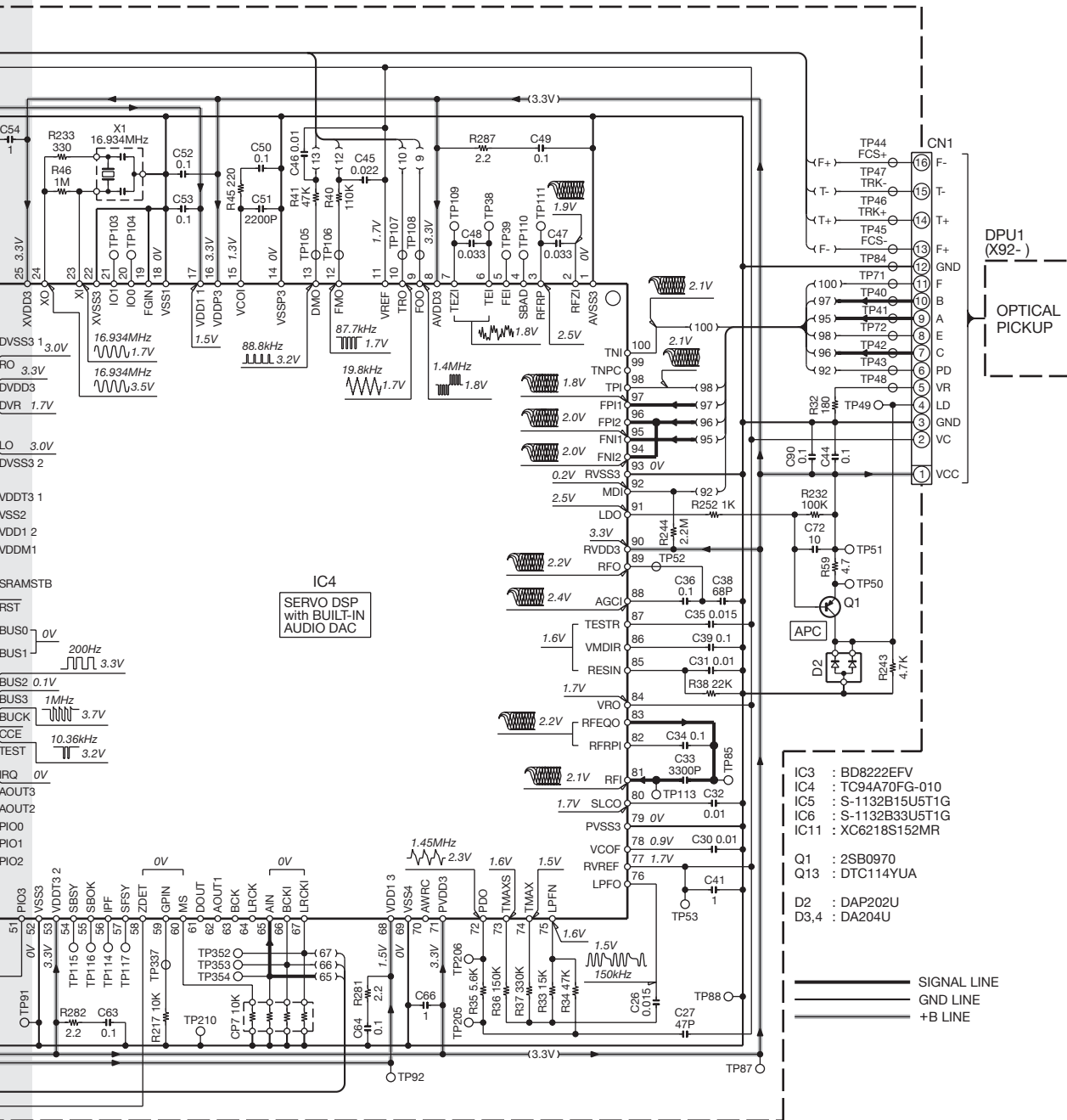
7

CD PLAYER UNIT (X32-6130-00)





AO AP AQ AR AS  
**KDC-MP738U/W7541U**  
**/W7541UY/X792/X8009U**



- IC3 : BD8222EFV
- IC4 : TC94A70FG-010
- IC5 : S-1132B15U5T1G
- IC6 : S-1132B33U5T1G
- IC11 : XC6218S152MR
- Q1 : 2SB0970
- Q13 : DTC114YUA
- D2 : DAP202U
- D3,4 : DA204U

— SIGNAL LINE  
 - - - GND LINE  
 = = = +B LINE

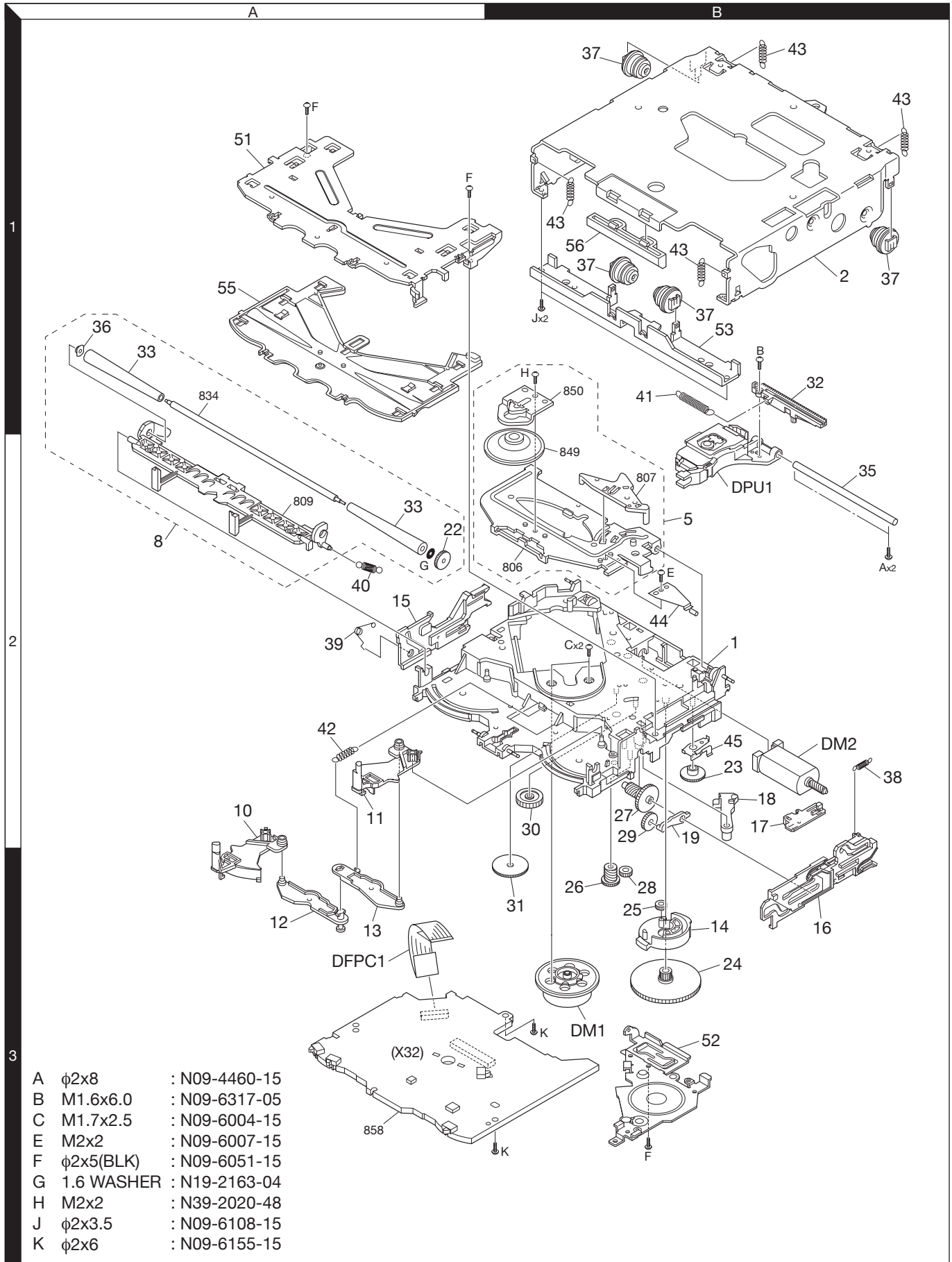
**CAUTION :** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).

⚠ 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.

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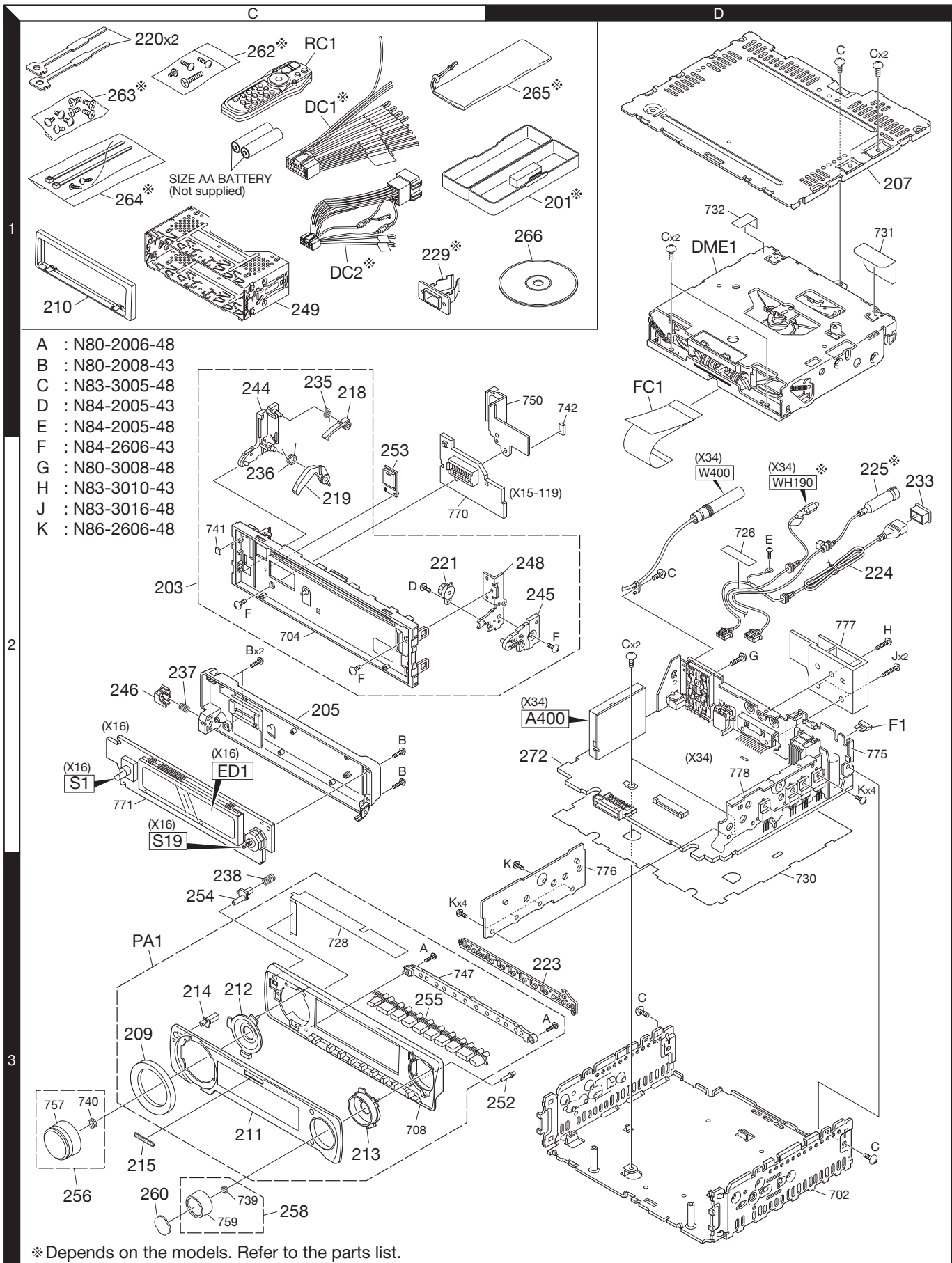
# EXPLODED VIEW (CD MECHANISM)



A	φ2x8	: N09-4460-15
B	M1.6x6.0	: N09-6317-05
C	M1.7x2.5	: N09-6004-15
E	M2x2	: N09-6007-15
F	φ2x5(BLK)	: N09-6051-15
G	1.6 WASHER	: N19-2163-04
H	M2x2	: N39-2020-48
J	φ2x3.5	: N09-6108-15
K	φ2x6	: N09-6155-15

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
<b>KDC-MP738U/W7541U/W7541UY/X792/X8009U</b>					
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)	
<b>DISPLAY UNIT (X15-1190-10)</b>					
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	
<b>SWITCH UNIT (X16-624x-xx)</b>					
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.	Add	New	Parts No.	Description	Destination
C10			CK73GB1A105K	CHIP C 1.0UF K	
C16-23			CK73GB1H103K	CHIP C 0.010UF K	
C26,27			CK73GB1H103K	CHIP C 0.010UF K	
C30			CK73GB1H103K	CHIP C 0.010UF K	
C32			CK73GB1A105K	CHIP C 1.0UF K	
C33			CK73GB1H103K	CHIP C 0.010UF K	
C35,36			CK73GB1H103K	CHIP C 0.010UF K	
C38			CK73FB1A225K	CHIP C 2.2UF K	
C39			CK73FB0J106K	CHIP C 10UF K	
C40			CK73GB0J475K	CHIP C 4.7UF K	
C41,42			CK73FB0J106K	CHIP C 10UF K	
C43			CC73GCH1H101J	CHIP C 100PF J	
J1			E59-0850-05	RECTANGULAR PLUG	
X1			L78-1208-05	RESONATOR (6.6M)	
CP1			RK74HB1J223J	CHIP-COM 22K J 1/16W	
CP3			RK74GA1J223J	CHIP-COM 22K J 1/16W	
CP8			RK74GA1J331J	CHIP-COM 330 J 1/16W	
CP9-14			RK74HB1J331J	CHIP-COM 330 J 1/16W	
CP16			RK74HB1J331J	CHIP-COM 330 J 1/16W	
CP18			RK74HB1J331J	CHIP-COM 330 J 1/16W	
CP20			RK74GA1J101J	CHIP-COM 100 J 1/16W	
CP21			RK74HB1J331J	CHIP-COM 330 J 1/16W	
CP23			RK74HB1J101J	CHIP-COM 100 J 1/16W	
CP24			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
CP25			RK74HB1J332J	CHIP-COM 3.3K J 1/16W	
CP26			RK74HB1J223J	CHIP-COM 22K J 1/16W	
CP27			RK74HB1J101J	CHIP-COM 100 J 1/16W	
CP28			RK74GA1J101J	CHIP-COM 100 J 1/16W	
CP29			RK74HB1J101J	CHIP-COM 100 J 1/16W	
CP30			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
CP31			RK74HB1J223J	CHIP-COM 22K J 1/16W	
CP32			RK74GA1J101J	CHIP-COM 100 J 1/16W	
CP36,37			RK74GA1J332J	CHIP-COM 3.3K J 1/16W	
R1			RK73FB2B331J	CHIP R 330 J 1/8W	
R3-9			RK73EB2E621J	CHIP R 620 J 1/4W	KE1E2
R3-9			RK73EB2E621J	CHIP R 620 J 1/4W	M1
R3,4			RK73EB2E621J	CHIP R 620 J 1/4W	K1
R5-9			RK73EB2E821J	CHIP R 820 J 1/4W	K1
R10			RK73EB2E911J	CHIP R 910 J 1/4W	
R13			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R18			RK73GB2A473J	CHIP R 47K J 1/10W	
R20			RK73GB2A332J	CHIP R 3.3K J 1/10W	
R23,24			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R25			RK73GB2A101J	CHIP R 100 J 1/10W	KE1E2
R26			RK73GB2A223J	CHIP R 22K J 1/10W	
R30			RK73GB2A223J	CHIP R 22K J 1/10W	K1M1
R31			RK73GB2A223J	CHIP R 22K J 1/10W	KE1E2
R33			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R34			RK73GB2A101J	CHIP R 100 J 1/10W	
R36			RK73GB2A101J	CHIP R 100 J 1/10W	
R37			RK73GB2A473J	CHIP R 47K J 1/10W	
R38			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R43,44			RK73PB2H3R9J	CHIP R 3.9 J 1/2W	

Ref. No.	Add	New	Parts No.	Description	Destination
R52			RK73GB2A223J	CHIP R 22K J 1/10W	
R53			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R54			RK73EB2E333J	CHIP R 33K J 1/4W	
R55			RK73GB2A473J	CHIP R 47K J 1/10W	
R59			RK73GB2A473J	CHIP R 47K J 1/10W	
R60			RK73FB2B150J	CHIP R 15 J 1/8W	
R61			RK73GB2A753J	CHIP R 75K J 1/10W	
R68			RK73GB2A333J	CHIP R 33K J 1/10W	
R71			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R77			RK73GB2A223J	CHIP R 22K J 1/10W	
R79			RK73GB2A822J	CHIP R 8.2K J 1/10W	
R80			RK73GB2A332J	CHIP R 3.3K J 1/10W	
W4			RK73GB2A000J	CHIP R 0.0 J 1/10W	
S19			S70-0947-05	TACT SWITCH	
S1			T99-0456-15	ROTARY ENCODER	
ED1	*		JN12832A	FLUORESCENT INDICATOR TUBE	
IC1	*		MX233213T19Z7	ROM IC	K1M1
IC1	*		29L32CBT179Z6	ROM IC	KE1E2
IC3			BR24L04FV-W	ROM IC	
IC4	*		703134AGJ018A	MICROCONTROLLER IC	
IC6			PIC95603	ANALOGUE IC	
IC7			74LVC08APW	MOS-IC	
IC8	*		74HC2G08DP	MOS-IC	
IC9			74AHC1G32GW	MOS-IC	
IC10			SI-3025KMNF	ANALOGUE IC	
IC11			S-1132B33U5T1G	ANALOGUE IC	
Q1-4			DTC143ZE	DIGITAL TRANSISTOR	K
Q2-4			DTC143ZE	DIGITAL TRANSISTOR	K1E1E2
Q2-4			DTC143ZE	DIGITAL TRANSISTOR	M1
Q5			2SC4081	TRANSISTOR	
Q6			2SB1689	TRANSISTOR	
Q11			2SC2713-F	TRANSISTOR	
Q13			2SB1260	TRANSISTOR	
<b>CD PLAYER UNIT (X32-6130-00)</b>					
C20			CC73GCH1H330J	CHIP C 33PF J	
C23			CC73GCH1H151J	CHIP C 150PF J	
C24			CK73FB1A225K	CHIP C 2.2UF K	
C25			CK73GB1A105K	CHIP C 1.0UF K	
C26			CK73GB1H153K	CHIP C 0.015UF K	
C27			CC73GCH1H470J	CHIP C 47PF J	
C30-32			CK73GB1H103K	CHIP C 0.010UF K	
C33			CK73GB1H332K	CHIP C 3300PF K	
C34			CK73GB1H104K	CHIP C 0.10UF K	
C35			CK73GB1H153K	CHIP C 0.015UF K	
C36			CK73GB1H104K	CHIP C 0.10UF K	
C38			CC73GCH1H680J	CHIP C 68PF J	
C39			CK73GB1H104K	CHIP C 0.10UF K	
C41			CK73GB1A105K	CHIP C 1.0UF K	
C44			CK73GB1H104K	CHIP C 0.10UF K	
C45			CK73GB1H223K	CHIP C 0.022UF K	
C46			CK73GB1H103K	CHIP C 0.010UF K	
C47,48			CK73GB1H333K	CHIP C 0.033UF K	
C49,50			CK73GB1H104K	CHIP C 0.10UF K	

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

△Indicates safety critical components.

# PARTS LIST

## CD PLAYER UNIT (X32-6130-00)

Ref. No.	Add	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.	Add	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	
<b>ELECTRIC UNIT (X34-579x-xx)</b>					
C1			C90-6783-05	ERECTRO 3900 16WV	K1E1E2
C1			C90-6783-05	ERECTRO 3900 16WV	M1
C1			C90-6784-05	ELECTRO 3900UF 16WV	K
C3			C93-1470-05	CHIP C 1500PF K	E1E2
C10			CD04AY1A221M	ELECTRO 220UF 10WV	
C11			CK73GB1H103K	CHIP C 0.010UF 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	K
C31			CD04AY1H220M	ELECTRO 22UF 50WV	K
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.	Add	New	Parts No.	Description	Destination	Ref. No.	Add	New	Parts No.	Description	Destination
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			RK73FB2B181J	CHIP R 180 J 1/8W	
R381			RK73GB2A331J	CHIP R 330 J 1/10W	
R382			RK73FB2B181J	CHIP R 180 J 1/8W	
R383			RK73GB2A331J	CHIP R 330 J 1/10W	
R384,385			RK73GB2A223J	CHIP R 22K J 1/10W	
R386			RK73FB2B181J	CHIP R 180 J 1/8W	
R387			RK73GB2A331J	CHIP R 330 J 1/10W	
R401			RK73GB2A223J	CHIP R 22K J 1/10W	
R402			RK73FB2B821J	CHIP R 820 J 1/8W	
R403,404			RK73GB2A471J	CHIP R 470 J 1/10W	
R410,411			RK73GB2A123J	CHIP R 12K J 1/10W	
R412,413			RK73EB2E100J	CHIP R 10 J 1/4W	
R414			RK73EB2E4R7J	CHIP R 4.7 J 1/4W	
R415			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R420-424			RK73EB2E432J	CHIP R 4.3K J 1/4W	
R425			RK73EB2E101J	CHIP R 100 J 1/4W	
R426			RK73EB2E100J	CHIP R 10 J 1/4W	
R427			RK73EB2E4R7J	CHIP R 4.7 J 1/4W	
R428			RK73EB2E100J	CHIP R 10 J 1/4W	
R429			RK73EB2E432J	CHIP R 4.3K J 1/4W	
R430			RK73EB2E101J	CHIP R 100 J 1/4W	
R431			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R432			RK73GB2A104J	CHIP R 100K J 1/10W	
R433,434			RK73GB2A473J	CHIP R 47K J 1/10W	
R435			RK73GB2A101J	CHIP R 100 J 1/10W	
R440			RK73GB2A473J	CHIP R 47K J 1/10W	
R441			RK73GB2A101J	CHIP R 100 J 1/10W	
R442			RK73GB2A104J	CHIP R 100K J 1/10W	
R450			RK73GB2A133J	CHIP R 13K J 1/10W	
R451			RK73GB2A473J	CHIP R 47K J 1/10W	
R452			RK73GB2A331J	CHIP R 330 J 1/10W	
R453			RK73GB2A432J	CHIP R 4.3K J 1/10W	
R456			RK73GB2A100J	CHIP R 10 J 1/10W	
R469			RK73GB2A473J	CHIP R 47K J 1/10W	
R482,483			RK73GB2A103J	CHIP R 10K J 1/10W	
R490			RK73EB2E2R2J	CHIP R 2.2 J 1/4W	
R500,501			RK73GB2A103J	CHIP R 10K J 1/10W	
R502			RK73GB2A104J	CHIP R 100K J 1/10W	
R503			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R505			RK73GB2A473J	CHIP R 47K J 1/10W	
R506			RK73GB2A104J	CHIP R 100K J 1/10W	
R507			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R508,509			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R511			RK73GB2A101J	CHIP R 100 J 1/10W	
R512-514			RK73GB2A473J	CHIP R 47K J 1/10W	
R515,516			RK73GB2A471J	CHIP R 470 J 1/10W	
R517,518			RK73GB2A104J	CHIP R 100K J 1/10W	
R519,520			RK73GB2A473J	CHIP R 47K J 1/10W	
R522,523			RK73GB2A473J	CHIP R 47K J 1/10W	
R525			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R526			RK73EB2E333J	CHIP R 33K J 1/4W	
R527			RK73GB2A333J	CHIP R 33K J 1/10W	
R528			RK73GB2A223J	CHIP R 22K J 1/10W	
R529			RK73GB2A473J	CHIP R 47K J 1/10W	K
R530			RK73GB2A223J	CHIP R 22K J 1/10W	KK1M1

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

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

△Indicates safety critical components.

# 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			STMP2151STR	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		*	92CD28AFG6V1	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	VARISTOR		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
D458			1SR154-400	DIODE		Q351,352			2SC4081	TRANSISTOR	KE1E2
D484-486			DAP202U	DIODE		Q351,352			2SC4081	TRANSISTOR	M1
IC10			M5237ML-CF0J	ANALOGUE IC		Q353			DTA124EUA	DIGITAL TRANSISTOR	KE1E2
IC20			R1114N331B-TR	ANALOGUE IC (3.3V LF)		Q353			DTA124EUA	DIGITAL TRANSISTOR	M1
IC60		*	LT3489	ANALOGUE IC		Q354			DTC124EUA	DIGITAL TRANSISTOR	KE1E2
IC80			LT3684EMSE	ANALOGUE IC		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			DTC143TUA	DIGITAL TRANSISTOR	
Q371			DTA124EUA	DIGITAL TRANSISTOR	
Q372-376			DTC143TUA	DIGITAL TRANSISTOR	
Q377			DTA124EUA	DIGITAL TRANSISTOR	
Q400			2SA1577	TRANSISTOR	
Q401			DTC124EUA	DIGITAL TRANSISTOR	
Q500			2SB1260	TRANSISTOR	
Q501			2SC2713-F	TRANSISTOR	
Q650			DTA114YUA	DIGITAL TRANSISTOR	
Q702			DTC114YUA	DIGITAL TRANSISTOR	
Q703			2SA1577	TRANSISTOR	
Q704,705			DTC114YUA	DIGITAL TRANSISTOR	
TH450			PRF18BE471QS2	POSITIVE RESISTOR	
A400			X86-4030-11	FRONT-END UNIT	KK1M1
A400			X86-4032-70	FRONT-END UNIT	E1E2
<b>CD MECHANISM ASSY (X92-6130-00) (DXM-6E20W)</b>					
1	2B		A10-5328-31	CHASSIS	
2	1B		A10-5329-11	CHASSIS	
5	2B		D10-4910-13	ARM ASSY	
8	2A		D10-4911-23	LEVER ASSY	
10	2A		D10-4906-33	ARM	
11	2A		D10-4907-33	ARM	
12	3A		D10-4908-03	ARM	
13	3A		D10-4909-03	ARM	
14	3B		D10-4915-03	ARM	
15	2A		D10-4916-23	SLIDER	
16	3B		D10-4914-22	SLIDER	
17	2B		D10-4588-13	SLIDER	
18	2B		D10-4917-04	ARM	
19	2B		D10-4596-24	ARM	
22	2A		D13-2151-04	GEAR	
23	2B		D13-2152-04	GEAR	
24	3B		D13-2153-04	GEAR	
25	3B		D13-2154-04	GEAR	
26	3B		D13-2155-04	WORM	
27	2B		D13-2156-14	GEAR	
28	3B		D13-2157-04	GEAR	
29	2B		D13-2158-04	GEAR	
30	2B		D13-2168-04	GEAR	
31	3B		D13-2171-04	GEAR	
32	1B		D13-2400-23	RACK (GEAR)	
33	2A		D14-0759-04	ROLLER	
35	2B		D21-2382-04	SHAFT	
36	1A		D23-0954-04	RETAINER	
37	1B		D39-0271-05	DAMPER	
38	2B		G01-3072-04	EXTENSION SPRING	
39	2A		G01-3073-04	TORSION COIL SPRING	
40	2A		G01-3074-04	EXTENSION SPRING	
41	1B		G01-4615-04	EXTENSION SPRING	
42	2A		G01-3076-04	EXTENSION SPRING	
43	1B		G01-3077-14	EXTENSION SPRING	
44	2B		G02-1399-14	FLAT SPRING	
45	2B		G02-1547-14	FLAT SPRING	

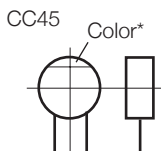
Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
51	1A		J22-0473-21	MOUNTING HARDWARE	
52	3B		J22-0474-12	MOUNTING HARDWARE	
53	1B		J22-0519-13	MOUNTING HARDWARE	
55	1A		J90-1138-41	GUIDE	
56	1B		J90-1023-03	GUIDE	
DFPC1	3A		J86-0039-05	FPC (LEAD FREE)	
A	2B		N09-4460-15	TAPTITE SCREW (PT 2X8)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

# PARTS LIST

## CAPACITORS

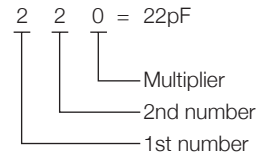
CC 45 TH 1H 220 J  
1 2 3 4 5 6

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



### • Capacitor value

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



### • Temperature coefficient

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

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

Example : CC45TH = -470±60ppm/°C

### • Tolerance (More than 10pF)

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

### (Less than 10pF)

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

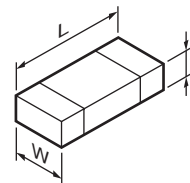
### • Voltage rating

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

### • Chip capacitors

- (EX) CC 73 F SL 1H 000 J  
1 2 3 4 5 6 7
- (Chip) (CH, RH, UJ, SL)
- (EX) CK 73 F F 1H 000 Z  
1 2 3 4 5 6 7
- (Chip) (B, F)
- Refer to the table above.
- 1 = Type
  - 2 = Shape
  - 3 = Dimension
  - 4 = Temp. coefficient
  - 5 = Voltage rating
  - 6 = Value
  - 7 = Tolerance

### • Dimension



### Chip capacitor

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

### Chip resistor

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

### • 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)

### FM tuner section

Frequency range (200 kHz space).....	87.9 MHz – 107.9 MHz
Usable sensitivity (S/N = 30dB).....	9.3dBf (0.8 $\mu$ V/75 $\Omega$ )
Quieting Sensitivity (S/N = 50dB).....	15.2dBf (1.6 $\mu$ V/75 $\Omega$ )
Frequency response ( $\pm$ 3 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 (10 kHz space).....	530 kHz – 1700 kHz
Usable sensitivity (S/N = 20dB).....	28 dB $\mu$ (25 $\mu$ V)

### CD player section

Laser diode.....	GaAlAs
Digital filter (D/A).....	8 Times Over Sampling
D/A Converter.....	24 Bit
Spindle speed.....	500 – 200 rpm (CLV)
Wow & Flutter.....	Below Measurable Limit
Frequency response ( $\pm$ 1 dB).....	10 Hz – 20 kHz
Total harmonic distortion (1 kHz)	
KDC-X792.....	0.008 %
KDC-MP738U.....	0.010 %
Signal to Noise ratio (1 kHz).....	110 dB
Dynamic range.....	93 dB
MP3 decode.....	Compliant with MPEG-1/2 Audio Layer-3
WMA decode.....	Compliant with Windows Media Audio
AAC decode.....	AAC-LC “.m4a” files

### USB Interface

USB Standard.....	USB1.1/ 2.0
Maximum Supply current.....	500 mA
File System.....	FAT16/ 32
MP3 decode.....	Compliant with MPEG-1/2 Audio Layer-3
WMA decode.....	Compliant with Windows Media Audio
AAC decode.....	AAC-LC “.m4a” files

### Audio section

Maximum output power.....	50 W x 4
Full Bandwidth Power (at less than 1% THD).....	22 W x 4
Speaker Impedance.....	4 – 8 $\Omega$
Tone action	
Bass.....	100 Hz $\pm$ 8 dB
Middle.....	1 kHz $\pm$ 8 dB
Treble.....	10 kHz $\pm$ 8 dB
Preout level / Load (CD)	
KDC-X792.....	4000 mV/10 k $\Omega$
KDC-MP738U.....	2500 mV/10 k $\Omega$
Preout impedance.....	$\leq$ 600 $\Omega$

### Auxiliary input

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

### 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
.....	7-3/16 x 2-1/16 x 6-1/8 inch
Weight.....	3.1 lbs (1.40 kg)



# 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  $\mu$ V/75  $\Omega$   
 Quieting Sensitivity (S/N = 46dB)..... 1.6  $\mu$ V/75  $\Omega$   
 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  $\mu$ V

## LW tuner section

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

## CD player section

Laser diode.....GaAIAs  
 Digital filter (D/A)..... 8 Times Over Sampling  
 D/A Converter..... 24 Bit  
 Spindle speed ..... 500 – 200 rpm (CLV)  
 Wow & Flutter ..... Below 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 range ..... 93 dB  
 MP3 decode..... Compliant with MPEG-1/2 Audio Layer-3  
 WMA decode..... Compliant with Windows Media Audio  
 AAC decode ..... AAC-LC “.m4a” files

## USB Interface

USB Standard ..... USB1.1/ 2.0  
 Maximum Supply current ..... 500 mA  
 File System ..... FAT16/ 32  
 MP3 decode..... Compliant with MPEG-1/2 Audio Layer-3  
 WMA decode..... Compliant with Windows Media Audio  
 AAC decode ..... AAC-LC “.m4a” files

## Audio section

Maximum output power ..... 50 W x 4  
 Output power (DIN 45324, +B=14.4V) ..... 30 W x 4  
 Speaker Impedance ..... 4 – 8  $\Omega$   
 Tone action  
     Bass ..... 100 Hz  $\pm$ 8 dB  
     Middle ..... 1 kHz  $\pm$ 8 dB  
     Treble ..... 10 kHz  $\pm$ 8 dB  
 Preout level / Load (CD) ..... 4000 mV/10 k $\Omega$   
 Preout impedance .....  $\leq$  600  $\Omega$

## Auxiliary input

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

## 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  
 Weight ..... 1.40 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 $\mu$ V /75 $\Omega$ )
Quieting Sensitivity (S/N = 50dB).....	15.2dBf (1.6 $\mu$ V /75 $\Omega$ )
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 $\mu$ (25 $\mu$ V)

### CD player section

Laser diode.....	GaAlAs
Digital filter (D/A).....	8 Times Over Sampling
D/A Converter.....	24 Bit
Spindle speed.....	500 – 200 rpm (CLV)
Wow & Flutter.....	Below 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 range.....	93 dB
MP3 decode.....	Compliant with MPEG-1/2 Audio Layer-3
WMA decode.....	Compliant with Windows Media Audio
AAC decode.....	AAC-LC “.m4a” files

### USB Interface

USB Standard.....	USB1.1/ 2.0
Maximum Supply current.....	500 mA
File System.....	FAT16/ 32
MP3 decode.....	Compliant with MPEG-1/2 Audio Layer-3
WMA decode.....	Compliant with Windows Media Audio
AAC decode.....	AAC-LC “.m4a” files

### Audio section

Maximum output power.....	50 W x 4
Full Bandwidth Power (at less than 1% THD).....	22 W x 4
Speaker Impedance.....	4 – 8 $\Omega$
Tone action	
Bass.....	100 Hz $\pm$ 8 dB
Middle.....	1 kHz $\pm$ 8 dB
Treble.....	10 kHz $\pm$ 8 dB
Preout level / Load (CD).....	4000 mV/10 k $\Omega$
Preout impedance.....	$\leq$ 600 $\Omega$

### Auxiliary input

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

### 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
Weight.....	1.4 kg

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

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**DANGER:**

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

