

CD RECEIVER

KDC-BT7539U/BT8041U /BT8141UY/BT838U

SERVICE MANUAL

KENWOOD

Kenwood Corporation

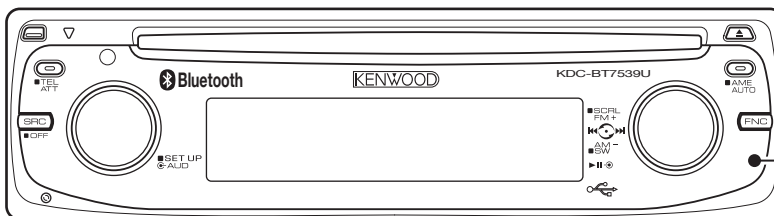
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B53-0666-00 (N) 429

TDF SPARE-PANEL

MODEL	TDF PANEL No.	TDF NAME
KDC-BT838U	Y33-2970-60	TDF-BT89D
KDC-BT8041U/BT8141UY	Y33-2970-61	TDF-BT8041U
KDC-BT7539U	Y33-2970-62	TDF-BT7539U

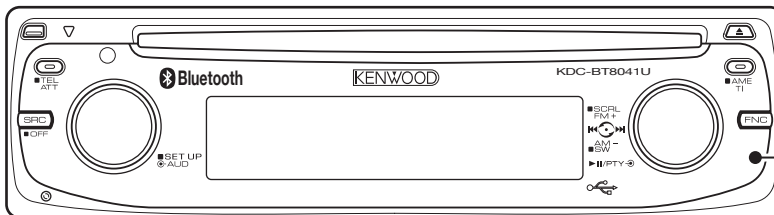
CD MECHANISM EXTENSIONCORD (30P) : E39-1014-05

KDC-BT7539U
(M type)



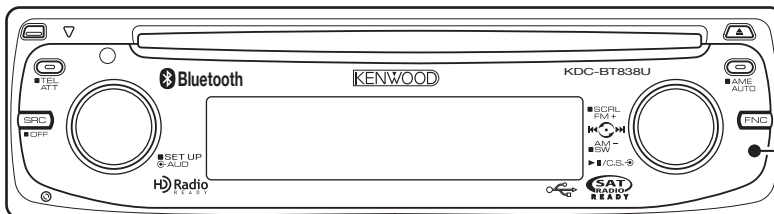
Panel assy
(A64-4447-02)

KDC-BT8041U
KDC-BT8141UY
(E type)



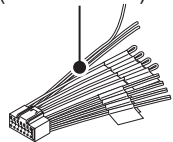
Panel assy
KDC-BT8041U:
(A64-4445-02)
KDC-BT8141UY:
(A64-4446-02)

KDC-BT838U
(K type)

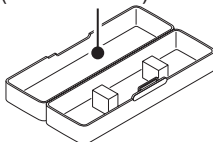


Panel assy
(A64-4444-02)

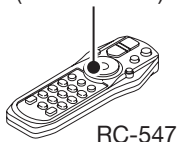
DC cord (K,M type)
(E30-6428-05)



Plastic cabinet assy (M type)
(A02-2755-13)



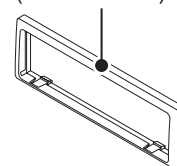
Remote controller assy
(A70-2085-05)



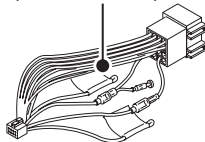
SIZE AA BATTERY
(Not supplied)



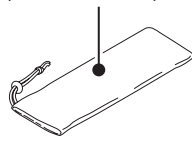
Escutcheon
(B07-3245-01)



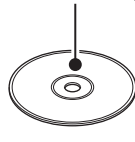
DC cord (E type)
(E30-6671-05)



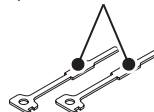
Carrying case (K,E type)
(W01-1710-05)



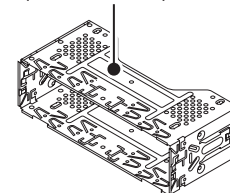
Compact disc
(W01-1723-15)



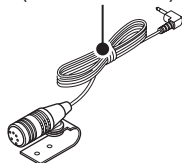
Lever
(D10-7012-04) x2



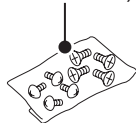
Mounting hardware assy
(J21-9716-03)



Microphone
(W01-1718-05)



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



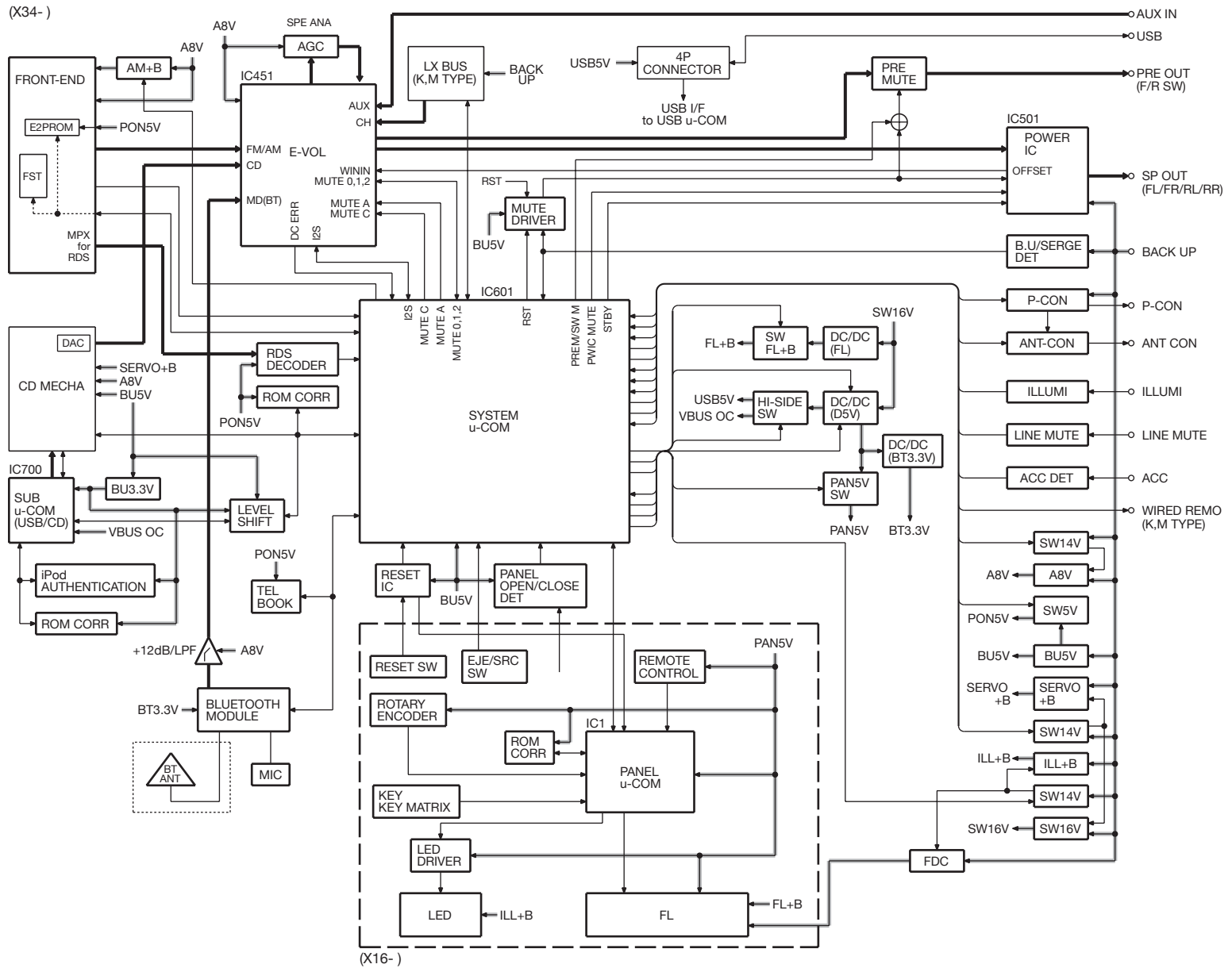
Screw (K,M type)
(N84-4016-48)



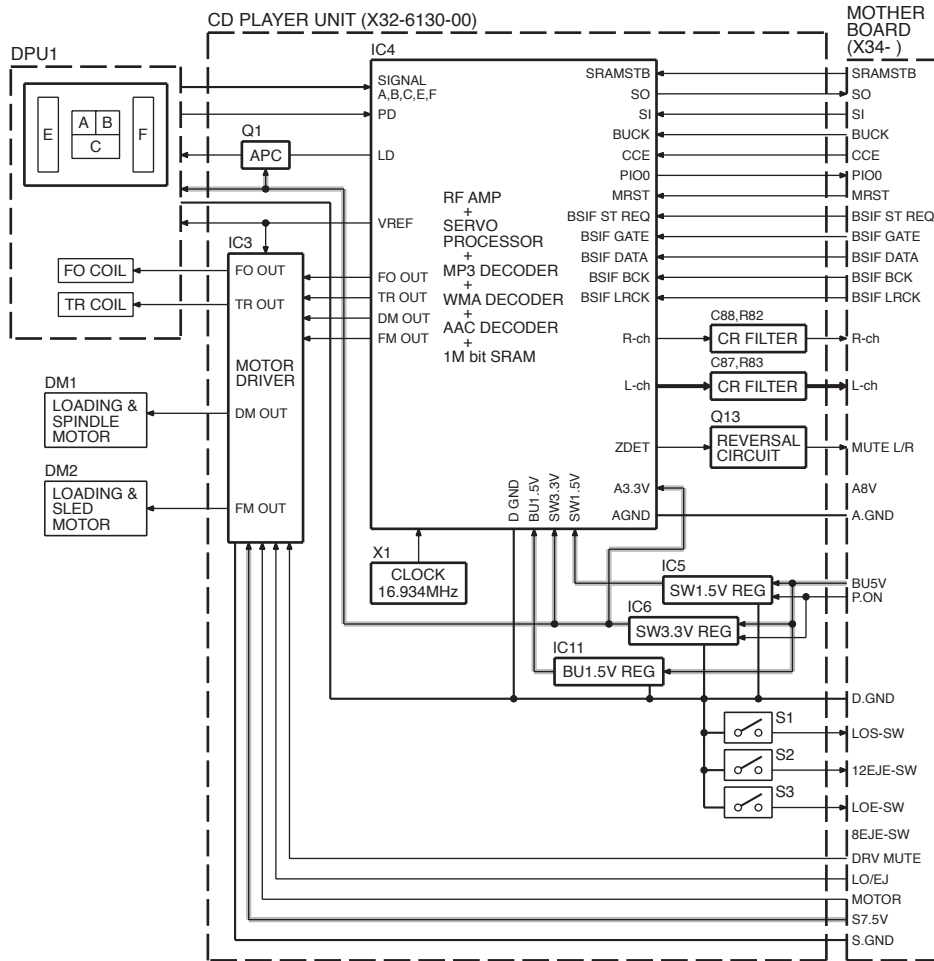
This product uses Lead Free solder.

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

BLOCK DIAGRAM



BLOCK DIAGRAM



COMPONENTS DESCRIPTION

● SWITCH UNIT (X16-638x-xx)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC1	Panel μ -COM	
IC3	Remote Control IC	Remote control receiver
Q1	Triangle Red LED SW	Triangle LED lights when Q1's base level goes Hi.
Q3	Blue LED SW (Vol left)	Blue LED brightness control (PWM).
Q4	Blue LED SW (FL Top & ATT Key)	Blue LED lights when Q4's base level goes Hi.
Q5	Blue LED SW (FL under)	Blue LED brightness control (PWM).
Q6	Blue LED SW (Multi function Key)	Blue LED brightness control (PWM).
Q11	VFD Filament Voltage (-)	VFD Cut-off bias (5-7.5V) supply.

● ELECTRIC UNIT (X34-597x-xx)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC11	Audio8V Ref Power Supply	Output 1.27V.
IC21	Regulator	Power supply for IC700. (USB μ -com)
IC61	Switching Regulator	Power supply for D5V. (to USB/PANEL)
IC71	Switching Regulator	Power supply for FL+B. (to PANEL)
IC211	Hi-side SW	Detection of USB Over Current
IC301	RDS decoder IC	RDS decoder. (only E type)
IC331	OPAMP	For AGC of the Spectrum Analyzer
IC451	Eelectrical Volume & Source Selecter	Controls the source, volume, and tone.
IC501	Power IC	Amplifies the front L/R and the rear L/R to 50W maximum.
IC601	System μ -com	Controls FM/AM tuner, the changer, CD mechanism, Panel, volume and tone.
IC602	Reset IC	"L" when detection voltage goes below 3.6V or less.
IC603	ROM CORRECTION	For Main program correcting emergency (EEP_ROM)
IC604	Muting logic IC	Controls logic for muting.
IC605	Logic IC	Level Shift (3.3V \rightarrow 5V)
IC607	Logic IC	Level Shift (5V \rightarrow 3.3V)
IC608	EEP_ROM	Memory of TEL BOOK for "Blue Tooth"
IC700	Sub μ -com	USB/CD mechanism control
IC750	iPod Authentication Coprocessor	iPod Authentication
IC751	ROM CORRECTION	For USB program correcting emergency (EEP_ROM)
IC964	OP AMP	+12dB Gain AMP & L.P.F for BT Output
IC965	Switching Regulator	Power supply for BT3.3V. (to BT Module)
Q11	Audio8V AVR	When Q13 & Q12' go ON, A8V AVR outputs 8.0V.
Q12	Audio8V AVR SW	When Q13'Base goes Hi, Supply current to IC11.
Q13	Audio8V AVR SW	When Q13'Base goes Hi, Q12 & Q11 are ON.
Q21,22	B.U.5V AVR	While BU is applied, BU5V AVR outputs +5V.
Q23,24	PON5V	When Q24'base goes Hi, PON5V outputs +5V.
Q31,32	SERVO+B AVR	When Q33 & Q34' go ON, AVR outputs 8V.
Q33,34	SERVO+B SW	When Q34'Base goes Hi, Q33 is ON.
Q41,42	Illumination+B AVR	When Q43 & Q44' go ON, AVR outputs 10V.
Q43,44	Illumination+B SW	When Q44'Base goes Hi, Q43 is ON.
Q51,52	SW16V	When Q9 & Q34' go ON, The voltage appears. (~16V)
Q71,72	FDC+B AVR	When Q43 goes ON, AVR outputs 9V. (FL Filament)
Q81,82	FL+B SW	When Q81'Base goes Hi, FL+B outputs 53V.

COMPONENTS DESCRIPTION

Ref. No.	Application / Function	Operation / Condition / Compatibility
Q121	B.U Detected SW	When Q121'base goes Hi, B.U voltage is detected.
Q122	Surge Detect SW	When Q122'base goes Hi, Surge voltage is detected.
Q123	ACC Detect SW	When Q123'base goes Hi, Acc voltage is detected.
Q141,144	P-CON SW	When Q144'base goes Hi, AVR outputs 14V.
Q142,143	P-CON Protect	Protect Q141 by turning on when P-CON output is grounded.
Q145,146	Power Antenna SW	When Q146'base goes Hi, power antenna switch outputs 14V.
Q151	Small-lamp Detect SW	When Q151'base goes Hi, Small-lamp is detected.
Q321,322	AM+B SW	When Q322'base goes Hi, AM+B is outputs.
Q331	AGC CONTROL (for SPE. ANA.)	AGC GAIN CONTROL
Q401~406	Pre-out mute SW	When a base goes Hi, Pre-out is set to mute.
Q407,408	Pre-out mute driver	When a base goes Lo, mute driver is turned on.
Q602,603	LEVEL SHIFT	System μ -com (5V) to Sub μ -com (3.3V)
Q680	Invertor	When a base goes Hi, BT RESET is ON.
Q681,682	PANEL +5V SW	When Q682'base goes Hi, PANEL +5V is outputs.
Q683,684	LEVEL SHIFT	CD mechanism (3.3V) to Sysytem μ -com (5V)
Q702,703	3.3V_AVR_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.
Q900	L.P.F	L.P.F for BT Output (Rch)
Q901	L.P.F	L.P.F for BT Output (Lch)

● 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 μ -COM: 30626FHP3A7GP (X34-597: IC601)

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 (Models without RDS)		Output is fixed to L
3	S_SYS_DATA	O	Data from system μ -com to SOC (System μ -com \rightarrow SOC)		400k
3	CD_SI	O	CD mechanism serial output		
4	S_SOC_DATA	I	Data from SOC to system μ -com (SOC \rightarrow System μ -com)		400k
4	CD_SO	I	CD mechanism serial input		
5	S_SOC_CLK	I	Host is SOC, CLK from SOC		400k
5	CD_CLK	O	6E Mechanism serial clock output		f=1MHz
6	BYTE				
7	CNVSS				
8	XCIN				32,768Hz
9	XCOU				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		RDS clock input terminal
16	NC	O	Not used (Models without RDS)		Output is fixed to L
17	PANEL_DET	I	Panel connector attach/detach detection terminal		H: Panel detach, L: Panel attach
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 (Models without RDS)		Output is fixed to L
20	CD_DRIVEMUTE	O	CD motor driver mute output		
20	NC	O	Not used (Models with USB)		Output is fixed to L
21	EJECT_KEY	I	Eject key input		H: OFF, L: ON
22	PANRST	O	Panel reset terminal		H: Normal, L: Reset
23	CD_PIO0	I	Command I/F Communication request terminal from mechanism DSP		H: Data request
23	NC	O	Not used (Models with USB)		Output is fixed to L
24	PON_CD	I/O	CD mechanism power supply control		H: CD mechanism power supply ON Hi-Z: Power supply OFF
24	NC	O	Not used (Models with USB)		Output is fixed to L
25	F_SEL1	I/O	SW_REG frequency setup terminal 1 (Models with BT)		H: When receiving MW Hi-Z: When receiving other frequency than MW
25	NC	O	Not used (Models without BT)		Output is fixed to L
26	PWIC_BEEP	O	Beep output		2kHz 1kHz
27	TUN_SCL	I/O	F/E I2C clock I/O terminal		MAX 400k
28	TUN_SDA	I/O	F/E I2C data I/O terminal		MAX 400k
29	PAN_SYS_DATA	O	Data from system μ -com to panel (System μ -com \rightarrow Panel)		UART MAX 500k

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Truth value table	Processing Operation Description
30	PAN_PAN_DATA	I	Data from panel to system μ -com (Panel \rightarrow System μ -com)		UART MAX 500k
31	PAN_SYS_REQ	O	Communication request from system μ -com to panel (System μ -com \rightarrow Panel)		
32	PAN_PAN_REQ	I	Communication request from panel to system μ -com (Panel \rightarrow System μ -com)		
33	BT_SYS_DATA	O	Data from system μ -com to BT module (System μ -com \rightarrow BT module)		
33	NC	O	Not used (Models without BT)		Output is fixed to L
34	BT_BT_DATA	I	Data from BT module to system μ -com (BT module \rightarrow System μ -com)		
34	NC	O	Not used (Models without BT)		Output is fixed to L
35	NC	O	Not used		Output is fixed to L
36	PON_ILL	I/O	Panel LED FL bias power supply control		H: Power ON Hi-Z: When panel is detach and power is OFF
37	NC	O	Not used		Output is fixed to L
38	PON_PANEL	I/O	Power supply for panel μ -com Supply FL_VDD		H: Power ON Hi-Z: When panel is detach and power is OFF
39	ROMCOR_DET	I	ROM correction writing request		H: Can re-write ROM correction (I2C open)
39	EPM	I	EPM input terminal for re-writing Rewritable when EPM input terminal is "L" when starting to re-write.		
40	CD_MOTOR	O	CD motor control terminal		
41	CD_LOE_LIM_SW	I	CD detection terminal (Chucking SW)		H: Loading completed, L: No disc
42	CD_LOS_SW	I	CD loading detection terminal		L: Ejection completed
43	CD_DISC12_SW	I	CD disk detection terminal (12cm)		L: 12cm disc
44	PAN_SC_CON	O	Panel operation control terminal CE when re-writing system μ -com		H: In normal condition, L: Stop the panel
45	CD_LOEJ	I/O	CD motor control terminal		
46	S_SOC_REQ	I	Communication request from SOC to system μ -com (SOC \rightarrow System μ -com)		
46	NC	O	Not used (Models without USB)		Output is fixed to L
47	SOC_SSTOP	O	SOC stop terminal		H: Normal, L: Stop SOC
47	CD_SRAMSTB	O	Decoder SRAM STANDBY control (Models without USB)		L: SRAM standby (6E**)
48	SOC_SRST	O	SOC reset terminal		H: Normal, L: Reset (Bolero)
48	CD_RST	O	CD mechanism μ -com RST terminal		H: Normal, L: Reset
49	S_SYS_REQ	O	Communication request from system μ -com to SOC (System μ -com \rightarrow SOC)		
49	CD_CCE	O	Command I/F CD mechanism chip enable terminal		
50	SOC_MUTE	I	DAC mute request		H: Mute request, L: In normal condition
50	CD_MUTE	I	DAC mute request		L: Mute request, H: In normal condition
51	PON_D5V	I/O	For USB /FDC 5V power supply control terminal		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 (Models without BT/Models without OEM_DISP)		Output is fixed to L

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Truth value table	Processing Operation Description
54	OEM_DISP_CLK	I/O	External display CLK		External display
54	NC	O	Not used (Models without BT/Models without OEM_DISP)		Output is fixed to L
55	OEM_DISP_CE	I/O	External display control request		External display
55	NC	O	Not used (Models without BT/Models without OEM_DISP)		Output is fixed to L
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 (including while receiving RDS): H POWER OFF: L, STBY source: L
58	NC	O	Not used (Models without EXT_AMP)		Output is fixed to L
59	ILLUMI_DET	I	Dimmer illumi detection		L: ON, H: OFF
60	VCC2	-			
61	MUTE_0	O	EVOL FRONT MUTE control		L: Mute ON, Independent setup of time constant 10ms, H: In normal condition
62	VSS	-			
63	MUTE_1	O	EVOL REAR MUTE control		L: Mute ON, Independent setup of time constant 10ms, H: In normal condition
64	MUTE_2	O	IC-2 SW MUTE control		L: Mute ON, Independent setup of time constant 10ms, H: In normal condition, Shall be shared 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 more
66	NC	O	Not used		Output is fixed to L
67	BT_RST	O	BT module reset terminal		H: Normal, H: BT reset
67	NC	O	Not used (Models without BT)		Output is fixed to L
68	NC	O	Not used		Output is fixed to L
69	MUTE_SA	I/O	IC-2 MUTE_A control Spectrum analyzer MUTE		L: Mute ON, Independent setup of time constant 0.5ms, Hi-Z: In normal condition
70	PWIC_DC_DET	I	DC offset detection terminal		
71	ACC_DET	I	ACC detection		ACC detected: L, ACC not detected: H
72	BU_DET	I	BU detection		BU detected: L BU not detected/Reduced voltage/Over-voltage: H
73	LX_REQ_S	I	Communication request from slave unit		
73	NC	O	Not used (Models not-supporting LX-BUS)		Output is fixed to L
74	MUTE_AFS	I/O	IC-2 MUTE_C control AFS MUTE		L: Mute ON, Independent setup of time constant 0.5ms, Hi-Z: In normal condition
74	MUTE_AFS (Not-used)	I	Not used		Input is fixed to Hi-Z
75	SDA/EVOL_SDA	I/O	Data output from system μ -com to E.VOL (System μ -com \rightarrow E.VOL data output)		Communication speed 200-400k
75	PBOOK_SDA	I/O	Data for BT telephone book memory		
75	SDA/E2P_SDA	I/O	I2C data for ROM correction		Communication speed 200-400k
76	SCL/EVOL_SCL	I/O	Output from system μ -com to EVOLCLK (System μ -com \rightarrow EVOLCLK output)		Communication speed 200-400k
76	PBOOK_SCL	I/O	Clock for BT telephone book memory		
76	SCL/E2P_SCL	I/O	I2C clock for ROM correction		Communication speed 200-400k
77	PWIC_MUTE	O	Power IC MUTE terminal		While in STANDBY source, or momentary power down: L While TEL MUTE: L
78	PWIC_STBY	O	Power IC standby terminal		POWER ON: H, POWER OFF: L

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Truth value table	Processing Operation Description
79	LX_REQ_M	O	Communication request to slave unit		
79	NC	O	Not used (Models not-supporting LX-BUS)		Output is fixed to L
80	LX_MUTE	I	Mute request from slave unit		H: Mute ON, L: Mute OFF
80	NC	O	Not used (Models not-supporting LX-BUS)		Output is fixed to L
81	LX_CON	O	Start-up request to slave unit		H: Slave unit ON, L: Slave unit OFF
81	NC	O	Not used (Models not-supporting LX-BUS)		Output is fixed to L
82	LX_RST	O	Hardware-reset to slave unit		H: Reset, L: Normal
82	NC	O	Not used (Models not-supporting LX-BUS)		Output is fixed to L
83	MUTE_PRE_FR	O	External PREOUT_MUTE F/R		0bit, "L" during momentary power down
84	MUTE_PRE_SW	O	External PREOUT_MUTE SUB MUTE_2 shock noise measure		0bit, "L" during momentary power down Use in addition to MUTE_2.
85	PON_AM	I/O	AM+B power supply control terminal		H: ON when receiving AM, Hi-Z: OFF in other cases
86	TUN_IFC_OUT	I	F/E IFC OUT input terminal		H: Station found, L: Station not found
87	TUN_SMETER	I	S meter voltage detection terminal		
88	RDS_NOISE	I	FM noise voltage detection terminal		
88	NC	O	Not used (Models without RDS)		Output is fixed to L
89	RDS_AFS_M	I/O	Time constant switching when noise is detected		L: During AF search, Hi-Z: In normal condition
89	NC	O	Not used (Models without RDS)		Output is fixed to L
90	TYPE_1	I	A/D 5 patterns	①	Refer to "Destination table"
90	NC	O	Not used (Models without USB)		Output is fixed to L
91	TYPE_2	I	A/D 5 patterns	①	Refer to "Destination table"
91	NC	O	Not used (Models without USB)		Output is fixed to L
92,93	NC	O	Not used		Output is fixed to L
94	AVSS	-			
95	NC	O	Not used		Output is fixed to L
96	VREF	-			
97	AVCC	-			
98	LX_DATA_S	I	Data from slave unit		
98	NC	O	Not used (Models not-supporting LX-BUS)		Output is fixed to L
99	LX_DATA_M	O	Data to slave unit		
99	NC	O	Not used (Models not-supporting LX-BUS)		Output is fixed to L
100	LX_CLK	I/O	LX BUS clock		
100	NC	O	Not used (Models not-supporting LX-BUS)		Output is fixed to L

Truth value table

① Destination setting

Model name	Type1 90	Type2 91	Type1 (90)		Type2 (91)		Features	
			Pull up	Pull down	Pull up	Pull down		
			R645	R644	R643	R642		
KDC-BT838U	1	1	×	22k	×	22k	BT	BLUE
KDC-BT8041U	1	5	×	22k	22k	×	BT	BLUE
KDC-BT8141UY	1	4	×	22k	22k	47k	BT	BLUE
KDC-BT7539U	1	2	×	22k	47k	22k	BT	BLUE

MICROCOMPUTER'S TERMINAL DESCRIPTION

● SUB μ -COM: 92CD28AFG6VV1 (X34-597: IC700)

Pin No.	Pin Name	I/O	Application	Processing Operation Description
1	MRST	-	Reset	L: RESET, H: Normal
2	MSTOP	I	STOP signal from system μ -com (Momentary power down detection / Recovery to low power consumption mode)	H: Normal, L: SOC stop
3	REQ_S	I	REQ signal from system μ -com	L: Request
4	IPOD_RDY	I	RDY signal of IPOD authentication IC	
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	-	Power supply terminal for 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	-	Power supply terminal for built-in logic	
17	DVSS	-	GND terminal	
18~22	NC	O	Not used	Output is fixed to L
23	CD_CCE	O	Command I/F. CD mechanism chip enable terminal	
24	CD_RST	O	RESET. CD mechanism RST terminal	H: Normal, L: Reset
25	NC	O	Not used	Output is fixed to L
26	DVSS	-	GND terminal	
27	DVCC3A	-	Power supply terminal for 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 driver 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 is fixed to L
44	DVSS	-	GND terminal	
45	DVCC3A	-	Power supply terminal for peripheral I/O	
46~61	NC	O	Not used	Output is fixed to L
62	DVSS	-	GND terminal	
63	DVCC3A	-	Power supply terminal for peripheral I/O	
64	NC	O	Not used	Output is fixed to L
65	ZDET_IN	I	ZDET. 0Bit Mute request terminal	L: Mute request, H: In normal condition
66	CD_MUTE	O	Mute request to system μ -com	L: Mute request, H: In normal condition
67	REQ_M	O	REQ signal to system μ -com	L: Request

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Processing Operation Description
68	IPOD_RST	O	RESET	
69	BOOT	I	For writing data in Flash	
69,70	NC	O	Not used	Output is fixed to L
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	-	Power supply terminal for peripheral I/O	
77	USB_OC	I	USB over current detection	L: Detected, H: Normal
78	USB_PON	O	USB PON output	
79	USB_D+	-	USB data connection terminal	
80	USB_D-	-	USB data connection terminal	
81	AM0	-	Operation mode: Fixed to "1"	
82	CD_LOE_LIM_SW	I	CD detection terminal (Chucking SW)	L: Loading completed, H: No disc
83	DVSS	-	GND terminal	
84	DATA_M	O	Serial I/F with system μ -com (Sending)	
85	DATA_S	I	Serial I/F with system μ -com (Receiving)	
86	CLK	O	Serial I/F with system μ -com (Clock output)	f=1M or less
87	CD_SO	O	Command I/F. Serial I/F (Sending)	
87	FLSH_UO	O	For writing data in Flash	
88	CD_SI	I	Command I/F. Serial I/F (Receiving)	
88	FLSH_UI	I	For writing data in 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	-	Power supply terminal for peripheral I/O	
96	NC	I	Not used	
96	ROMCOR_DET	I	ROMCOR writing detection	H: Writing
97~99	NC	I	Not used	
100	DVSS	-	GND terminal	

MICROCOMPUTER'S TERMINAL DESCRIPTION

● PANEL μ -COM: 30624MWPB81GP/30626MJPA23GP (X16-638: IC1)

Pin No.	Pin Name	I/O	Application	Truth value table	Processing Operation Description
1	REMO	I	Remote control signal input		Pulse width detection
2	NC	-	Not used		Output L fixed
3	FL SI1	O	FL display serial data output		Pulse output
4	NC	-	Not used		Output L fixed
5	FL CLK	O	FL display serial clock output		H: Except when data is written (Including STANDBY)
6	BYTE	-	GND		
7	CNVSS	-			
8,9	NC	-	Not used		Output L fixed
10	RESET	-	Reset		Being controlled by system μ -COM H: Normal, L: Reset
11	XOUT	-	Resonator		12MHz
12	VSS	-	GND		
13	XIN	-	Resonator		12MHz
14	VCC1	-	Power supply (5V)		Connects PAN5V
15	NMI	I	Not used		Input fixed
16~19	NC	-	Not used		Output L fixed
20	LED CONT RTY2	O	LED rotary (Multi-key side) PWM output		H: LED ON, L: LED OFF
20	LED CONT BLUE	O	Vari blue PWM output		H: LED ON, L: LED OFF
21	NC	-	Not used		Output L fixed
22	FL BK	O	FL display blanking control		H: FL display OFF, L: FL display ON
23	FL LAT	O	FL display latch control		H: Data through, L: Data latch
24	LED CONT UNDER	O	LED side luminescence (Under FL display) PWM output		H: LED ON, L: LED OFF
24	LED CONT RED	O	Vari RED PWM output		H: LED ON, L: LED OFF
25	NC	-	Not used		Output L fixed
26	LED CONT RTY1	O	LED rotary (VOL side) PWM output		H: LED ON, L: LED OFF
26	LED CONT GREEN	O	Vari GREEN PWM output		H: LED ON, L: LED OFF
27,28	NC	-	Not used		Output L fixed
29	PAN DATA	O	Data transmission from panel		
30	SYS DATA	I	Data reception from system μ -COM		
31	SYS REQ	I	System μ -COM communication request input		H: Data communicated
32	PAN REQ	O	Panel communication request output		H: Data communicated
33	FL SI2	O	FL display serial data output		Pulse output
34	NC	-	Not used		Output L fixed
35	CLK IN	I/O	FL display serial clock input		Inputs FL display clock
36~38	NC	-	Not used		Output L fixed
39	ROMCOR DET	I	ROM correction writing mode		H: Authorization to rewrite in ROM correction (I2C opened)
39	EPM	I	For rewriting in flash ROM (EPM)		Input fixed
40~43	NC	-	Not used		Output L fixed
44	FLASH CE	I	For rewriting in flash ROM (CE)		
45,46	NC	-	Not used		Output L fixed
47	LED CONT FLTOP	I/O	LED side luminescence (Above FL display) SW		H: LED ON, Hi-Z: LED OFF

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Truth value table	Processing Operation Description
48	LED CONT TRI	I/O	Triangle LED luminescence SW		H: LED ON, Hi-Z: LED OFF
49,50	NC	-	Not used		Output L fixed
51	SDA	I/O	Data transmission and reception for ROM correction		Output except when data is read
52	SCL	I/O	Clock for ROM correction		Output except when clock data is read
53~55	NC	-	Not used		Output L fixed
56	ROTALY2 CW	I	Rotary (Multi key) B input		Pulse width detection 1-pulse/2-click, 15-pulse/360°
57	ROTALY2 CCW	I	Rotary (Multi key) A input		Pulse width detection 1-pulse/2-click, 15-pulse/360°
58	ROTALY1 CW	I	Rotary (VOL) B input		Pulse width detection 1-pulse/2-click, 15-pulse/360°
59	ROTALY1 CCW	I	Rotary (VOL) A input		Pulse width detection 1-pulse/2-click, 15-pulse/360°
60	VCC2	-	Power supply (5V)		Connects PAN5V
61	NC	-	Not used		Output L fixed
62	VSS	-	GND		
63~70	NC	-	Not used		Output L fixed
71	SC CON	I	System μ -COM communication Panel operation control		H: Panel operated, L: Panel operation stopped
72	NC	-	Not used		Output L fixed
73	KR2	I	Key return input	①	
74	KR1	I	Key return input	①	
75	NC	-	Not used		Output L fixed
76	KS1	I/O	Key scan output	①	Switches between output-L and Hi-Z
77	KS2	I/O	Key scan output	①	Switches between output-L and Hi-Z
78	KS3	I/O	Key scan output	①	Switches between output-L and Hi-Z
79	KS4	I/O	Key scan output	①	Switches between output-L and Hi-Z
80	KS5	I/O	Key scan output	①	Switches between output-L and Hi-Z
81~90	NC	-	Not used		Output L fixed
91	SA RST	O	Reset output for spectrum analyzer		H: Reset released, L: Reset
92	SA CLK	O	Clock output for spectrum analyzer		
93	SA IN	I	Data input for spectrum analyzer		
94	AVSS	-	GND		
95	NC	-	Not used		Output L fixed
96	VREF	-	A/D analog reference voltage		Connects PAN5V
97	AVCC	-	Power supply (5V)		Connects PAN5V
98~100	NC	-	Not used		Output L fixed

Truth value table

① KEY MATRIX

	KR1 (Pin 74)	KR2 (Pin 73)
KS1 (Pin 76)	TI	AM
KS2 (Pin 77)	MENU	<<
KS3 (Pin 78)	AUDIO	PLAY
KS4 (Pin 79)	ATT	>>
KS5 (Pin 80)	N/A	FM

TEST MODE

● How to enter the test mode

Press and hold the [FNC] and [EJECT] 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
- DISPLAY TYPE is TYPE A, SIDE is Display Tag.
- TUNER source display shall be as shown below:
<For European models> Upper row = PS/Frequency, Middle row = Spectrum analyzer/Clock, Lower row = Date
<For models of destination "K" and "M"> Upper row = SNPS, Middle row = Spectrum analyzer/Clock, Lower row = Date
- CD/USB source display shall be as shown below:
Upper row = P-TIME, Middle row = Spectrum analyzer/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.

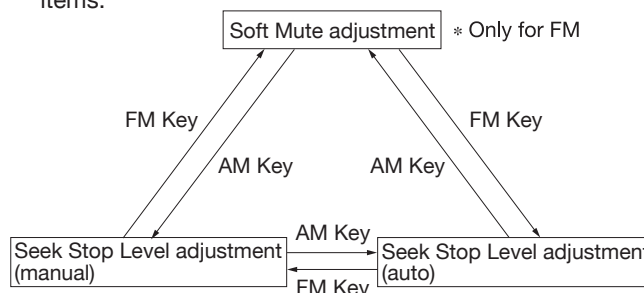
(*1) Only in the test mode, [1] key, [2] key, [3] key, [4] key, [5] key and [6] key shall be displayed on the multi-function key.

1. Press the [FNC] key briefly to make the multi-function display.
2. Rotate the control knob on the right side and use the [◀◀] / [▶▶] keys to display the target key in the center.
3. Press the [▶|] key briefly to finalize the display.

(*2) Perform the same operations as above on the keys, [1], [2], [3], [4], [5], and [6] of the remote controller.

● 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 98.3MHz.
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 (which can be pressed and continuously held) to set the value between 0 (18dBμ) and F (36dBμ).
- 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.

TEST MODE

- 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.)

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 (which can be pressed and continuously held) to manually adjust the seek stop level between 0.00 and 4.49V (K/M), and between 0.00 and 4.70V (E), depending on the destination.
* 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 automatic measurement (European model)

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 source

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

- "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 band, 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).
(*1) Only in the test mode, [1] key, [2] key, [3] key and [6] key shall be displayed on the multi-function key.
 1. Press the [FNC] key briefly to make the multi-function display.
 2. Rotate the control knob on the right side and use the [◀◀] / [▶▶] keys to display the target key in the center.
 3. Press the [▶|] key briefly to finalize the display.
- (*2) Perform the same operations as above on the keys, [1], [2], [3], and [6] on the remote controller.

● AUDIO adjust mode

- Press the [AUD] key briefly to enter the audio adjustment mode.

TEST 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 [◀◀] / [▶▶] 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 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.
- Only in the Test mode, add [PH-SEL] (Phone Selection) in the multi-function display of the STANDBY source and this shall be included in the initial item (and shall be located at the top of the item).
- The initial item in TUNER source MENU source during the Test mode shall be selectable between Seek ON and OFF. (European model)
- 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.

● Bluetooth

- Connect the unit with the Test mode counterpart unit and follow the below procedure to do the Audio Loop Back test.
- While in the source is STANDBY, press and hold the [ATT] key for 1 second to initialize the BT memory information to the factory setup.

During the initialization, the message “Initialize....” blinks (at the period of 1Hz) and at the completion of the initialization the message, “BT_MEM_INIT_OK” is displayed. (In the case of unsuccessful initialization, the message, “BT_MEM_INIT_NG” is displayed.)

- Factory setup
Pairing information (Flash Memory) cleared
Telephone number preset (E2PROM) cleared
Friendly name “KENWOOD BT CD/R-2P2” written
PIN code “0000” written

● Audio Loop Back

Audio Loop Back test can be carried out with BT Audio source in the Test mode.

(Note: After the Audio Loop Back test, “CK5050” is added to the list of registered units. After the completion of the test, without fail reset to the factory setup using the above procedure.)

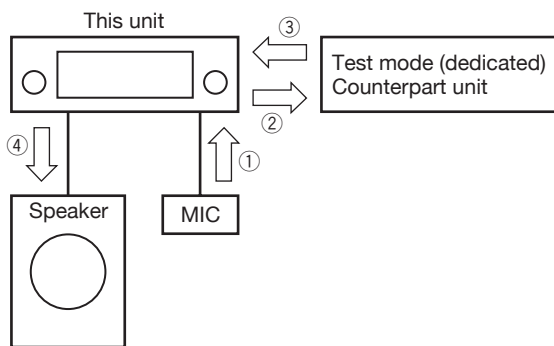
1. Add [PH-SEL] (Phone Selection) in the multi-function of the STANDBY source in the test mode, and the [PH-SEL] shall be included in the initial item.



2. While in the source is STANDBY, press the [FNC] key briefly to show the multi-function display and press the [▶] key briefly to enter the Phone Selection mode (Counterpart unit selection mode).

TEST MODE

- In the Phone Selection mode in the Test mode, 5 counterpart units are listed. Rotate the control knob on the right or use the [FM] / [AM] key to select the desired counterpart unit, and then press the [◀◀] / [▶▶] key briefly to connect with the counterpart unit.
- The symbol, * lights up at the left side of the selected counterpart unit name and the Audio Loop Back test mode turns ON after the completion of the connection.
- Turn [SRC] key briefly twice to switch the source to the BT Audio.
- When the source is BT Audio, voice from the Mic can be heard from the Speaker as shown in the below illustration, where the voice passes through the paths, ① through ④.



● ROM data transfer

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

- While in the source is STANDBY, press the [FNC] key briefly to show the multi-function display and press the [▶] key briefly to enter the Menu.
- Rotate the control knob on the right or use the [◀◀] / [▶▶] keys to select ROM Read Mode or ROM Write Mode in the MENU items and press and hold the [▶] key for 1 second to turn on the Mode.

Operation	Display	Description
Start resetting by pressing "[FNC] key + [EJECT] key"	All lights ON	Test mode ON
Press [FNC] key to select [Menu] mode.	"ROM_Read_Mode"	Front-end→Mother Process to transfer data
	"ROM_Write_Mode"	Mother→Front-end Process to transfer data

Operation	Display	Description
(In the above ROM Read Mode) Press and hold [▶] key (for one second) to select Yes.	"ROM_Reading..."	Front-end→Mother ROM data transfer in progress
	"ROM_Read_OK"	Front-end→Mother ROM data transfer OK
	"ROM_Read_NG"	Front-end→Mother ROM data transfer NG
(In the above ROM Write Mode) Press and hold [▶] key (for one second) to select Yes.	"ROM_Writing..."	Mother→Front-end ROM data transfer in progress
	"ROM_Write_OK"	Mother→Front-end ROM data transfer OK
	"ROM_Write_NG"	Mother→Front-end ROM data transfer NG

● Dual Zone

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

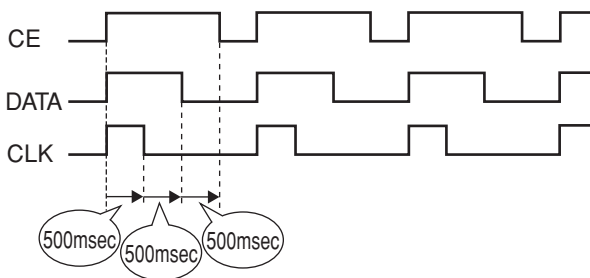
● Backup current measurement

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.)



● 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**** *1 "BOL ROM" can be shown only in the model with USB.
----------	---

TEST MODE

[▶▶] key	Key pressed briefly: AUDIO data initialization (Display) AUD_INIT
[◀◀] key	Key pressed briefly: Forced Power OFF data displayed. Press and hold: To clear the forced power OFF information. (Press and hold for 2 seconds while the forced power OFF data is displayed.) (Display) POFF_ - - - (No Forced Power OFF) SEC (Forced Power OFF because of missing Security Code) PNL (Forced Power OFF because of system μ-com and panel communication error)
[AUD] key	Key pressed briefly: iPod authentication IC installation status display (Display) iPod_ OK_ (Installation status OK) NG (Installation status NG)
[FNC] key	Key pressed briefly: Multi-function display Press and hold: Version & Service information display mode ON Refer to the Table 1.
[1]~[6] Key (Remote controller)	Key pressed briefly: Version & Service information display mode ON Refer to the Table 1.
[▶] key	Key pressed briefly: CD information display mode ON Refer to the Table 2.

Table 1 - Version & Service information display mode

[AM] key ↑	[1] key (Remote controller)	Key pressed briefly: Version is displayed (Switching) (Display) C0715WK_SYS1.23 (Display) STYPE: xx_PAN1.11 (Display) PTYPE: x__ *1 STYPE indicates system μ-com destination, and PTYPE indicates panel μ-com destination, and show real-time condition of the destination terminal ↓↑ Use the remote controller [1] key or the [◀◀] / [▶▶] keys to switch. (Display) BT_VER : HWxxx_SWxxx (BT module H/W & S/W Version) (Display) ADDR : xxxxxxxxxxxx (BT module Address) (Display) PIN : xxxxxxxx (BT module PIN Code)
	[2] key (Remote controller)	Key pressed briefly: Serial No. is displayed (8 digits) (Display) SNo_XXXXXXXX
[FM] key ↓	[3] key (Remote controller)	Key pressed briefly: 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)

[AM] key ↑ ↓	[4] key (Remote controller)	Key pressed briefly: 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 (Remote controller)	Key pressed briefly: Number of CD EJECT times is displayed. (Display) EjeCnt_ xxxxxx 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 ↑ ↓	[FM] 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 “△/△”.
	[AM] key	CD loading error log display (Display) Load_Error____ (Display) __ (1) xx__ (2) xx (Number of times is displayed for “xx”). MAX 99 (times)
[FM] key	[AM] key	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)
	[FM] key	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)
[▶] key	[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	[FM] 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.

TEST MODE

● Other

- When Power ON, do not display “CODE_NG”, “CODE_OFF”, and “CODE_ON”.
- 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 models)
- 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, when DC offset error detection is run, the detection information is not written into the E2PROM.
- DEMO mode shall not be operated while in the Test Mode, Backup/Installer Memory & CD Mechanism Information & Service Information & DC Error Detection Information & BT Memory Information Clear Mode, or DC Error Detection Information Clear Mode.
Also, do not display DEMO ON/OFF option items in the MENU in STANDBY source in the above modes.

● Panel combination check

In order to avoid improper combination of the unit and panel, the following messages are shown in the STANDBY source during the Test mode. The message is decided based on the combination of System μ-com and panel.

<Mother for K destination + Panel for K destination >
<Mother for E destination + Panel for E destination>
<Mother for M destination + Panel for M destination>

	OK!
--	-----

< Mother for K destination + Panel for E destination>

NG	NG!
_Mother:K_with_BT	
Panel:E_with_BT	

<Mother for K destination + Panel for M destination>

NG	NG!
_Mother:K_with_BT	
Panel:M_with_BT	

<Mother for E destination + Panel for K destination>

NG	NG!
_Mother:E_with_BT	
Panel:K_with_BT	

<Mother for E destination + Panel for M destination>

NG	NG!
_Mother:E_with_BT	
Panel:M_with_BT	

<Mother for M destination + Panel for K destination>

NG	NG!
_Mother:M_with_BT	
Panel:K_with_BT	

<Mother for M destination + Panel for E destination>

NG	NG!
_Mother:M_with_BT	
Panel:E_with_BT	

[Note]

1. The above indication of the “NG” message is based on the decision made by the panel μ-com. In the panel μ-com of the model that is already T/O and does not have the integrated BT, the combination with the mother of the model that has the integrated BT is not considered. Thus the indication of OK or NG is not correct for the combination of <Mother of the model with the integrated BT and Panel of the model without the integrated BT>.
2. In the combination of the above 1 and any case of the above NG, the power is forcedly turned off if the unit is normally started up (not in the Test mode startup).

● Clearing the Backup/Installer memory & CD mechanism information & service information & DC error detection information & BT memory information (Clearing E2PROM data within the front end)

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

TEST MODE

[Service Information]

- Displays power ON time is displayed.
- Displays CD operation time.
- Displays number of CD EJECT times.
- Displays forced Power OFF data.

[DC offset error detection information]

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

[BT memory information]

- Pairing information
- Preset telephone number information
- Friendly name (Setup)
- PIN code

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

When successfully completed

```
E2P_CLR:○
BT_CLR :○
```

When finished but unsuccessful 1: Initialization of BT memory information is NG

```
E2P_CLR:○
BT_CLR :×
```

When finished but unsuccessful 2: Initialization of E2PROM in TUNER PACK is NG

```
E2P_CLR:×
```

When finished but unsuccessful 3: Initialization NG

```
E2P_CLR:×
```

(Note)

It takes about 10 seconds to initialize BT memory information and during this initialization process the following “-” is shown that indicates the “Not-yet-decided” status.

```
E2P_CLR:○
BT_CLR :-
```

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.

Do not touch any key in this mode (while in clearing).
Never turn ON or OFF in this mode.

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

1. Press and hold [ATT] and [AUD] 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 (Models for destination “K” and “M”)

FM: 50kHz↔200kHz, AM: 9kHz↔10kHz

- While power is OFF, press and hold [FNC] and [AUTO]/[TI] keys, and press [SRC] key to power ON.

● Security

How to enter the forced POWER ON mode

While “_ _ _ _” is being displayed, while simultaneously pressing [FNC] key and [▶] 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 (inside the front-end) (code security models)

1. Enter the test mode. (Refer to “How to enter the test mode”.)

TEST MODE

2. Press the [FNC] key briefly to make the multi-function display and press the [▶|] key briefly to enter the MENU.

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

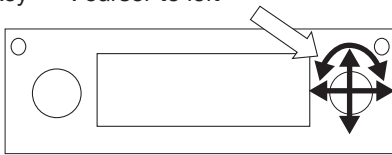
3. Enter codes with the operation knob in the right side or with the [FM] / [AM] and [◀◀] / [▶▶] keys.

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 μ -com is reset.
* While power-on, even if the IC2VI DCErr output terminal logic recovered to normal level value, the error condition shall continue.
- Prohibit to save the backup/installer memory to E2PROM (nonvolatile memory).

● Controlling μ -com terminal

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

DC OFFSET ERROR

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

● Key specification

- Other keys than eject and power keys are invalid.

● Display specification

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

Display example



● Cancel Condition

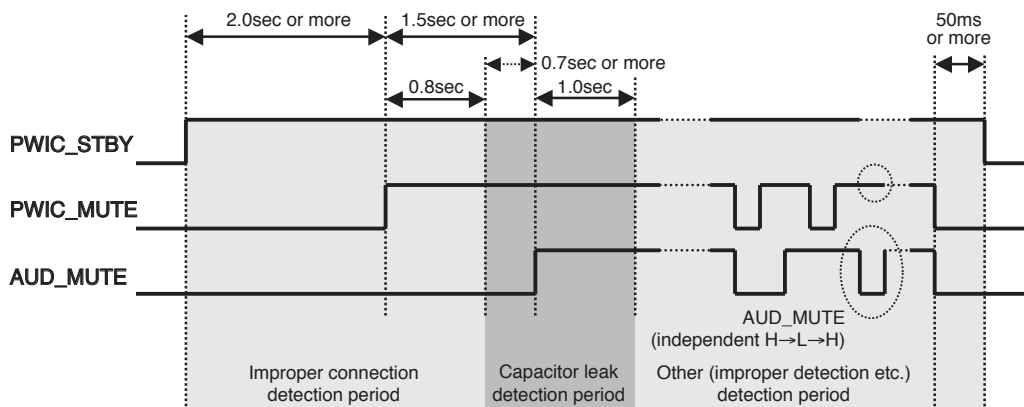
- Press the Reset terminal on the main body. Or set Back-up to OFF (Unplug and plug back in the DC connector). The history is maintained (E2PROM data is saved).
- If DC error is detected during the capacitor leak detection period, the clearing the error by the reset is limited to 4 times. The startup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

● Note while in the test mode

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

● Other

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



OTHER

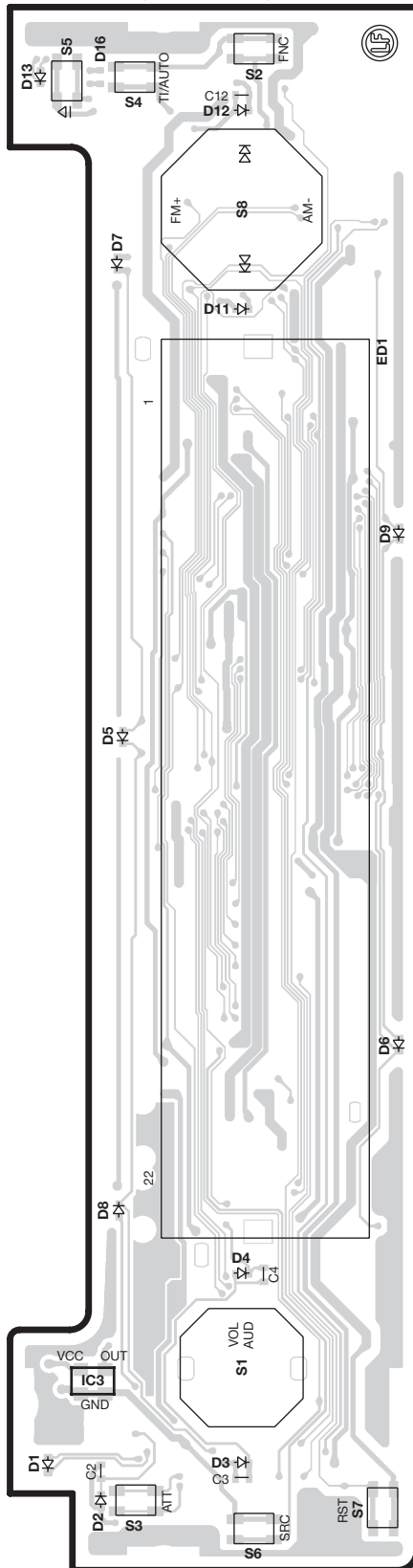
The explanations for the following items are same as those for the 06 model (U717, KDC-W7534U/W7534UY/X890/X9533U).

Refer to the service manuals for these models.

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

PC BOARD (COMPONENT SIDE VIEW)

SWITCH UNIT
X16-638x-xx (J76-0503-12)

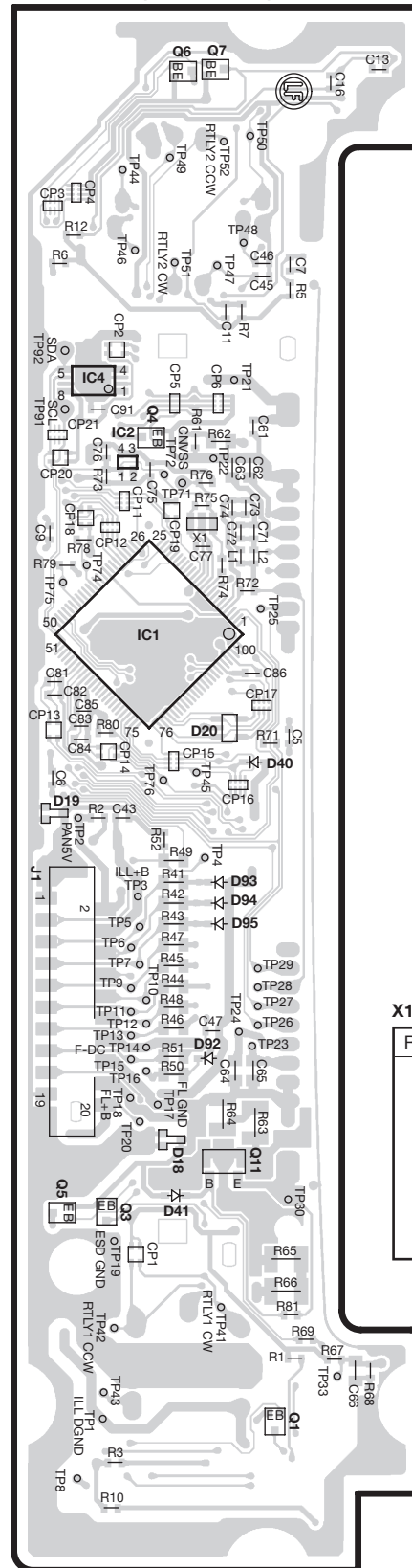


X16-638x-xx

Ref. No.	Address
IC3	6A

PC BOARD (FOIL SIDE VIEW)

SWITCH UNIT
X16-638x-xx (J76-0503-12)



X16-638x-xx

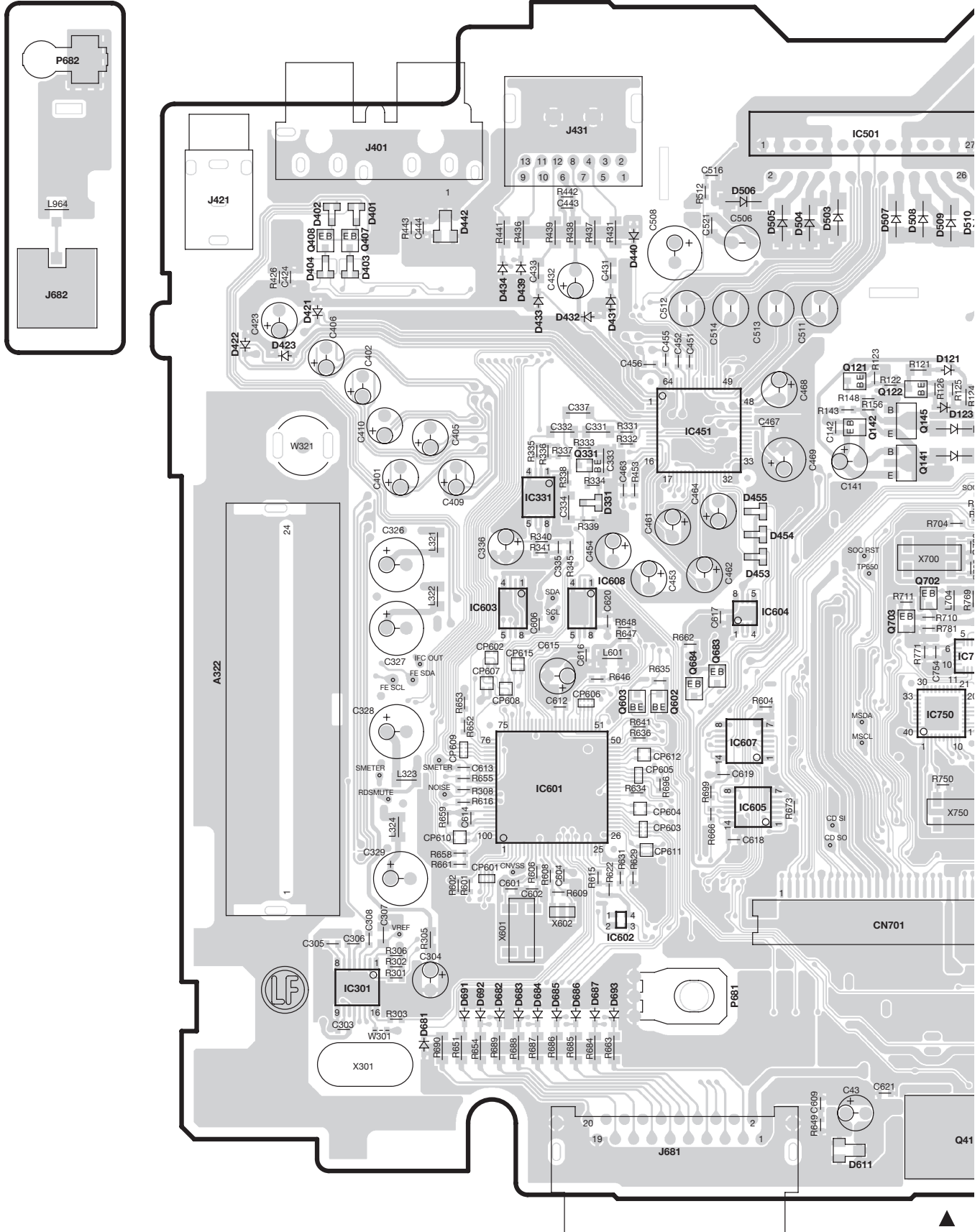
Ref. No.	Address
IC1	4C
Q1	6D
Q3	6C
Q4	3C
Q5	6C
Q6	2D
Q11	5D

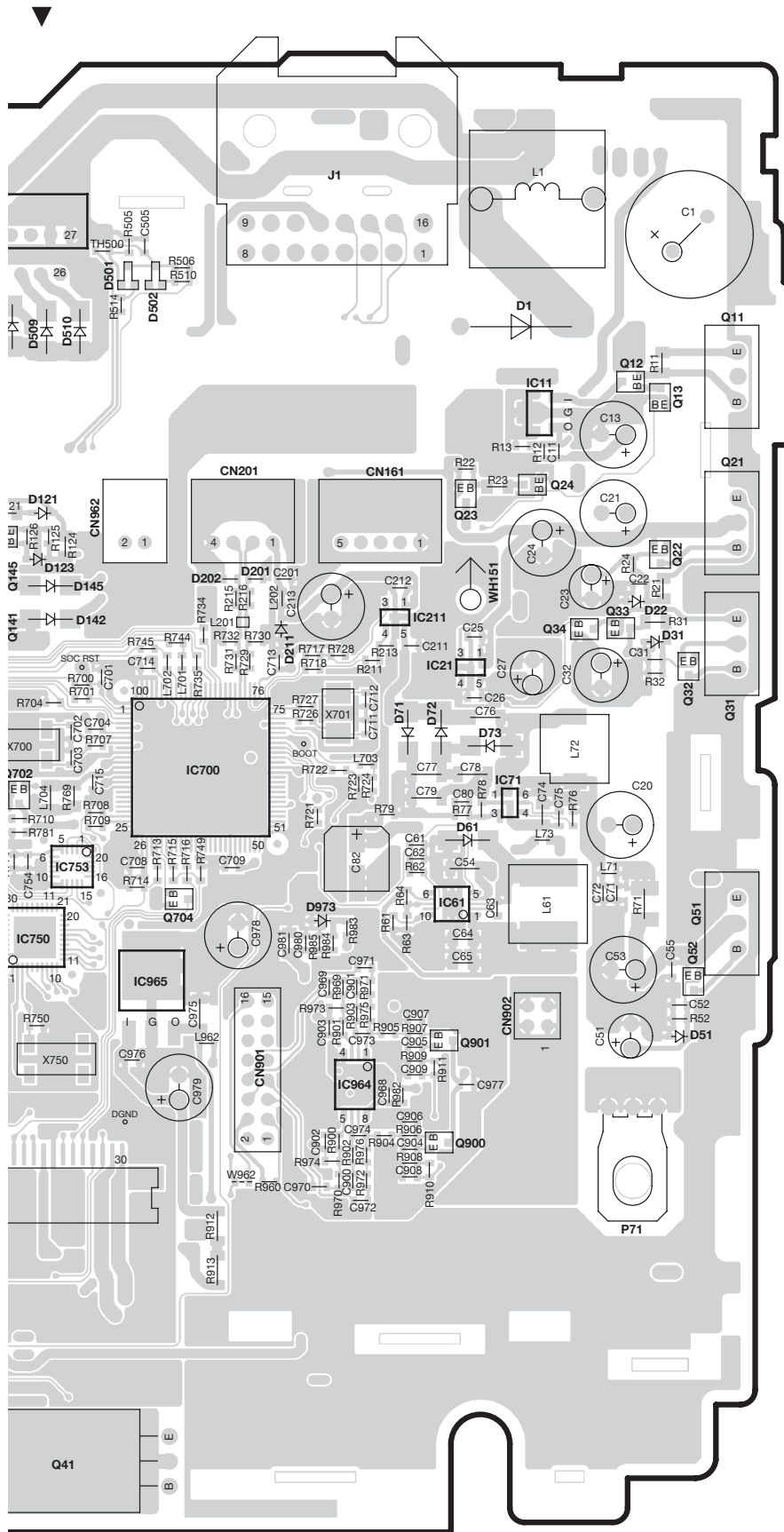
Refer to the schematic diagram for the values of resistors and capacitors.

PC BOARD (COMPONENT SIDE VIEW)

ELECTRIC UNIT
X34-597x-xx A/2 (J76-0516-12)

X34 B/2





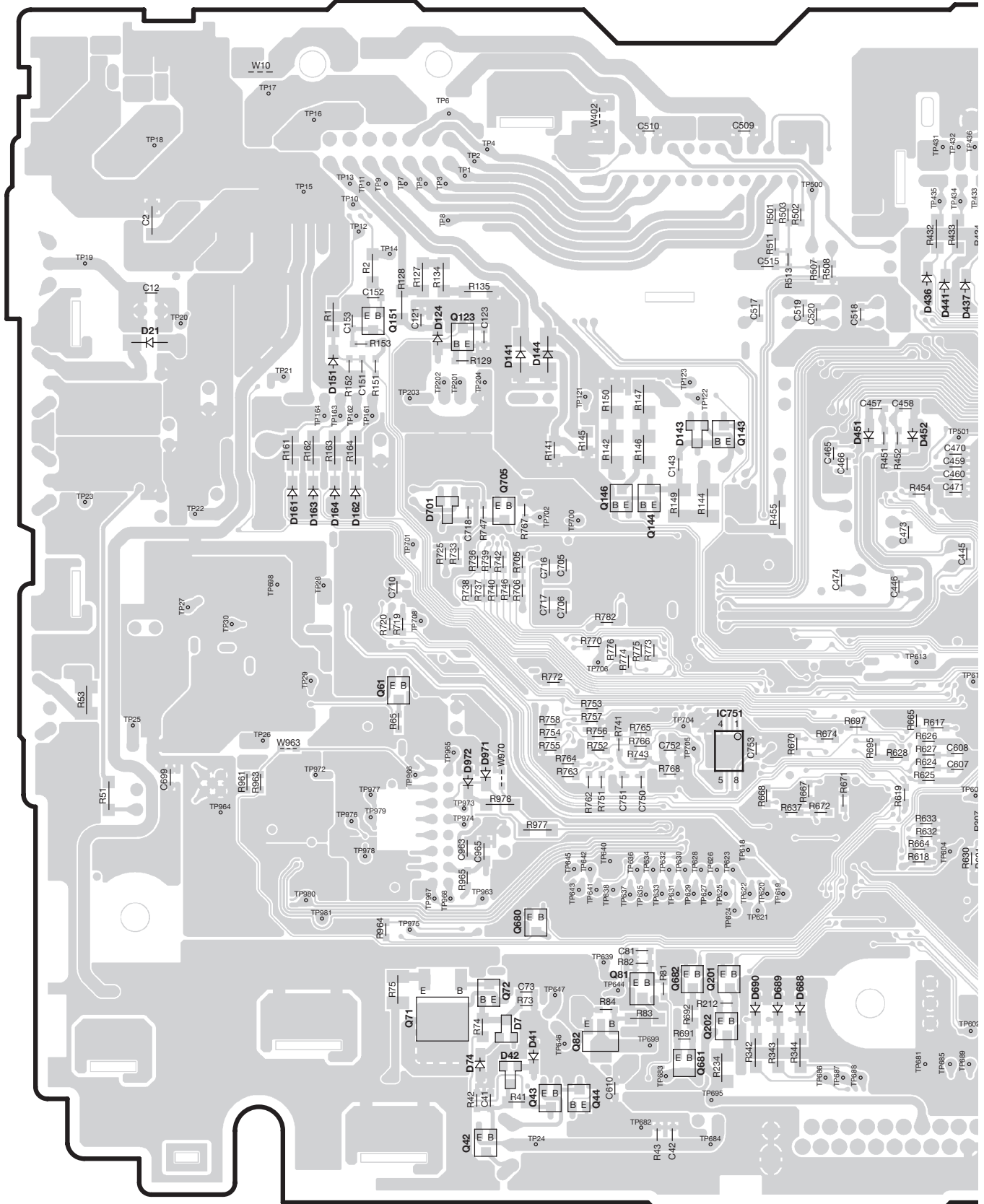
X34-597x-xx

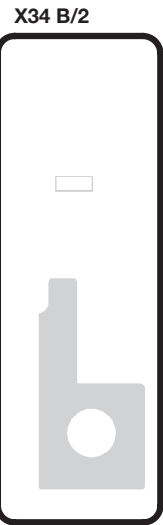
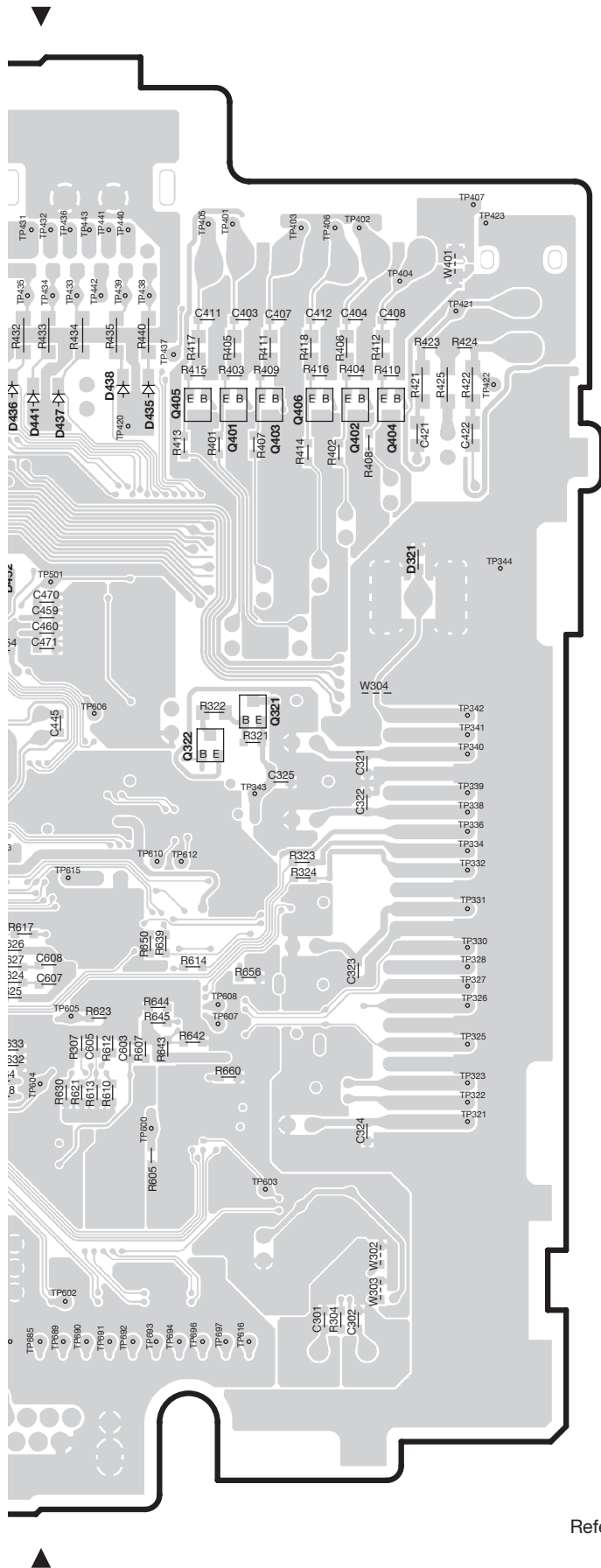
Ref. No.	Address
IC11	3M
IC21	4L
IC61	5L
IC71	4L
IC211	4L
IC301	6H
IC331	4H
IC451	3I
IC501	2J
IC601	5I
IC602	6I
IC604	4J
IC605	5I
IC607	5I
IC608	4I
IC700	4K
IC750	5J
IC964	5L
IC965	5K
Q11	2M
Q12	3M
Q13	3M
Q21	3M
Q22	3M
Q23	3L
Q24	3M
Q31	4M
Q32	4M
Q33	4M
Q34	4M
Q41	7K
Q51	5M
Q52	5M
Q121	3J
Q122	3J
Q141	4J
Q142	3J
Q145	3J
Q331	4I
Q407	3H
Q408	3G
Q602	5I
Q603	5I
Q683	4I
Q684	4I
Q702	4J
Q703	4J
Q704	5K
Q900	5L
Q901	5L

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

PC BOARD (FOIL SIDE VIEW)

ELECTRIC UNIT
X34-597x-xx A/2 (J76-0516-12)





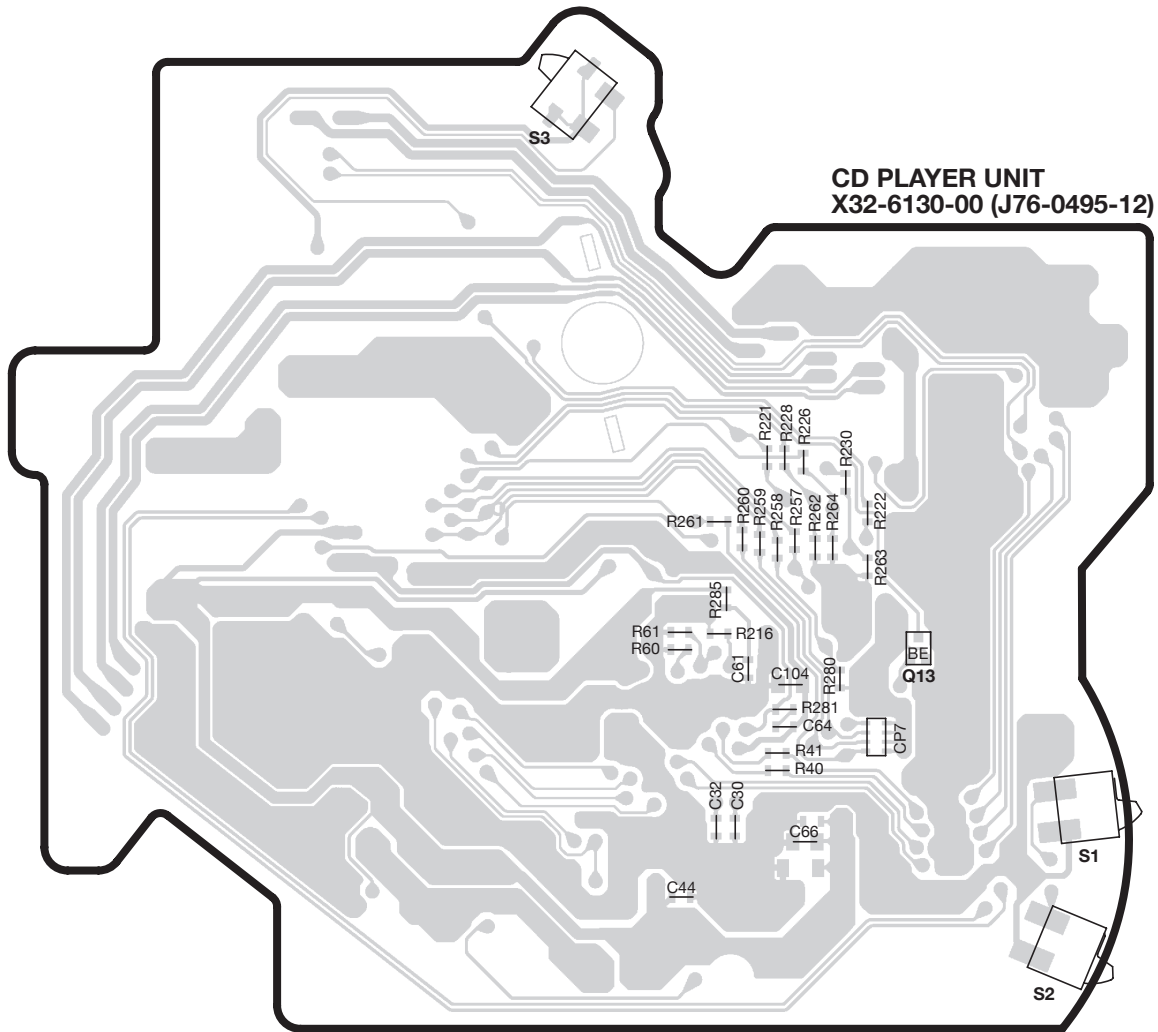
X34-597x-xx

Ref. No.	Address
IC751	5S
Q42	7R
Q43	6R
Q44	6S
Q71	6R
Q72	6R
Q81	6S
Q82	6S
Q123	3R
Q143	3S
Q144	4S
Q146	4S
Q151	3R
Q321	4V
Q322	4U
Q401	3U
Q402	3V
Q403	3V
Q404	3V
Q405	3U
Q406	3V
Q680	6R
Q681	6S
Q682	6S
Q705	4R

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

KDC-BT7539U/BT8041U
/BT8141UY/BT838U

PC BOARD (COMPONENT SIDE VIEW)

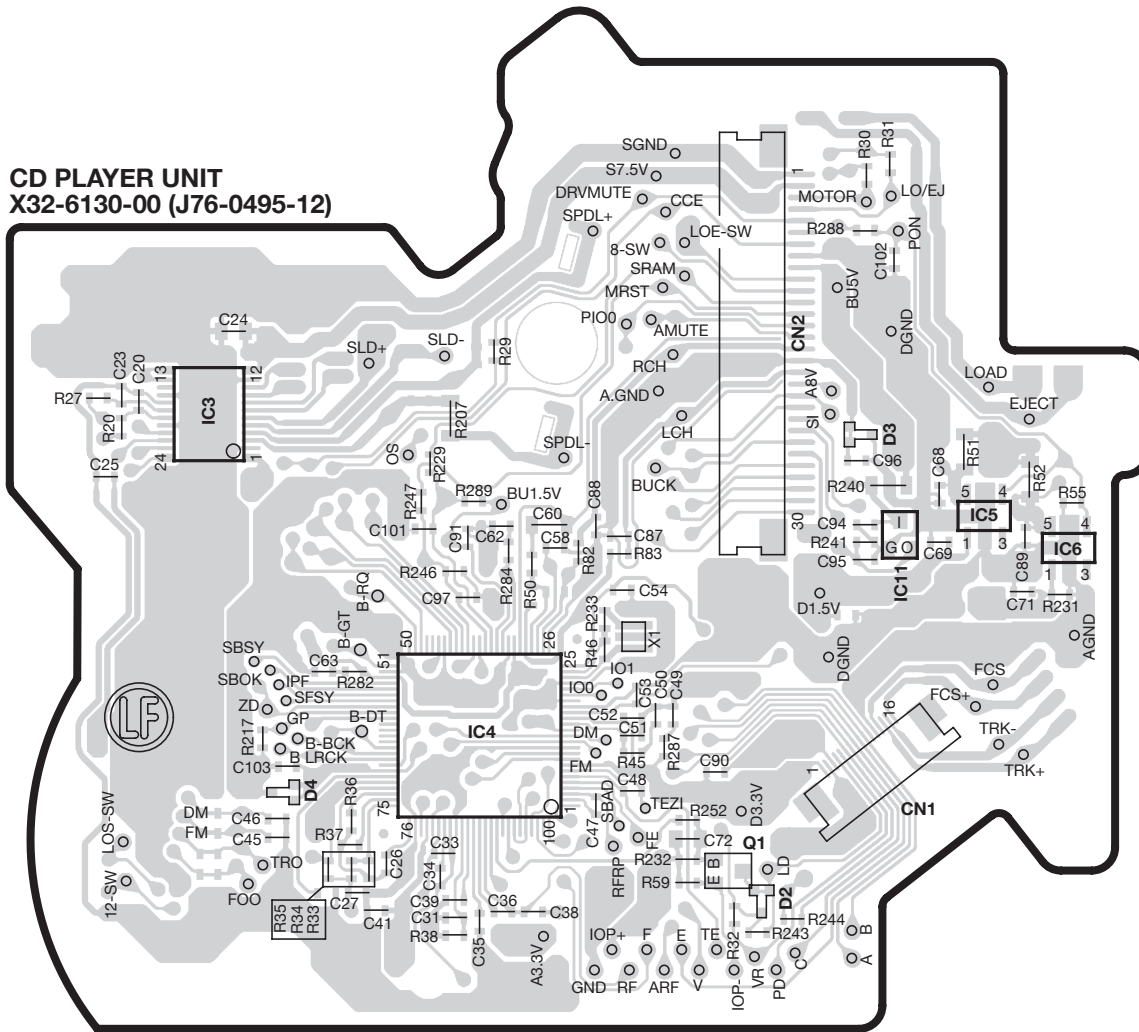


X32-6130-00

Ref. No.	Address
Q13	4AC

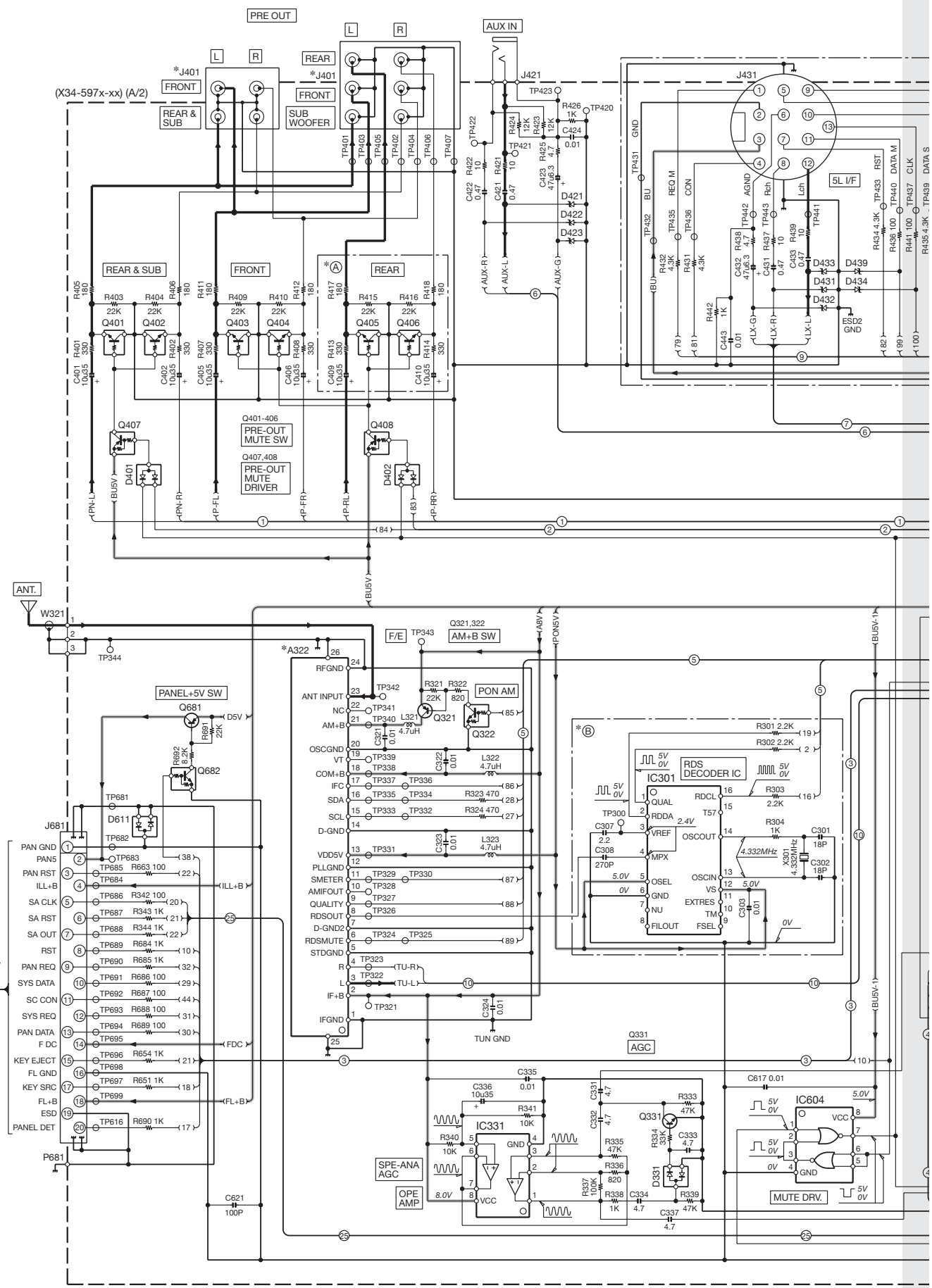
Refer to the schematic diagram for the values of resistors and capacitors.

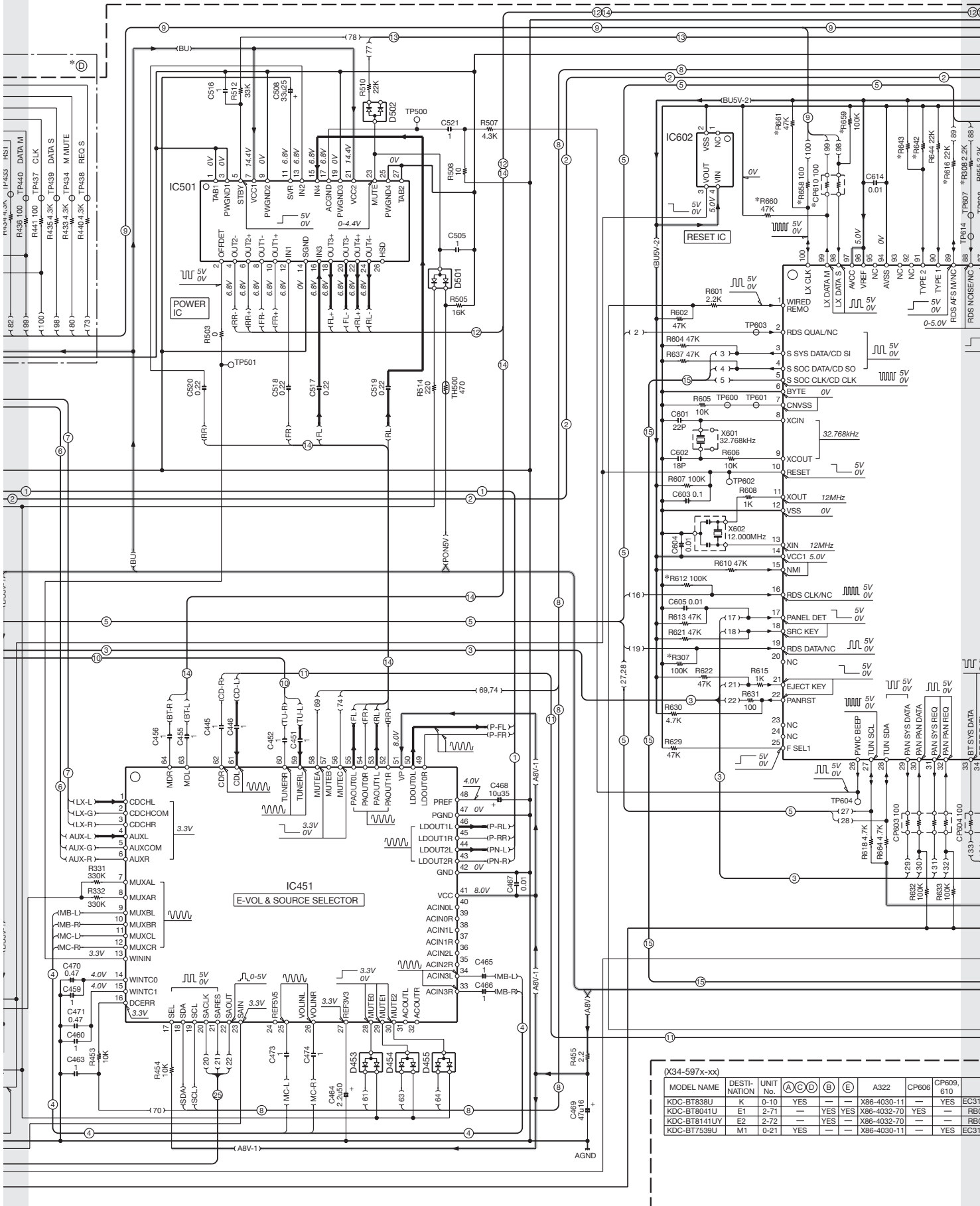
PC BOARD (FOIL SIDE VIEW)

**X32-6130-00**

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

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

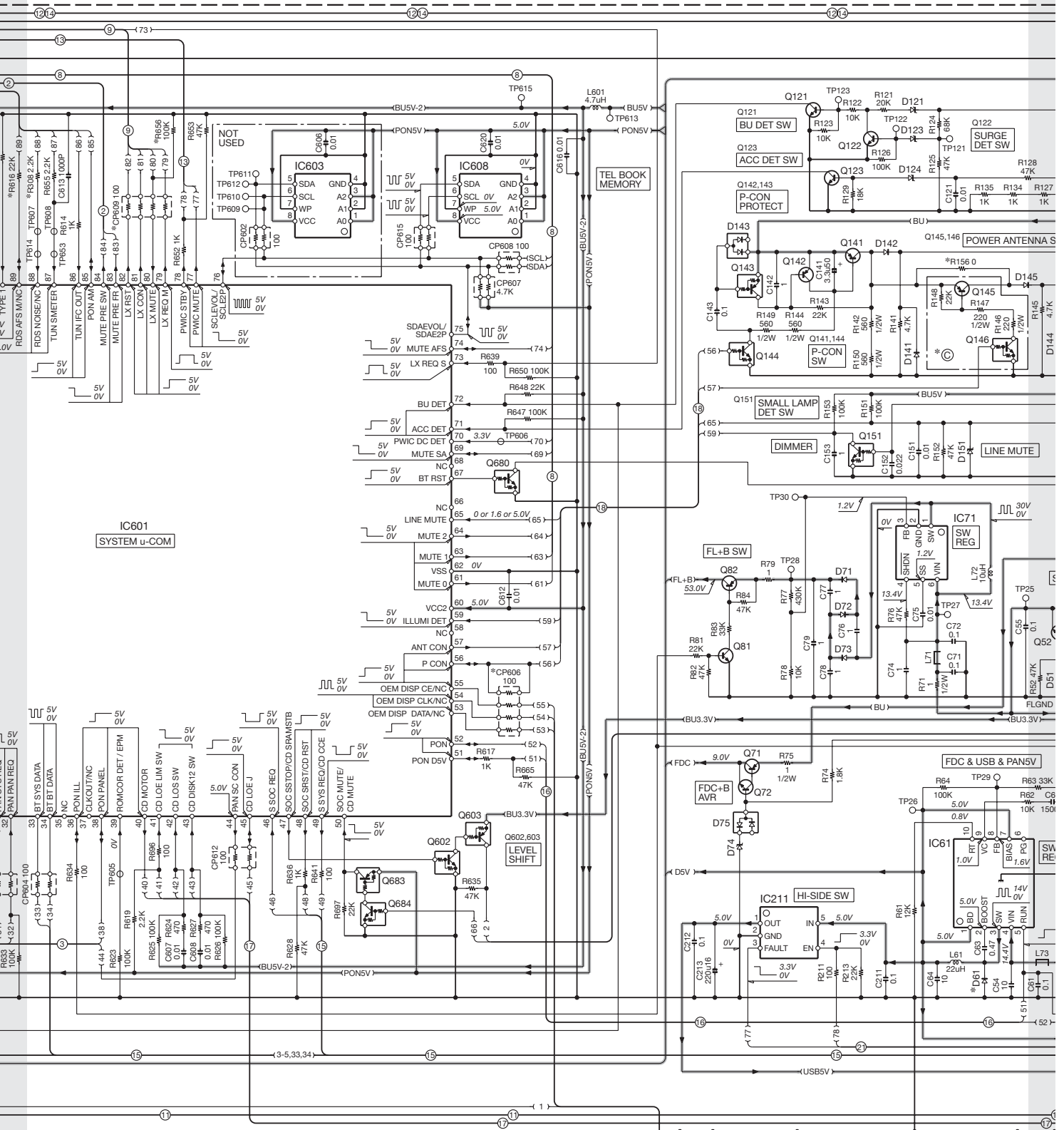




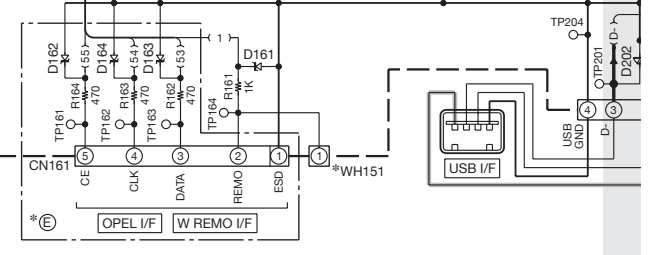
(X34-597x-xx)

MODEL NAME	DESTINATION	UNIT No.	(A)	(C)	(D)	(B)	(E)	A322	CP606	CP609, 610	D
KDC-BT838U	K	0-10	YES	—	—	—	—	X86-4030-11	—	YES	EC310
KDC-BT8041U	E1	2-71	—	YES	YES	YES	—	X86-4032-70	YES	—	RB08
KDC-BT8141UY	E2	2-72	—	YES	—	—	—	X86-4032-70	—	—	RB08
KDC-BT7539U	M1	0-21	YES	—	—	—	—	X86-4030-11	—	YES	EC310

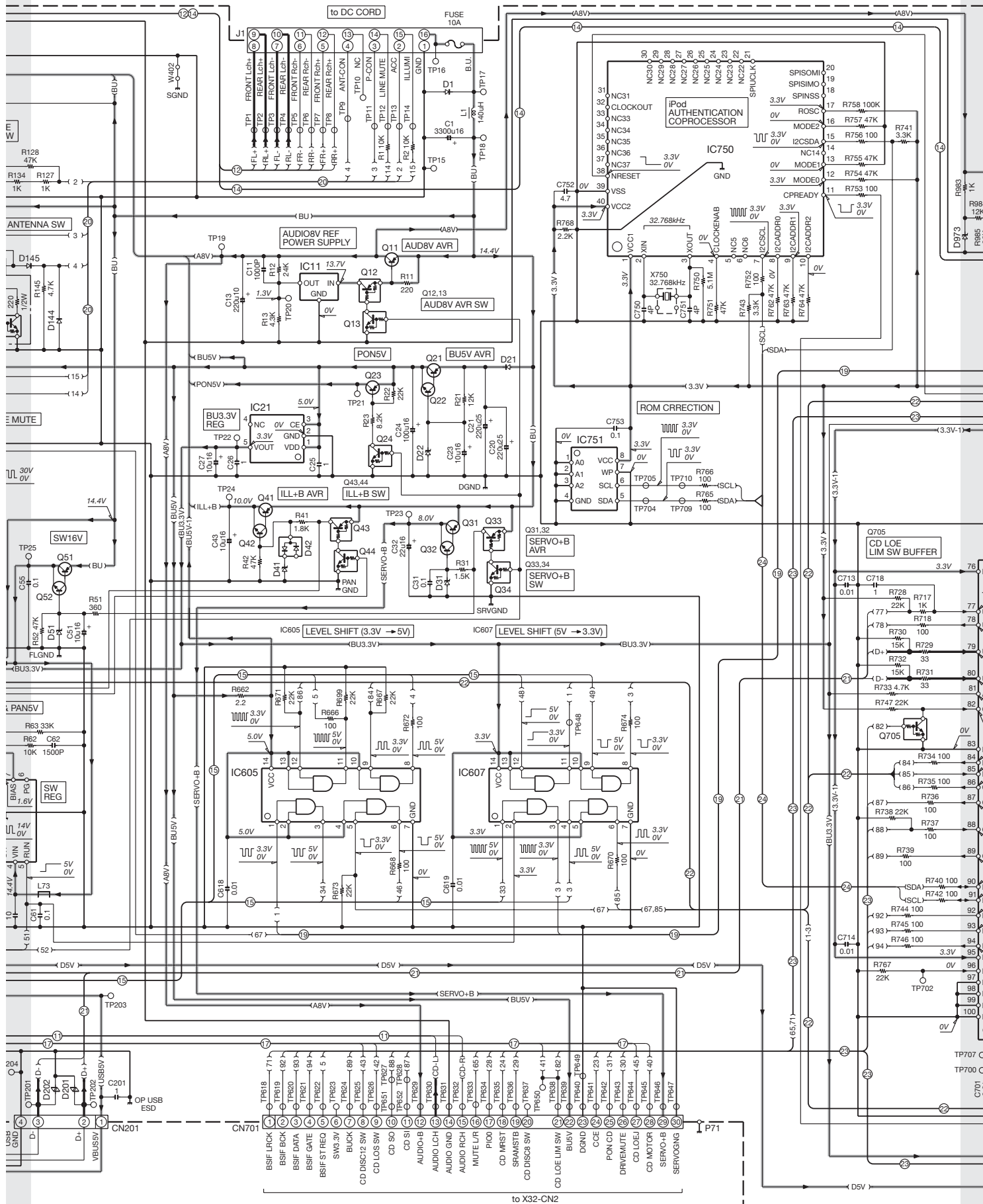
KDC-BT7539U/BT8041U
/BT8141UY/BT838U



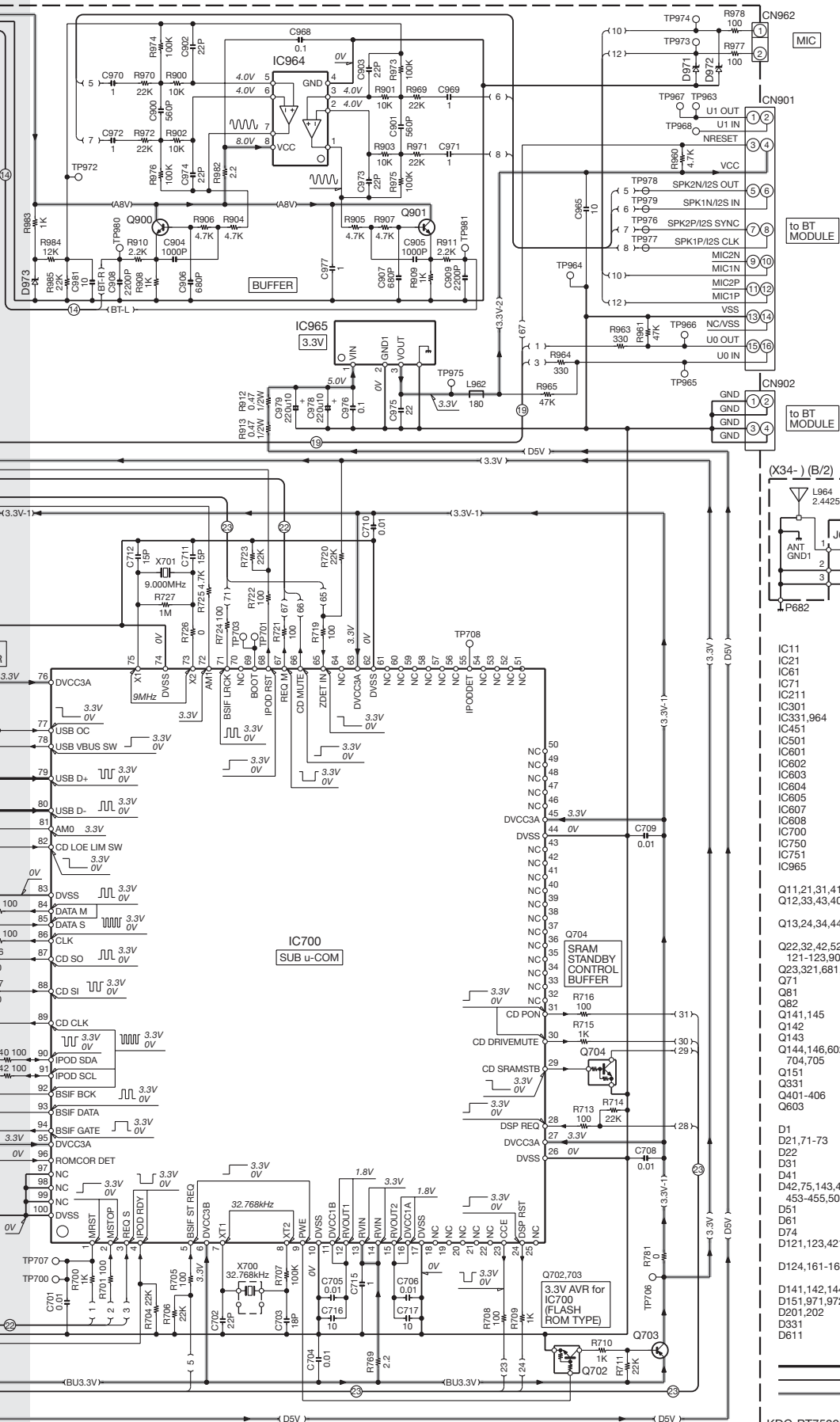
CP809, 610	D61	J401	R156,307,308, 612,616	R642	R643	R656, 658-661	W151
YES	EC31Q0S4AG	3-PRE	-	22K	-	YES	YES
-	RB081L-20	2-PRE	YES	-	22K	-	-
-	RB081L-20	2-PRE	YES	47K	22K	-	YES
YES	EC31Q0S4AG	3-PRE	-	22K	47K	YES	YES



KDC-BT7539U/BT8041U /BT8141UY/BT838U



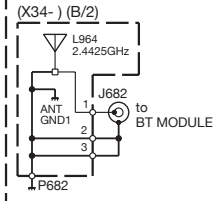
KDC-BT7539U/BT8041U
/BT8141UY/BT838U



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.



IC11	: M5237ML-CF0J
IC21	: R1114N331B-TR
IC61	: LT3684EMSE
IC71	: LT3467A
IC211	: STMP52151STR
IC301	: E-TDA7478AD
IC331,964	: NJM4565V-ZB
IC451	: E-TDA7415CB
IC501	: E-TDA7850A
IC601	: 30626FHP3A7GP
IC602	: XC6120N362N1
IC603	: NOT USED
IC604	: 74HC2G02DP
IC605	: 74AHCT08PW
IC607	: 74LVCO8APW
IC608	: BR24L04FV-W
IC700	: 92CD28AF6GVV1
IC750	: 34TS2084
IC751	: BR24L04FV-W
IC965	: SI-3033KMS

Q11,21,31,41,51	: KTA1046-P
Q12,33,43,407,408,683	: DTA124EUA
Q13,24,34,44,322,680,682	: DTC124EUA

Q22,32,42,52,72,121-123,900,901	: 2SC4081
Q23,321,681,703	: 2SA1577
Q71	: 2SB1184
Q81	: 2SC2713-F
Q82	: 2SB1260
Q141,145	: 2SB1188(Q,R)
Q142	: 2SA1576A
Q143	: DTA114EUA
Q144,146,602,684,702,704,705	: DTC114YUA
Q151	: DTC144EUA
Q331	: 2SC4617
Q401-406	: DTC143TUA
Q603	: DTA114YUA

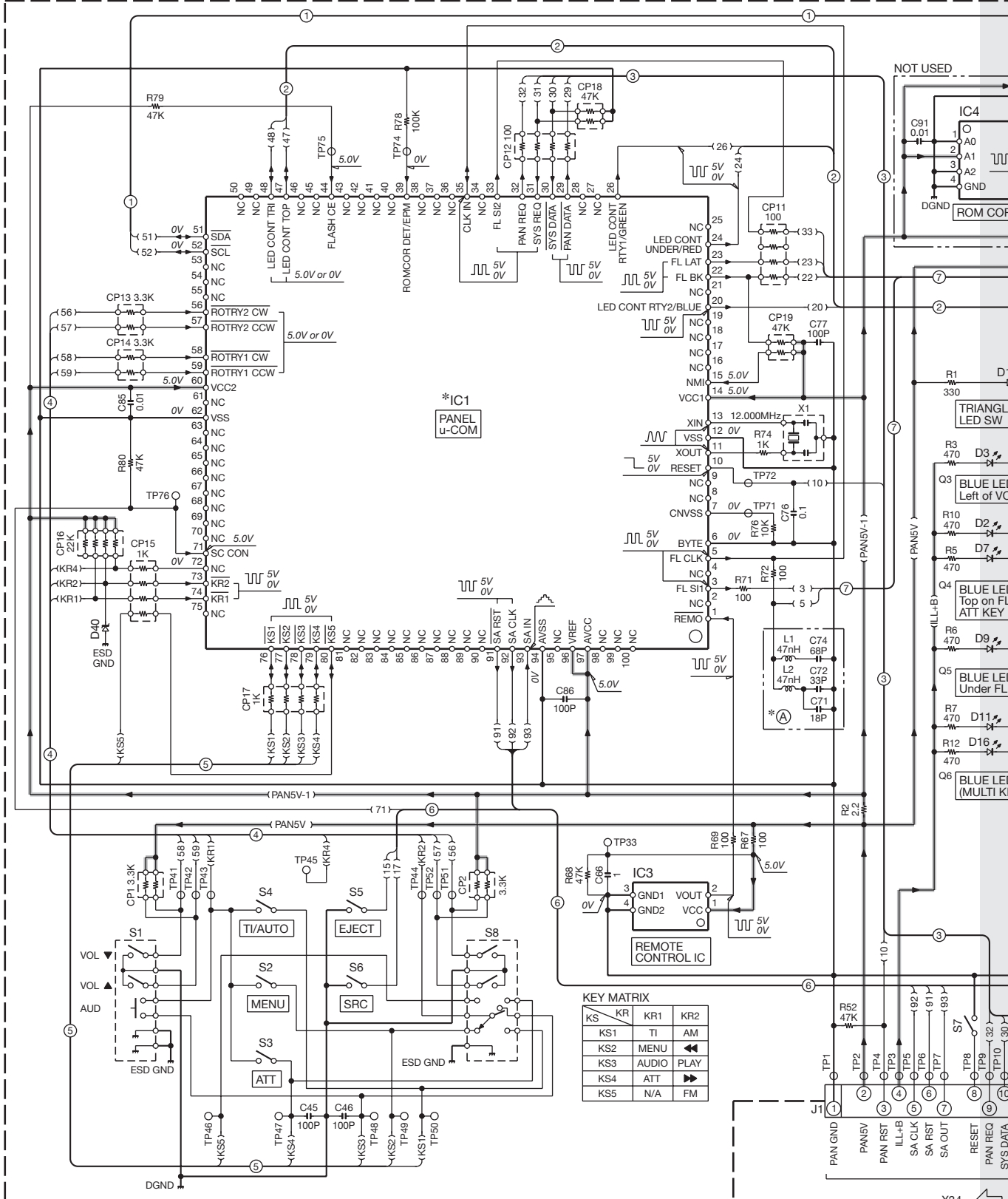
D1	: S2V60-5009F46
D21,71-73	: D1FJ4
D22	: UDZW5.6(B)
D31	: UDZW8.2(B)
D41	: UDZW10(B)
D42,75,143,401,402,453-455,501,502	: DAP202U
D51	: UDZW15(B)
D61	: *
D74	: UDZW9.1(B)
D121,123,421-423,431-433	: UDZW6.8(B)
D124,161-164,434,439,973	: UDZW6.2(B)
D141,142,144,145	: D1F60-5063
D151,971,972	: UDZW4.7(B)
D201,202	: AVR1613R3FTA
D331	: DA204U
D611	: DA204K

— SIGNAL LINE
— GND LINE
— +B LINE

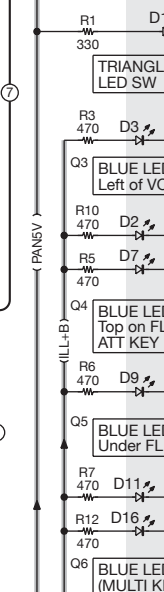
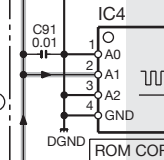
KDC-BT7539U/BT8041U/
BT8141UY/BT838U (1/2)

KDC-BT7539U/BT8041U /BT8141UY/BT838U

(X16-638x-xx)



NOT USED

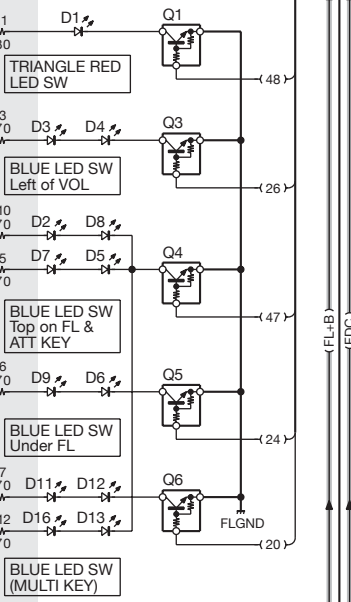
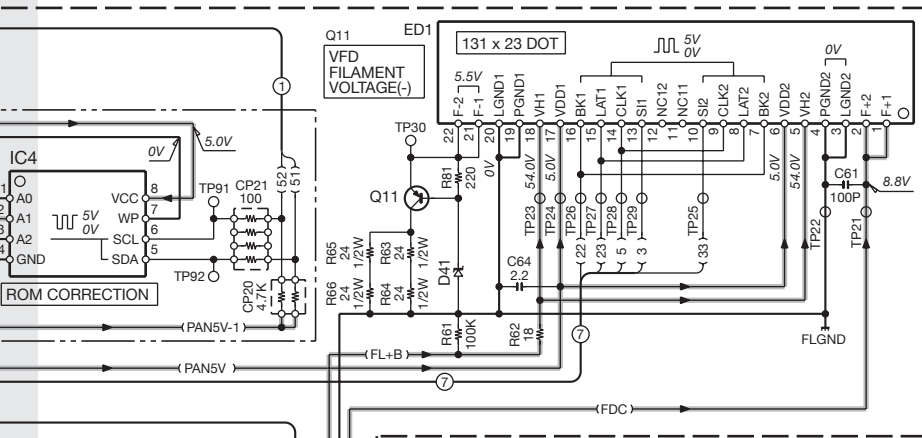


KEY MATRIX

KS	KR	KR1	KR2
KS1	TI	AM	
KS2	MENU	◀	
KS3	AUDIO	▶	
KS4	ATT	▶	
KS5	N/A	FM	

X34-J681 1/2

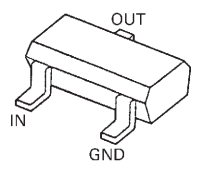
KDC-BT7539U/BT8041U /BT8141UY/BT838U



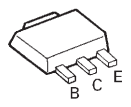
- IC1 : *
- IC3 : PIC95603
- IC4 : NOT USED
- Q1,3-6 : DTC143ZUA
- Q11 : 2SB1188(Q,F)
- D1 : B30-1566-05
- D2-9,11-13,16 : B30-1790-05
- D18,19 : DA204U
- D40 : UDZW6.8(B)
- D41 : UDZW5.1(B)

- DTC114YUA
- DTC143TUA
- 2SA1576A
- 2SC2713-F
- 2SC4617

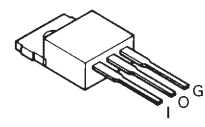
- DTA114EUA
- DTA124EUA
- DTC124EUA
- DTC144EUA



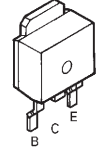
- 2SB1188



- KTA1046-P

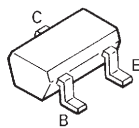


- 2SB1184

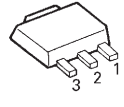


- DAP202U
- DA204K
- DA204U
- DTA114YUA

- 2SC4081



- M5237ML-CF0J

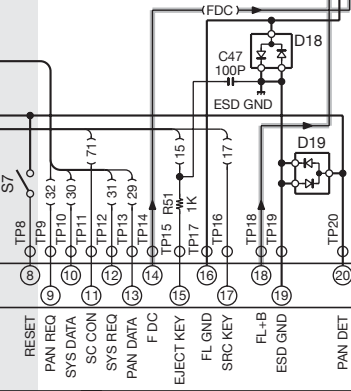


GND LINE
+B LINE

(X16-638x-xx)

CD RECEIVER	UNIT No.	(A)	IC1
KDC-BT838U	0-10	—	30624MGPB53GP
KDC-BT8041U	2-71	YES	30624MWPB81GP
KDC-BT8141UY	0-21	—	30626MJPA23GP

KDC-BT7539U/BT8041U/
BT8141UY/BT838U (2/2)



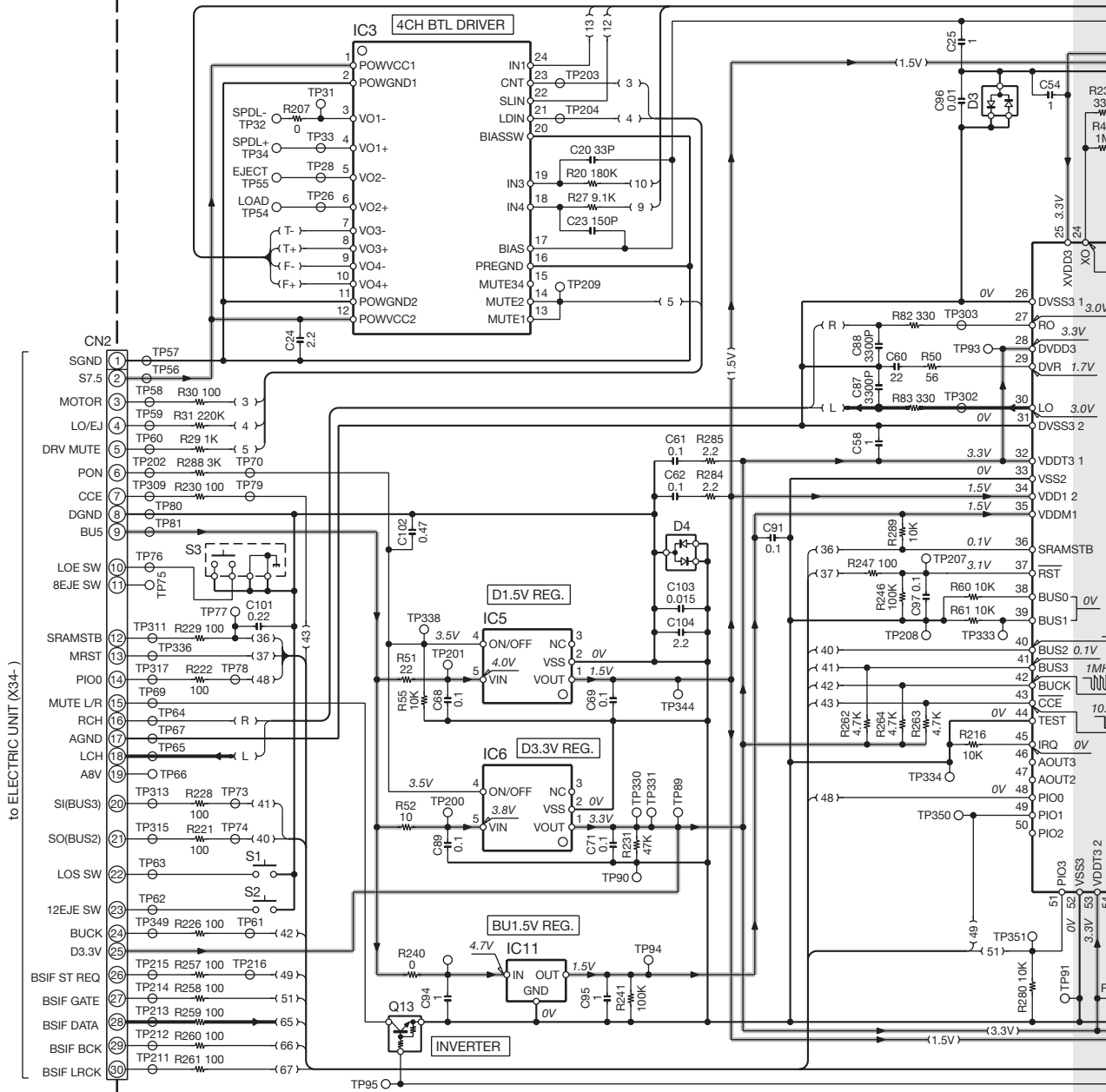
CAUTION : For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).

⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

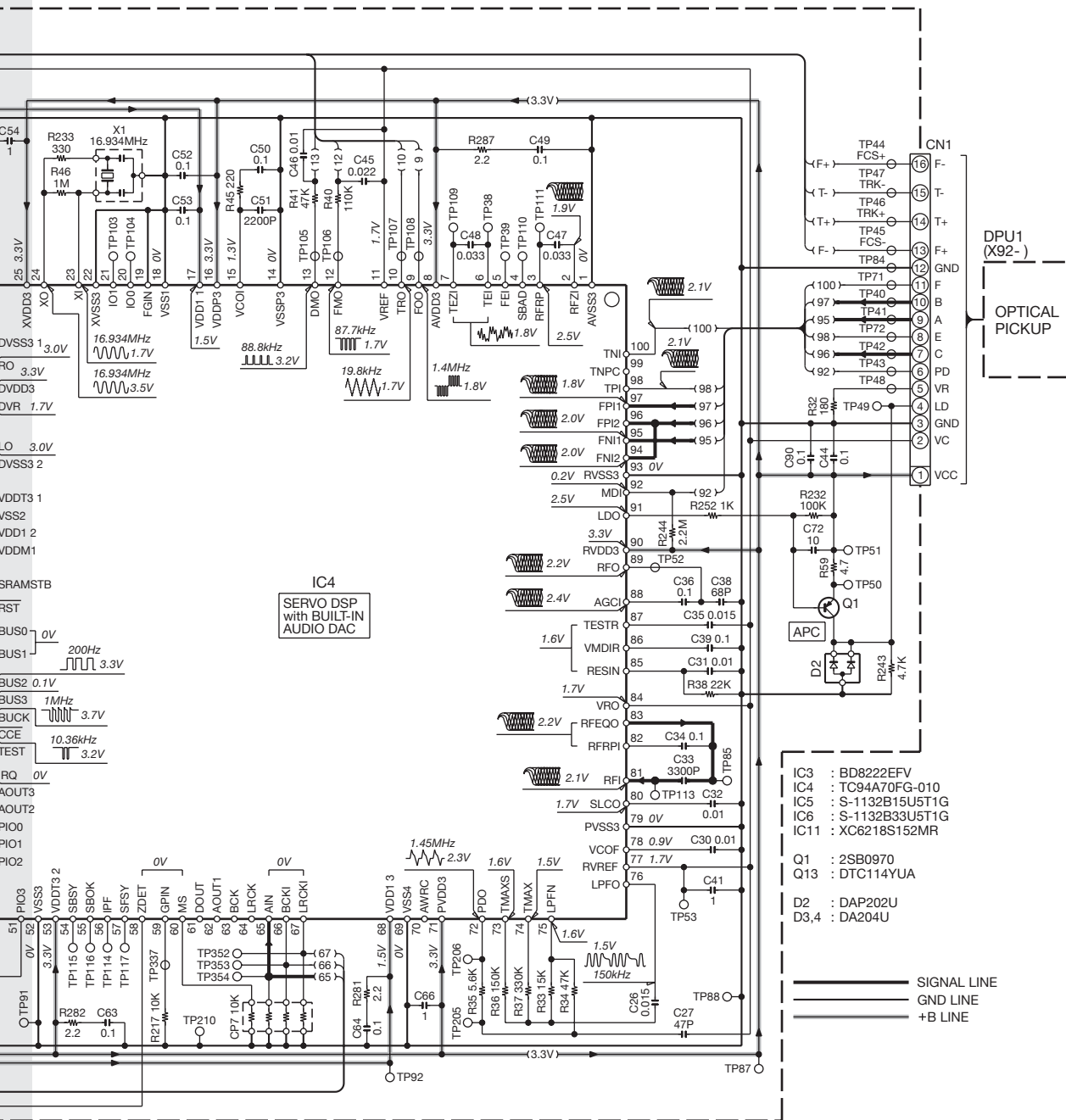
- DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

KDC-BT7539U/BT8041U /BT8141UY/BT838U

CD PLAYER UNIT (X32-6130-00)



1
2
3
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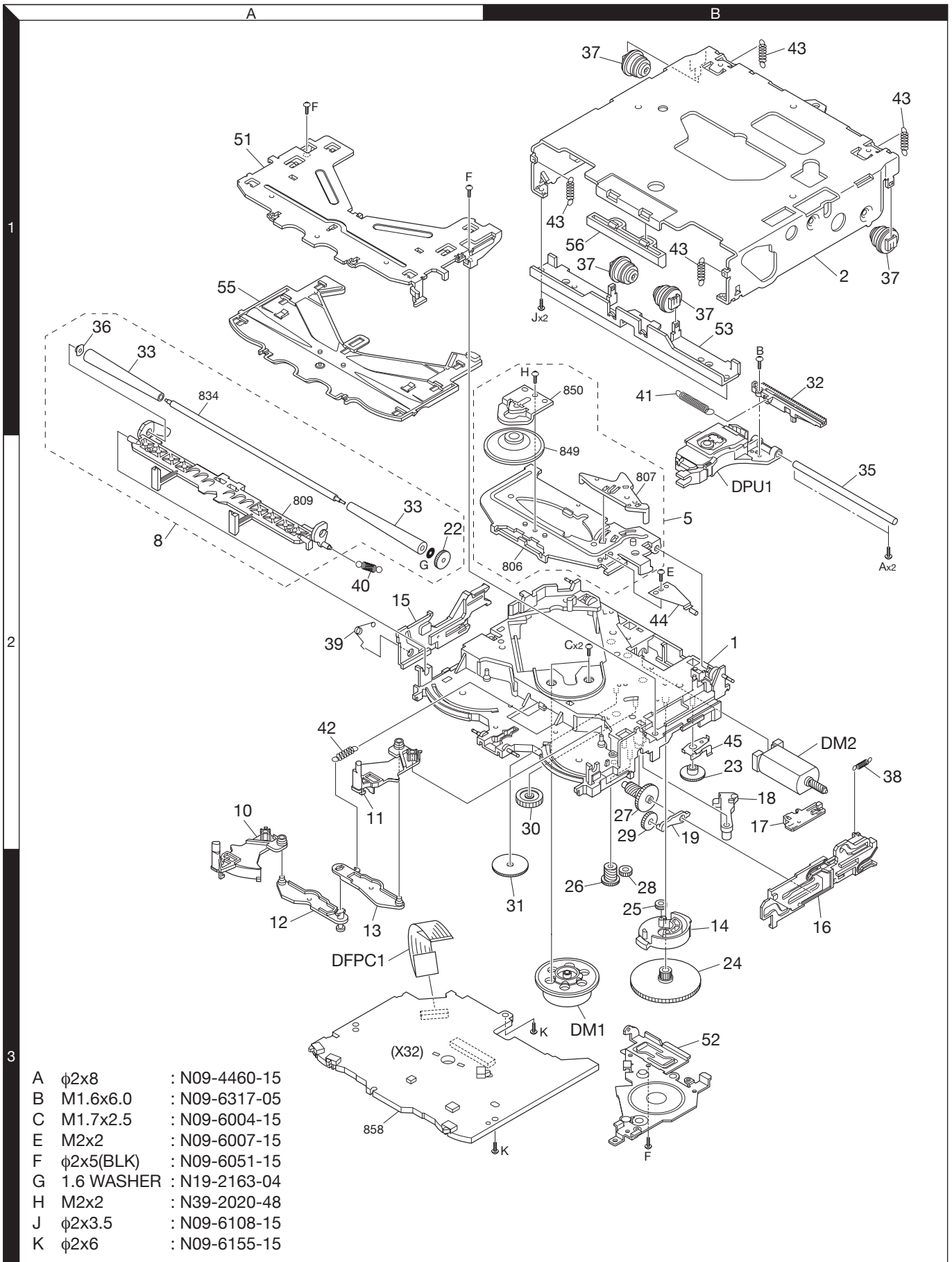


- IC3 : BD8222EFV
- IC4 : TC94A70FG-010
- IC5 : S-1132B15U5T1G
- IC6 : S-1132B33U5T1G
- IC11 : XC6218S152MR
- Q1 : 2SB0970
- Q13 : DTC114YUA
- D2 : DAP202U
- D3,4 : DA204U

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

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

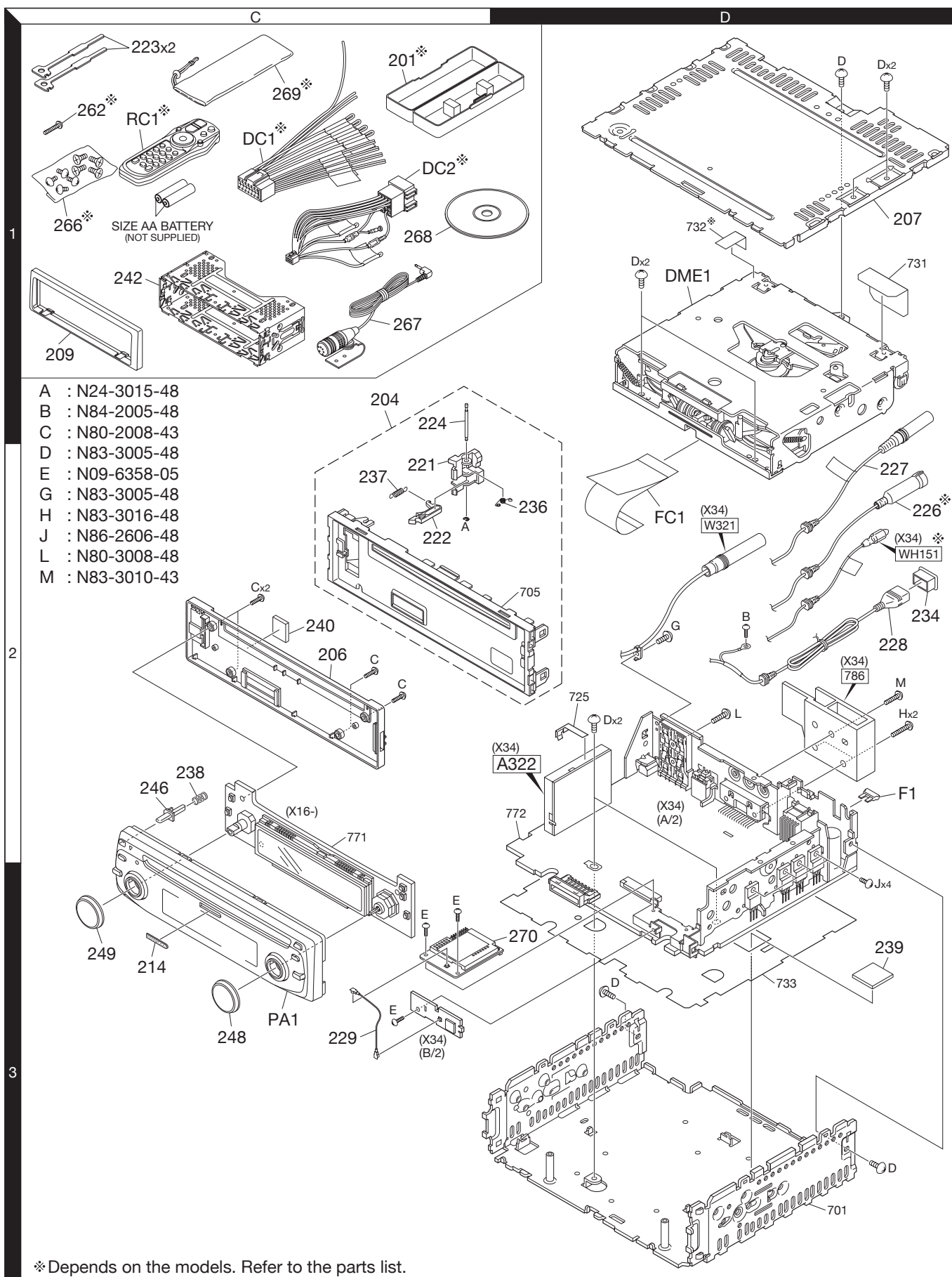
EXPLODED VIEW (CD MECHANISM)



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
KDC-BT7539U/BT8041U/BT8141UY/BT838U					
201	1C		A02-2755-13	PLASTIC CABINET ASSY	M1
204	1C		A22-3149-03	SUB PANEL ASSY	
206	2C		A46-1866-11	REAR COVER	
207	1D		A52-0897-02	TOP PLATE	
PA1	3C	*	A64-4444-02	PANEL ASSY	K
PA1	3C	*	A64-4445-02	PANEL ASSY	E1
PA1	3C	*	A64-4446-02	PANEL ASSY	E2
PA1	3C	*	A64-4447-02	PANEL ASSY	M1
RC1	1C		A70-2085-05	REMOTE CONTROLLER ASSY (RC-547)	KE2M1
-		*	B64-4159-00	INSTRUCTION MANUA (ENG.FRE.SPA)	K
-		*	B64-4160-00	INSTRUCTION MANUAL (ENG.)	E1E2
-		*	B64-4161-00	INSTRUCTION MANUA (FRE.GER.DUT)	E1
-		*	B64-4162-00	INSTRUCTION MANUA (DUT.ITA.SPA)	E1
-		*	B64-4163-00	INSTRUCTION MANUAL (RUS.)	E2
-		*	B64-4164-00	INSTRUCTION MANUAL (ENG.S-CHI)	M1
-		*	B64-4165-00	INSTRUCTION MANUAL (ARA.)	M1
209	1C		B07-3245-01	ESCUTCHEON	
214	3C		B43-1518-04	BADGE	
221	2C		D10-4446-03	LEVER	
222	2C		D10-4447-03	LEVER	
223	1C		D10-7012-04	LEVER	
224	1C		D21-2329-04	SHAFT	
226	2D		E30-6823-05	CORD WITH DIN CONNECTOR (OPEL)	E1
227	2D	*	E30-6832-05	CORD WITH CONNECTOR (MIC)	
228	2D		E30-6821-05	CORD WITH CONNECTOR (USB)	
229	3C	*	E39-1022-05	WIRING HARNESS (BT ANT)	
△ DC1	1C		E30-6428-05	DC CORD	KM1
△ DC2	1C		E30-6671-05	DC CORD	E1E2
FC1	2D		E39-0974-05	FLAT CABLE	
234	2D		F29-0637-04	INSULATING COVER (USB)	
△ F1	2D		F52-0023-05	FUSE (MINI BLADE TYPE) 10A	
236	2D		G01-2987-04	TORSION COIL SPRING	
237	2C		G01-3096-04	EXTENSION SPRING	
238	2C		G01-3244-04	COMPRESSION SPRING	
239	3D	*	G16-1721-04	SHEET (THERMAL X34)	
240	2C		G16-1720-04	SHEET (THERMAL X16)	
-		*	H54-4370-03	ITEM CARTON CASE	K
-		*	H54-4371-03	ITEM CARTON CASE	E1
-		*	H54-4372-03	ITEM CARTON CASE	E2
-		*	H54-4373-03	ITEM CARTON CASE	M1
242	1C		J21-9716-03	MOUNTING HARDWARE ASSY	
246	2C		K24-4808-03	PUSH KNOB (RELEASE)	
248	3C		K28-0293-14	KNOB ASSY (JOG ASSY)	
249	3C	*	K28-0323-04	KNOB ASSY (VOL ASSY)	
262	1C		N84-4016-48	PAN HEAD TAPTITE SCREW	KM1
266	1C		N99-1757-15	SCREW SET	KM1
A	2C		N24-3015-48	E TYPE RETAINING RING	
B	2D		N84-2005-48	PAN HEAD TAPTITE SCREW	
C	2C		N80-2008-43	PAN HEAD TAPTITE SCREW	
D	1D		N83-3005-48	PAN HEAD TAPTITE SCREW	

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
E	3C		N09-6358-05	TAPTITE SCREW	
267	1C		W01-1718-05	MICROPHONE	
268	1C	*	W01-1723-15	COMPACT DISC	KE1E2
269	1C		W01-1710-05	CARRYING CASE	
270	3D	*	W02-5280-15	ELECTRIC CIRCUIT MODULE (BT)	
DME1	1D		X92-6130-00	CD MECHANISM ASSY (DXM-6E20W)	
SWITCH UNIT (X16-638x-xx)					
D1			B30-1566-05	LED (1608,RED)	
D2-9			B30-1790-05	LED (1608 BLUE)	
D11-13			B30-1790-05	LED (1608 BLUE)	
D16			B30-1790-05	LED (1608 BLUE)	
C45-47			CC73GCH1H101J	CHIP C 100PF	J
C61			CC73GCH1H101J	CHIP C 100PF	J
C64			CK73FB1A225K	CHIP C 2.2UF	K
C66			CK73FB1C105K	CHIP C 1.0UF	K
C71			CC73GCH1H180J	CHIP C 18PF	J
					E1E2
C72			CC73GCH1H330J	CHIP C 33PF	J
C74			CC73GCH1H680J	CHIP C 68PF	J
C76			CK73GB1C104K	CHIP C 0.10UF	K
C77			CC73GCH1H101J	CHIP C 100PF	J
C85			CK73GB1H103K	CHIP C 0.010UF	K
C86			CC73GCH1H101J	CHIP C 100PF	J
J1			E59-0852-05	RECTANGULAR PLUG	
L1,2			L40-4775-38	SMALL FIXED INDUCTOR (47NH)	E1E2
X1			L78-0872-05	RESONATOR (12MHZ)	
CP1,2			RK74GA1J332J	CHIP-COM 3.3K	J 1/16W
CP11,12			RK74HB1J101J	CHIP-COM 100	J 1/16W
CP13,14			RK74GA1J332J	CHIP-COM 3.3K	J 1/16W
CP15			RK74HB1J102J	CHIP-COM 1.0K	J 1/16W
CP16			RK74HB1J223J	CHIP-COM 22K	J 1/16W
CP17			RK74HB1J102J	CHIP-COM 1.0K	J 1/16W
CP18,19			RK74GA1J473J	CHIP-COM 47K	J 1/16W
R1			RK73GB2A331J	CHIP R 330	J 1/10W
R2			RK73GB2A2R2J	CHIP R 2.2	J 1/10W
R3			RK73GB2A471J	CHIP R 470	J 1/10W
R5-7			RK73GB2A471J	CHIP R 470	J 1/10W
R10			RK73GB2A471J	CHIP R 470	J 1/10W
R12			RK73GB2A471J	CHIP R 470	J 1/10W
R51			RK73FB2B102J	CHIP R 1.0K	J 1/8W
R52			RK73GB2A473J	CHIP R 47K	J 1/10W
R61			RK73GB2A104J	CHIP R 100K	J 1/10W
R62			RK73FB2B180J	CHIP R 18	J 1/8W
R63-66			RK73PB2H240J	CHIP R 24	J 1/2W
R67			RK73GB2A101J	CHIP R 100	J 1/10W
R68			RK73GB2A473J	CHIP R 47K	J 1/10W
R69			RK73GB2A101J	CHIP R 100	J 1/10W
R71,72			RK73GB2A101J	CHIP R 100	J 1/10W
R74			RK73GB2A102J	CHIP R 1.0K	J 1/10W
R76			RK73GB2A103J	CHIP R 10K	J 1/10W
R78			RK73GB2A104J	CHIP R 100K	J 1/10W
R79,80			RK73GB2A473J	CHIP R 47K	J 1/10W

E1 : KDC-BT8041U **E2** : KDC-BT8141UY (Europe)
K : KDC-BT838U (North America) **M1** : KDC-BT7539U (Other Areas)

△ Indicates safety critical components.

PARTS LIST

SWITCH UNIT (X16-638x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination
R81			RK73GB2A221J	CHIP R 220 J 1/10W	
S2-7			S70-0901-05	TACT SWITCH	
S8			S70-0947-05	TACT SWITCH	
S1			T99-0474-05	ROTARY ENCODER	
D18,19			DA204U	DIODE	
D40			UDZW6.8(B)	ZENER DIODE	
D41			UDZW5.1(B)	ZENER DIODE	
ED1			GP1210AI	FLUORESCENT INDICATOR TUBE	
IC1		*	30624MGPB53GP	MICROCONTROLLER IC	K
IC1		*	30624MWPB81GP	MICROCONTROLLER IC	E1E2
IC1		*	30626MJPA23GP	MICROCONTROLLER IC	M1
IC3			PIC95603	ANALOGUE IC	
Q1			DTC143ZUA	DIGITAL TRANSISTOR	
Q3-6			DTC143ZUA	DIGITAL TRANSISTOR	
Q11			2SB1188(Q,R)	TRANSISTOR	
CD PLAYER UNIT (X32-6130-00) IN CD MECHA.					
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	
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	

Ref. No.	Add	New	Parts No.	Description	Destination
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	
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	

E1 : KDC-BT8041U E2 : KDC-BT8141UY (Europe)
K : KDC-BT838U (North America) M1 : KDC-BT7539U (Other Areas)

△Indicates safety critical components.

PARTS LIST

CD PLAYER UNIT (X32-6130-00) IN CD MECHA.

Ref. No.	Add	New	Parts No.	Description	Destination	Ref. No.	Add	New	Parts No.	Description	Destination
S1,2			S68-0863-05	PUSH SWITCH		C337			CK73EB1A475K	CHIP C 4.7UF K	
S3			S68-0862-05	PUSH SWITCH		C401,402			CD04AS1V100M	ELECTRO 10UF 35WV	
D2			DAP202U	DIODE		C405,406			CD04AS1V100M	ELECTRO 10UF 35WV	KM1
D3,4			DA204U	DIODE		C409,410			CD04AS1V100M	ELECTRO 10UF 35WV	
IC3			BD8222EFV	ANALOGUE IC		C421,422			CK73FB1E474K	CHIP C 0.47UF K	
IC4			TC94A70FG-010	MOS-IC		C423			CD04AS0J470M	ELECTRO 47UF 6.3WV	
IC5			S-1132B15U5T1G	ANALOGUE IC		C424			CK73GB1H103K	CHIP C 0.010UF K	
IC6			S-1132B33U5T1G	ANALOGUE IC		C431			CK73FB1E474K	CHIP C 0.47UF K	KM1
IC11			XC6218S152MR	MOS-IC		C432			CD04AS0J470M	ELECTRO 47UF 6.3WV	
Q1			2SB0970	TRANSISTOR		C433			CK73FB1E474K	CHIP C 0.47UF K	KM1
Q13			DTC114YUA	DIGITAL TRANSISTOR		C443			CK73GB1H103K	CHIP C 0.010UF K	KM1
						C445,446			CK73GB1A105K	CHIP C 1.0UF K	
ELECTRIC UNIT (X34-597x-xx)											
C1			C90-6746-05	ELECTRO 3300UF 16WV		C451,452			CK73GB1A105K	CHIP C 1.0UF K	
C11			CK73GB1H102K	CHIP C 1000PF K		C455,456			CK73GB1A105K	CHIP C 1.0UF K	
C13			CD04AY1A221M	ELECTRO 220UF 10WV		C459,460			CK73GB1A105K	CHIP C 1.0UF K	
C20,21			C90-6851-05	ELECTRO 220UF 25WV		C463			CK73GB1A105K	CHIP C 1.0UF K	
C23			CD04BA1C100M	ELECTRO 10UF 16WV		C464			CD04AS1H2R2M	ELECTRO 2.2UF 50WV	
C24			CD04AJ1C101M	ELECTRO 100UF 16WV		C465,466			CK73GB1A105K	CHIP C 1.0UF K	
C25,26			CK73GB1A105K	CHIP C 1.0UF K		C467			CK73GB1H103K	CHIP C 0.010UF K	
C27			CD04BA1C100M	ELECTRO 10UF 16WV		C468			CD04AS1V100M	ELECTRO 10UF 35WV	
C31			CK73GB1C104K	CHIP C 0.10UF K		C469			CD04AS1C470M	ELECTRO 47UF 16WV	
C32			CD04AY1C220M	ELECTRO 22UF 16WV		C470,471			CK73GB1A474K	CHIP C 0.47UF K	
C43			CD04AT1C100M	ELECTRO 10UF 16WV		C473,474			CK73GB1A105K	CHIP C 1.0UF K	
C51			CD04BA1C100M	ELECTRO 10UF 16WV		C505			CK73GB1A105K	CHIP C 1.0UF K	
C54			CK73EB1C106K	CHIP C 10UF K		C508			CD04BA1E330M	ELECTRO 33UF 25WV	
C55			CK73GB1C104K	CHIP C 0.10UF K		C516			CK73GB1A105K	CHIP C 1.0UF K	
C61			CK73GB1C104K	CHIP C 0.10UF K		C517-520			CK73GB1C224K	CHIP C 0.22UF K	
C62			CK73GB1H152K	CHIP C 1500PF K		C521			CK73FB1C105K	CHIP C 1.0UF K	
C63			CK73GB1A474K	CHIP C 0.47UF K		C601			CC73GCH1H220J	CHIP C 22PF J	
C64			CK73FB0J106K	CHIP C 10UF K		C602			CC73GCH1H180J	CHIP C 18PF J	
C71,72			CK73GB1C104K	CHIP C 0.10UF K		C603			CK73GB1C104K	CHIP C 0.10UF K	
C74			CK73FB1C105K	CHIP C 1.0UF K		C604,605			CK73GB1H103K	CHIP C 0.010UF K	
C75			CK73GB1H103K	CHIP C 0.010UF K		C607,608			CK73GB1H103K	CHIP C 0.010UF K	
C76			C93-1457-05	CHIP C 1.0UF K		C612			CK73GB1H103K	CHIP C 0.010UF K	
C77,78			C93-0059-05	CERAMIC 1UF K		C613			CK73GB1H102K	CHIP C 1000PF K	
C79			C93-1457-05	CHIP C 1.0UF K		C614			CK73GB1H103K	CHIP C 0.010UF K	
C121			CK73GB1H103K	CHIP C 0.010UF K		C616-620			CK73GB1H103K	CHIP C 0.010UF K	
C141			CD04AS1H3R3M	ELECTRO 3.3UF 50WV		C621			CC73GCH1H101J	CHIP C 100PF J	
C142			CK73GB1A105K	CHIP C 1.0UF K		C701			CK73GB1H103K	CHIP C 0.010UF K	
C143			CK73GB1H104K	CHIP C 0.10UF K		C702			CC73GCH1H220J	CHIP C 22PF J	
C151			CK73GB1H103K	CHIP C 0.010UF K		C703			CC73GCH1H180J	CHIP C 18PF J	
C152			CK73GB1H223K	CHIP C 0.022UF K		C704-706			CK73GB1H103K	CHIP C 0.010UF K	
C153			CK73GB1A105K	CHIP C 1.0UF K		C708-710			CK73GB1H103K	CHIP C 0.010UF K	
C201			CK73GB1A105K	CHIP C 1.0UF K		C711,712			CC73GCH1H150J	CHIP C 15PF J	
C211,212			CK73GB1C104K	CHIP C 0.10UF K		C713,714			CK73GB1H103K	CHIP C 0.010UF K	
C213			CD04BF1C221M	ELECTRO 220UF 16WV		C715			CK73GB1A105K	CHIP C 1.0UF K	
C301,302			CC73GCH1H180J	CHIP C 18PF J	E1E2	C716,717			CK73FB0J106K	CHIP C 10UF K	
C303			CK73GB1H103K	CHIP C 0.010UF K	E1E2	C718			CK73GB1A105K	CHIP C 1.0UF K	
C307			CK73FB1A225K	CHIP C 2.2UF K	E1E2	C750,751			CC73GCH1H040C	CHIP C 4.0PF C	
C308			CC73GCH1H271J	CHIP C 270PF J	E1E2	C752			CK73GB0J475K	CHIP C 4.7UF K	
C321-324			CK73GB1H103K	CHIP C 0.010UF K		C753			CK73GB1H103K	CHIP C 0.010UF K	
C331-334			CK73EB1A475K	CHIP C 4.7UF K		C900,901			CC73GCH1H561J	CHIP C 560PF J	
C335			CK73GB1H103K	CHIP C 0.010UF K		C902,903			CC73GCH1H220J	CHIP C 22PF J	
C336			CD04AS1V100M	ELECTRO 10UF 35WV		C904,905			CK73GB1H102K	CHIP C 1000PF K	
						C906,907			CC73GCH1H681J	CHIP C 680PF J	

E1 : KDC-BT8041U E2 : KDC-BT8141UY (Europe)
K : KDC-BT838U (North America) M1 : KDC-BT7539U (Other Areas)

△ Indicates safety critical components.

PARTS LIST

ELECTRIC UNIT (X34-597x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination
C908,909			CK73GB1H222K	CHIP C 2200PF K	
C965			CK73FB0J106K	CHIP C 10UF K	
C968			CK73GB1C104K	CHIP C 0.10UF K	
C969-972			CK73GB1A105K	CHIP C 1.0UF K	
C973,974			CC73GCH1H220J	CHIP C 22PF J	
C975			CK73EB0J226K	CHIP C 22UF K	
C976			CK73GB1C104K	CHIP C 0.10UF K	
C977			CK73GB1A105K	CHIP C 1.0UF K	
C978,979			CD04BK1A221M	ELECTRO 220UF 10WV	
C981			CK73FB0J106K	CHIP C 10UF K	
CN161			E41-1702-05	PIN ASSY	E1
CN201			E41-1701-05	PIN ASSY	
CN701			E41-2630-05	FLAT CABLE CONNECTOR	
CN901			E41-2956-05	SOCKET FOR PIN ASSY	
CN902			E41-2957-05	SOCKET FOR PIN ASSY	
CN962			E41-1699-05	PIN ASSY	
△ J1			E58-1003-05	RECTANGULAR RECEPTACLE	
J401			E63-0953-05	PIN JACK	KM1
J401			E63-0954-05	PIN JACK	E1E2
J421			E11-0625-05	PHONE JACK (LGY6502-0900)	
J431			E56-0855-05	CYLINDRICAL RECEPTACLE	KM1
J681			E58-1060-15	RECTANGULAR RECEPTACLE	
J682			E04-0433-05	RF COAXIAL CABLE RECEPTACLE	
W321			E30-6803-05	CORD WITH PLUG (FM/AM ANT)	
WH151			E30-6822-05	WIRING HARNESS	KE2M1
△ L1			L33-2436-05	CHOKE COIL ASSY	
L61			L33-2453-05	SMALL FIXED INDUCTOR	
L71			L92-0639-05	CHIP FERRITE	
L72			L33-2288-05	SMALL FIXED INDUCTOR	
L73			L92-0639-05	CHIP FERRITE	
L321-323			L41-4795-33	SMALL FIXED INDUCTOR (4.7U)	
L601			L41-4795-33	SMALL FIXED INDUCTOR (4.7U)	
L962			L92-0373-05	CHIP FERRITE	
X301			L77-2002-05	CRYSTAL RESONATOR	E1E2
X601		*	L77-2921-15	CRYSTAL RESONATOR (32.768KHZ, 1	
X602			L78-0872-05	RESONATOR (12MHZ)	
X700		*	L77-2921-15	CRYSTAL RESONATOR (32.768KHZ, 1	
X701			L77-2964-05	CRYSTAL RESONATOR (9.00MHZ)	
X750		*	L77-2921-15	CRYSTAL RESONATOR (32.768KHZ, 1	
G	2D		N83-3005-48	PAN HEAD TAPTITE SCREW	
H	2D		N83-3016-48	PAN HEAD TAPTITE SCREW	
J	2D		N86-2606-48	BINDING HEAD TAPTITE SCREW	
L	2D		N80-3008-48	PAN HEAD TAPTITE SCREW	
M	2D		N83-3010-43	PAN HEAD TAPTITE SCREW	
CP603			RK74HB1J101J	CHIP-COM 100 J 1/16W	
CP604			RK74GA1J101J	CHIP-COM 100 J 1/16W	
CP606			RK74HB1J101J	CHIP-COM 100 J 1/16W	E1
CP607			RK74GA1J472J	CHIP-COM 4.7K J 1/16W	
CP608			RK74GA1J101J	CHIP-COM 100 J 1/16W	
CP609			RK74HB1J101J	CHIP-COM 100 J 1/16W	KM1
CP610			RK74GA1J101J	CHIP-COM 100 J 1/16W	KM1
CP612			RK74GA1J101J	CHIP-COM 100 J 1/16W	
CP615			RK74GA1J101J	CHIP-COM 100 J 1/16W	
R1,2			RK73EB2E103J	CHIP R 10K J 1/4W	

Ref. No.	Add	New	Parts No.	Description	Destination
R11			RK73FB2B221J	CHIP R 220 J 1/8W	
R12			RK73GH2A243D	CHIP R 24K D 1/10W	
R13			RK73GH2A432D	CHIP R 4.3K D 1/10W	
R21			RK73FB2B123J	CHIP R 12K J 1/8W	
R22			RK73GB2A223J	CHIP R 22K J 1/10W	
R23			RK73FB2B822J	CHIP R 8.2K J 1/8W	
R31			RK73FB2B152J	CHIP R 1.5K J 1/8W	
R41			RK73FB2B182J	CHIP R 1.8K J 1/8W	
R42			RK73GB2A473J	CHIP R 47K J 1/10W	
R51			RK73EB2E361J	CHIP R 360 J 1/4W	
R52			RK73GB2A473J	CHIP R 47K J 1/10W	
R61			RK73GH2A123D	CHIP R 12K D 1/10W	
R62			RK73GB2A103J	CHIP R 10K J 1/10W	
R63			RK73GH2A333D	CHIP R 33K D 1/10W	
R64			RK73GH2A104D	CHIP R 100K D 1/10W	
R71			RK73PB2H1R0J	CHIP R 1.0 J 1/2W	
R74			RK73FB2B182J	CHIP R 1.8K J 1/8W	
R75			RK73PB2H1R0J	CHIP R 1.0 J 1/2W	
R76			RK73GB2A473J	CHIP R 47K J 1/10W	
R77			RK73GH2A434D	CHIP R 430K D 1/10W	
R78			RK73GH2A103D	CHIP R 10K D 1/10W	
R79			RK73GB2A1R0J	CHIP R 1.0 J 1/10W	
R81			RK73GB2A223J	CHIP R 22K J 1/10W	
R82			RK73GB2A473J	CHIP R 47K J 1/10W	
R83			RK73EB2E333J	CHIP R 33K J 1/4W	
R84			RK73GB2A473J	CHIP R 47K J 1/10W	
R121			RK73FB2B203J	CHIP R 20K J 1/8W	
R122,123			RK73GB2A103J	CHIP R 10K J 1/10W	
R124			RK73FB2B683J	CHIP R 68K J 1/8W	
R125			RK73GB2A473J	CHIP R 47K J 1/10W	
R126			RK73GB2A104J	CHIP R 100K J 1/10W	
R127			RK73EB2E102J	CHIP R 1.0K J 1/4W	
R128			RK73EB2E473J	CHIP R 47K J 1/4W	
R129			RK73GB2A183J	CHIP R 18K J 1/10W	
R134,135			RK73EB2E102J	CHIP R 1.0K J 1/4W	
R141			RK73FB2B472J	CHIP R 4.7K J 1/8W	
R142			RK73PB2H561J	CHIP R 560 J 1/2W	
R143			RK73GB2A223J	CHIP R 22K J 1/10W	
R144			RK73PB2H561J	CHIP R 560 J 1/2W	
R145			RK73FB2B472J	CHIP R 4.7K J 1/8W	
R146,147			RK73PB2H221J	CHIP R 220 J 1/2W	KM1
R148			RK73GB2A223J	CHIP R 22K J 1/10W	KM1
R149,150			RK73PB2H561J	CHIP R 560 J 1/2W	
R151			RK73GB2A104J	CHIP R 100K J 1/10W	
R152			RK73GB2A473J	CHIP R 47K J 1/10W	
R153			RK73GB2A104J	CHIP R 100K J 1/10W	
R156			RK73GB2A000J	CHIP R 0.0 J 1/10W	E1E2
R161			RK73EB2E102J	CHIP R 1.0K J 1/4W	
R162-164			RK73EB2E471J	CHIP R 470 J 1/4W	E1
R211			RK73GB2A101J	CHIP R 100 J 1/10W	
R213			RK73GB2A223J	CHIP R 22K J 1/10W	
R301-303			RK73GB2A222J	CHIP R 2.2K J 1/10W	E1E2
R304			RK73GB2A102J	CHIP R 1.0K J 1/10W	E1E2
R307			RK73GB2A104J	CHIP R 100K J 1/10W	E1E2
R308			RK73GB2A222J	CHIP R 2.2K J 1/10W	E1E2

E1 : KDC-BT8041U E2 : KDC-BT8141UY (Europe)
K : KDC-BT838U (North America) M1 : KDC-BT7539U (Other Areas)

△Indicates safety critical components.

PARTS LIST

ELECTRIC UNIT (X34-597x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination	Ref. No.	Add	New	Parts No.	Description	Destination
R321			RK73GB2A223J	CHIP R 22K J 1/10W		R618			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R322			RK73FB2B821J	CHIP R 820 J 1/8W		R619			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R323,324			RK73GB2A471J	CHIP R 470 J 1/10W		R621,622			RK73GB2A473J	CHIP R 47K J 1/10W	
R331,332			RK73GB2A334J	CHIP R 330K J 1/10W		R623			RK73GB2A104J	CHIP R 100K J 1/10W	
R333			RK73GB2A473J	CHIP R 47K J 1/10W		R624			RK73GB2A471J	CHIP R 470 J 1/10W	
R334			RK73GB2A333J	CHIP R 33K J 1/10W		R625,626			RK73GB2A104J	CHIP R 100K J 1/10W	
R335			RK73GB2A473J	CHIP R 47K J 1/10W		R627			RK73GB2A471J	CHIP R 470 J 1/10W	
R336			RK73GB2A821J	CHIP R 820 J 1/10W		R628,629			RK73GB2A473J	CHIP R 47K J 1/10W	
R337			RK73GB2A104J	CHIP R 100K J 1/10W		R630			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R338			RK73GB2A102J	CHIP R 1.0K J 1/10W		R631			RK73GB2A101J	CHIP R 100 J 1/10W	
R339			RK73GB2A473J	CHIP R 47K J 1/10W		R632,633			RK73GB2A104J	CHIP R 100K J 1/10W	
R340,341			RK73GB2A103J	CHIP R 10K J 1/10W		R634			RK73GB2A101J	CHIP R 100 J 1/10W	
R342			RK73EB2E101J	CHIP R 100 J 1/4W		R635			RK73GB2A473J	CHIP R 47K J 1/10W	
R343,344			RK73EB2E102J	CHIP R 1.0K J 1/4W		R636			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R401,402			RK73GB2A331J	CHIP R 330 J 1/10W		R637			RK73GB2A473J	CHIP R 47K J 1/10W	
R403,404			RK73GB2A223J	CHIP R 22K J 1/10W		R639			RK73GB2A101J	CHIP R 100 J 1/10W	
R405,406			RK73FB2B181J	CHIP R 180 J 1/8W		R641			RK73GB2A101J	CHIP R 100 J 1/10W	
R407,408			RK73GB2A331J	CHIP R 330 J 1/10W		R642			RK73GB2A223J	CHIP R 22K J 1/10W	KM1
R409,410			RK73GB2A223J	CHIP R 22K J 1/10W		R642			RK73GB2A473J	CHIP R 47K J 1/10W	E2
R411,412			RK73FB2B181J	CHIP R 180 J 1/8W		R643			RK73GB2A473J	CHIP R 47K J 1/10W	M1
R413,414			RK73GB2A331J	CHIP R 330 J 1/10W	KM1	R643,644			RK73GB2A223J	CHIP R 22K J 1/10W	E1E2
R415,416			RK73GB2A223J	CHIP R 22K J 1/10W	KM1	R644			RK73GB2A223J	CHIP R 22K J 1/10W	KM1
R417,418			RK73FB2B181J	CHIP R 180 J 1/8W	KM1	R644			RK73GB2A104J	CHIP R 100K J 1/10W	
R421,422			RK73EB2E100J	CHIP R 10 J 1/4W		R648			RK73GB2A223J	CHIP R 22K J 1/10W	
R423,424			RK73GB2A123J	CHIP R 12K J 1/10W		R650			RK73GB2A104J	CHIP R 100K J 1/10W	
R425			RK73EB2E4R7J	CHIP R 4.7 J 1/4W		R651			RK73EB2E102J	CHIP R 1.0K J 1/4W	
R426			RK73GB2A102J	CHIP R 1.0K J 1/10W		R652			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R431-435			RK73EB2E432J	CHIP R 4.3K J 1/4W	KM1	R653			RK73GB2A473J	CHIP R 47K J 1/10W	
R436			RK73EB2E101J	CHIP R 100 J 1/4W	KM1	R654			RK73EB2E102J	CHIP R 1.0K J 1/4W	
R437			RK73EB2E100J	CHIP R 10 J 1/4W	KM1	R655			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R438			RK73EB2E4R7J	CHIP R 4.7 J 1/4W	KM1	R656			RK73GB2A104J	CHIP R 100K J 1/10W	KM1
R439			RK73EB2E100J	CHIP R 10 J 1/4W	KM1	R658			RK73GB2A101J	CHIP R 100 J 1/10W	KM1
R440			RK73EB2E432J	CHIP R 4.3K J 1/4W	KM1	R659			RK73GB2A104J	CHIP R 100K J 1/10W	KM1
R441			RK73EB2E101J	CHIP R 100 J 1/4W	KM1	R660,661			RK73GB2A473J	CHIP R 47K J 1/10W	KM1
R453,454			RK73GB2A103J	CHIP R 10K J 1/10W		R662			RK73GB2A2R2J	CHIP R 2.2 J 1/10W	
R455			RK73EB2E2R2J	CHIP R 2.2 J 1/4W		R663			RK73EB2E101J	CHIP R 100 J 1/4W	
R503			RK73GB2A000J	CHIP R 0.0 J 1/10W		R664			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R505			RK73GB2A163J	CHIP R 16K J 1/10W		R665			RK73GB2A473J	CHIP R 47K J 1/10W	
R507			RK73GB2A432J	CHIP R 4.3K J 1/10W		R666			RK73GB2A101J	CHIP R 100 J 1/10W	
R508			RK73GB2A100J	CHIP R 10 J 1/10W		R667			RK73GB2A223J	CHIP R 22K J 1/10W	
R510			RK73GB2A223J	CHIP R 22K J 1/10W		R668			RK73GB2A101J	CHIP R 100 J 1/10W	
R512			RK73GB2A333J	CHIP R 33K J 1/10W		R670			RK73GB2A101J	CHIP R 100 J 1/10W	
R514			RK73GB2A221J	CHIP R 220 J 1/10W		R671			RK73GB2A223J	CHIP R 22K J 1/10W	
R601			RK73GB2A222J	CHIP R 2.2K J 1/10W		R672			RK73GB2A101J	CHIP R 100 J 1/10W	
R602			RK73GB2A473J	CHIP R 47K J 1/10W		R673			RK73GB2A223J	CHIP R 22K J 1/10W	
R604			RK73GB2A473J	CHIP R 47K J 1/10W		R674			RK73GB2A101J	CHIP R 100 J 1/10W	
R605,606			RK73GB2A103J	CHIP R 10K J 1/10W		R684,685			RK73EB2E102J	CHIP R 1.0K J 1/4W	
R607			RK73GB2A104J	CHIP R 100K J 1/10W		R686-689			RK73EB2E101J	CHIP R 100 J 1/4W	
R608			RK73GB2A102J	CHIP R 1.0K J 1/10W		R690			RK73EB2E102J	CHIP R 1.0K J 1/4W	
R610			RK73GB2A473J	CHIP R 47K J 1/10W		R691			RK73GB2A223J	CHIP R 22K J 1/10W	
R612			RK73GB2A104J	CHIP R 100K J 1/10W	E1E2	R692			RK73FB2B822J	CHIP R 8.2K J 1/8W	
R613			RK73GB2A473J	CHIP R 47K J 1/10W		R696			RK73GB2A101J	CHIP R 100 J 1/10W	
R614,615			RK73GB2A102J	CHIP R 1.0K J 1/10W		R697			RK73GB2A223J	CHIP R 22K J 1/10W	
R616			RK73GB2A223J	CHIP R 22K J 1/10W	E1E2	R699			RK73GB2A223J	CHIP R 22K J 1/10W	
R617			RK73GB2A102J	CHIP R 1.0K J 1/10W		R700			RK73GB2A102J	CHIP R 1.0K J 1/10W	

E1 : KDC-BT8041U E2 : KDC-BT8141UY (Europe)
K : KDC-BT838U (North America) M1 : KDC-BT7539U (Other Areas)

△ Indicates safety critical components.

PARTS LIST

ELECTRIC UNIT (X34-597x-xx)

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
R701			RK73GB2A101J	CHIP R 100 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	
R717			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R718,719			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			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R727			RK73GB2A105J	CHIP R 1.0M J 1/10W	
R728			RK73GB2A223J	CHIP R 22K 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	
R739,740			RK73GB2A101J	CHIP R 100 J 1/10W	
R741			RK73GB2A332J	CHIP R 3.3K J 1/10W	
R742			RK73GB2A101J	CHIP R 100 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			RK73GB2A515J	CHIP R 5.1M J 1/10W	
R751			RK73GB2A473J	CHIP R 47K J 1/10W	
R752,753			RK73GB2A101J	CHIP R 100 J 1/10W	
R754,755			RK73GB2A473J	CHIP R 47K J 1/10W	
R756			RK73GB2A101J	CHIP R 100 J 1/10W	
R757			RK73GB2A473J	CHIP R 47K J 1/10W	
R758			RK73GH2A104D	CHIP R 100K D 1/10W	
R762-764			RK73GB2A473J	CHIP R 47K J 1/10W	
R765,766			RK73GB2A101J	CHIP R 100 J 1/10W	
R767			RK73GB2A223J	CHIP R 22K J 1/10W	
R768			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R769			RK73FB2B2R2J	CHIP R 2.2 J 1/8W	
R781			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R900-903			RK73GB2A103J	CHIP R 10K J 1/10W	
R904-907			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R908,909			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R910,911			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R912,913			R92-3418-05	CHIP R 0.47 J 1/2W	
R960			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R961			RK73GB2A473J	CHIP R 47K J 1/10W	

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
R963,964			RK73GB2A331J	CHIP R 330 J 1/10W	
R965			RK73GB2A473J	CHIP R 47K J 1/10W	
R969-972			RK73GB2A223J	CHIP R 22K J 1/10W	
R973-976			RK73GB2A104J	CHIP R 100K J 1/10W	
R977,978			RK73EB2E101J	CHIP R 100 J 1/4W	
R982			RK73GB2A2R2J	CHIP R 2.2 J 1/10W	
R983			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R984			RK73GB2A123J	CHIP R 12K J 1/10W	
R985			RK73GB2A223J	CHIP R 22K J 1/10W	
W402			R92-2052-05	CHIP R 0 OHM J 1/10W	
L964			T90-0587-05	CHIP ANTENNA	
D1			S2V60-5009F46	DIODE	
D21			D1FJ4	DIODE	
D22			UDZW5.6(B)	ZENER DIODE	
D31			UDZW8.2(B)	ZENER DIODE	
D41			UDZW10(B)	ZENER DIODE	
D42			DAP202U	DIODE	
D51			UDZW15(B)	ZENER DIODE	
D61			EC31QS04AG	DIODE	KM1
D61			RB081L-20	DIODE	E1E2
D71-73			D1FJ4	DIODE	
D74			UDZW9.1(B)	ZENER DIODE	
D75			DAP202U	DIODE	
D121			UDZW6.8(B)	ZENER DIODE	
D123			UDZW6.8(B)	ZENER DIODE	
D124			UDZW6.2(B)	ZENER DIODE	
D141,142			D1F60-5063	DIODE	
D143			DAP202U	DIODE	
D144,145			D1F60-5063	DIODE	
D151			UDZW4.7(B)	ZENER DIODE	
D161			UDZW6.2(B)	ZENER DIODE	KE2M1
D161-164			UDZW6.2(B)	ZENER DIODE	E1
D201,202			AVRL1613R3FTA	VARIATOR	
D331			DA204U	DIODE	
D401,402			DAP202U	DIODE	
D421-423			UDZW6.8(B)	ZENER DIODE	
D431-433			UDZW6.8(B)	ZENER DIODE	KM1
D434			UDZW6.2(B)	ZENER DIODE	KM1
D439			UDZW6.2(B)	ZENER DIODE	KM1
D453-455			DAP202U	DIODE	
D501,502			DAP202U	DIODE	
D611			DA204K	DIODE	
D971,972			UDZW4.7(B)	ZENER DIODE	
D973			UDZW6.2(B)	ZENER DIODE	
IC11			M5237ML-CF0J	ANALOGUE IC	
IC21			R1114N331B-TR	ANALOGUE IC (3.3V LF)	
IC61			LT3684EMSE	ANALOGUE IC	
IC71			LT3467A	ANALOGUE IC	
IC211			STMP52151STR	MOS-IC	
IC301			E-TDA7478AD	ANALOGUE IC	E1E2
IC331			NJM4565V-ZB	ANALOGUE IC	
IC451			E-TDA7415CB	ANALOGUE IC	
IC501			E-TDA7850A	ANALOGUE IC	
IC601		*	30626FHP3A7GP	MICROCONTROLLER IC	

E1 : KDC-BT8041U E2 : KDC-BT8141UY (Europe)
K : KDC-BT838U (North America) M1 : KDC-BT7539U (Other Areas)

△Indicates safety critical components.

PARTS LIST

ELECTRIC UNIT (X34-597x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination
IC602			XC6120N362N1	MOS-IC	
IC604			74HC2G02DP	MOS-IC	
IC605			74AHCT08PW	MOS-IC	
IC607			74LVC08APW	MOS-IC	
IC608			BR24L04FV-W	ROM IC	
IC700			92CD28AFG6V1	MICROCONTROLLER IC	
IC750			341S2094	MICROPROCESSOR IC	
IC751			BR24L04FV-W	ROM IC	
IC964			NJM4565V-ZB	ANALOGUE IC	
IC965			SI-3033KMS	ANALOGUE IC	
Q11			KTA1046-P	TRANSISTOR	
Q12			DTA124EUA	DIGITAL TRANSISTOR	
Q13			DTC124EUA	DIGITAL TRANSISTOR	
Q21			KTA1046-P	TRANSISTOR	
Q22			2SC4081	TRANSISTOR	
Q23			2SA1577	TRANSISTOR	
Q24			DTC124EUA	DIGITAL TRANSISTOR	
Q31			KTA1046-P	TRANSISTOR	
Q32			2SC4081	TRANSISTOR	
Q33			DTA124EUA	DIGITAL TRANSISTOR	
Q34			DTC124EUA	DIGITAL TRANSISTOR	
Q41			KTA1046-P	TRANSISTOR	
Q42			2SC4081	TRANSISTOR	
Q43			DTA124EUA	DIGITAL TRANSISTOR	
Q44			DTC124EUA	DIGITAL TRANSISTOR	
Q51			KTA1046-P	TRANSISTOR	
Q52			2SC4081	TRANSISTOR	
Q71			2SB1184	TRANSISTOR	
Q72			2SC4081	TRANSISTOR	
Q81			2SC2713-F	TRANSISTOR	
Q82			2SB1260	TRANSISTOR	
Q121-123			2SC4081	TRANSISTOR	
Q141			2SB1188(Q,R)	TRANSISTOR	
Q142			2SA1576A	TRANSISTOR	
Q143			DTA114EUA	DIGITAL TRANSISTOR	
Q144			DTC114YUA	DIGITAL TRANSISTOR	
Q145			2SB1188(Q,R)	TRANSISTOR	KM1
Q146			DTC114YUA	DIGITAL TRANSISTOR	KM1
Q151			DTC144EUA	DIGITAL TRANSISTOR	
Q321			2SA1577	TRANSISTOR	
Q322			DTC124EUA	DIGITAL TRANSISTOR	
Q331			2SC4617	TRANSISTOR	
Q401-404			DTC143TUA	DIGITAL TRANSISTOR	E1E2
Q401-406			DTC143TUA	DIGITAL TRANSISTOR	KM1
Q407,408			DTA124EUA	DIGITAL TRANSISTOR	
Q602			DTC114YUA	DIGITAL TRANSISTOR	
Q603			DTA114YUA	DIGITAL TRANSISTOR	
Q680			DTC124EUA	DIGITAL TRANSISTOR	
Q681			2SA1577	TRANSISTOR	
Q682			DTC124EUA	DIGITAL TRANSISTOR	
Q683			DTA124EUA	DIGITAL TRANSISTOR	
Q684			DTC114YUA	DIGITAL TRANSISTOR	
Q702			DTC114YUA	DIGITAL TRANSISTOR	
Q703			2SA1577	TRANSISTOR	
Q704,705			DTC114YUA	DIGITAL TRANSISTOR	

Ref. No.	Add	New	Parts No.	Description	Destination
Q900,901			2SC4081	TRANSISTOR	
TH500			PRF18BE471QS2	POSITIVE RESISTOR	
A322	2D		X86-4030-11	FRONT-END UNIT	KM1
A322	2D		X86-4032-70	FRONT-END UNIT	E1E2
CD MECHANISM ASSY (X92-6130-00) (DXM-6E20W)					
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	
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 (PT2X8)	
B	1B		N09-6317-05	TAPTITE SCREW	
C	2B		N09-6004-15	MACHINE SCREW (M1.7X2.5)	
E	2B		N09-6007-15	MACHINE SCREW (PAN M2X2)	

E1 : KDC-BT8041U E2 : KDC-BT8141UY (Europe)
K : KDC-BT838U (North America) M1 : KDC-BT7539U (Other Areas)

△ Indicates safety critical components.

PARTS LIST

CD MECHANISM ASSY (X92-6130-00) (DXM-6E20W)

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
F	1A		N09-6051-15	TAPTITE SCREW (BIND PT 2X5)	
G	2A		N19-2163-04	FLAT WASHER	
H	1B		N39-2020-48	FLAT WASHER (1.6X6X0.25)	
J	1B		N09-6108-15	TAPTITE SCREW (M2X3.5)	
K	3B		N09-6155-15	SEMS (TAPTITE SCREW) (PT2X6)	
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	

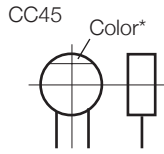
Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation

PARTS LIST

CAPACITORS

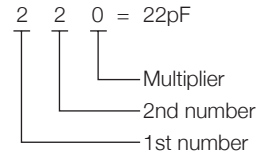
$\frac{CC}{1} \frac{45}{2} \frac{TH}{3} \frac{1H}{4} \frac{220}{5} \frac{J}{6}$

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



• Capacitor value

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



• Temperature coefficient

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

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

Example : CC45TH = -470±60ppm/°C

• Tolerance (More than 10pF)

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

(Less than 10pF)

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

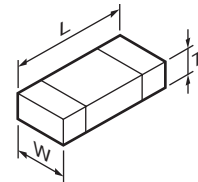
• Voltage rating

2nd word \ 1st word	A	B	C	D	E	F	G	H	J	K	V
0	1.0	1.25	1.6	2.0	2.5	3.15	4.0	5.0	6.3	8.0	-
1	10	12.5	16	20	25	31.5	40	50	63	80	35
2	100	125	160	200	250	315	400	500	630	800	-
3	1000	1250	1600	2000	2500	3150	4000	5000	6300	8000	-

• Chip capacitors

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

• Dimension



Chip capacitor

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

Chip resistor

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

RESISTORS

• Chip resistor (Carbon)

- (EX) $\frac{RD}{1} \frac{73}{2} \frac{E}{3} \frac{B}{4} \frac{2B}{5} \frac{000}{6} \frac{J}{7}$
- (Chip) (B, F)

• Carbon resistor (Normal type)

- (EX) $\frac{RD}{1} \frac{14}{2} \frac{B}{3} \frac{B}{4} \frac{2C}{5} \frac{000}{6} \frac{J}{7}$

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

• Rating wattage

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

SPECIFICATIONS (K TYPE)

FM tuner section

Frequency range (200 kHz space).....	87.9 MHz – 107.9 MHz
Usable sensitivity (S/N = 30dB).....	9.3dBf (0.8 μ V/75 Ω)
Quieting Sensitivity (S/N = 50dB).....	15.2dBf (1.6 μ V/75 Ω)
Frequency response (\pm 3 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 μ (25 μ V)

Bluetooth section

Technology	Bluetooth 1.2 Certified
Frequency.....	2.402 – 2.480 GHz
Output Power	+4dBm (MAX), 0dBm (AVE) Power Class 2
Maximum Communication range	Line of sight approx. 10m (32.8 ft)
Profiles.....	HFP (Hands Free Profile)
.....	HSP (Headset Profile)
.....	OPP (Object Push Profile)
.....	PBAP (Phonebook Access Profile)
.....	SYNC (Synchronization Profile)
.....	SPP (Serial Port Profile)
.....	A2DP (Advanced Audio Distribution Profile)
.....	AVRCP (Audio/Video Remote Control Profile)

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).....	0.01 %
Signal to Noise ratio (1 kHz).....	105 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 (Full speed)
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 Ω
Tone action	
Bass	100 Hz \pm 8 dB
Middle	1 kHz \pm 8 dB
Treble	10 kHz \pm 8 dB
Preout level / Load (CD)	2500 mV/10 k Ω
Preout impedance	\leq 600 Ω

Auxiliary input

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

General

Operating voltage (10.5 – 16V allowable).....	14.4 V
Maximum 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 (M TYPE)

FM tuner section

Frequency range	
200 kHz space	87.9 MHz – 107.9 MHz
50 kHz space	87.5 MHz – 108.0 MHz
Usable sensitivity (S/N = 30dB)	9.3dBf (0.8 μ V/75 Ω)
Quieting Sensitivity (S/N = 50dB)	15.2dBf (1.6 μ V/75 Ω)
Frequency response (\pm 3 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
9 kHz space	531 kHz – 1611 kHz
Usable sensitivity (S/N = 20dB)	28 dB μ (25 μ V)

Bluetooth section

Technology	Bluetooth 1.2 Certified
Frequency	2.402 – 2.480 GHz
Output Power	+4dBm (MAX), 0dBm (AVE) Power Class 2
Maximum Communication range	
.....	Line of sight approx. 10m (32.8 ft)
Profiles	HFP (Hands Free Profile)
.....	HSP (Headset Profile)
.....	OPP (Object Push Profile)
.....	PBAP (Phonebook Access Profile)
.....	SYNC (Synchronization Profile)
.....	SPP (Serial Port Profile)
.....	A2DP (Advanced Audio Distribution Profile)
.....	AVRCP (Audio/Video Remote Control Profile)

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 (Full speed)
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 Ω
Tone action	
Bass	100 Hz \pm 8 dB
Middle	1 kHz \pm 8 dB
Treble	10 kHz \pm 8 dB
Preout level / Load (CD)	2500 mV/10 k Ω
Preout impedance	\leq 600 Ω

Auxiliary input

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

General

Operating voltage (10.5 – 16V allowable)	14.4 V
Maximum Current consumption	10 A
Installation Size (W x H x D)	182 x 53 x 155 mm
Weight	1.40 kg

SPECIFICATIONS (E TYPE)

FM tuner section

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

MW tuner section

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

LW tuner section

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

Bluetooth section

Technology	Bluetooth 1.2 Certified
Frequency.....	2.402 – 2.480 GHz
Output Power	+4dBm (MAX), 0dBm (AVE) Power Class 2
Maximum Communication range	Line of sight approx. 10m (32.8 ft)
Profiles.....	HFP (Hands Free Profile)
.....	HSP (Headset Profile)
.....	OPP (Object Push Profile)
.....	PBAP (Phonebook Access Profile)
.....	SYNC (Synchronization Profile)
.....	SPP (Serial Port Profile)
.....	A2DP (Advanced Audio Distribution Profile)
.....	AVRCP (Audio/Video Remote Control Profile)

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 (Full speed)
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)	30 W x 4
Speaker Impedance	4 – 8 Ω
Tone action	
Bass	100 Hz \pm 8 dB
Middle	1 kHz \pm 8 dB
Treble	10 kHz \pm 8 dB
Preout level / Load (CD)	2500 mV/10 k Ω
Preout impedance	\leq 600 Ω

Auxiliary input

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

General

Operating voltage (10.5 – 16V allowable).....	14.4 V
Maximum Current consumption.....	10 A
Installation Size (W x H x D)	182 x 53 x 155 mm
Weight	1.40 kg

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

DANGER:

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

