

CD RECEIVER

KDC-2031SA/SAY KDC-2031SG/SGY SERVICE MANUAL

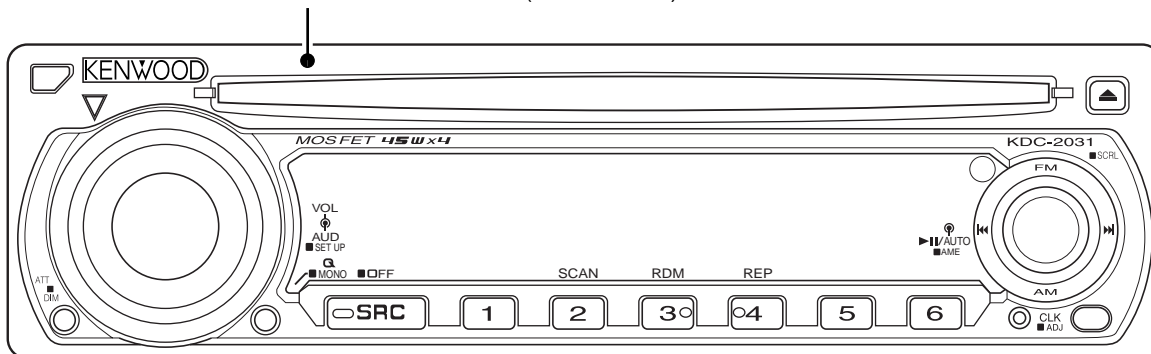
KENWOOD

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B53-0234-00 (N) 1813

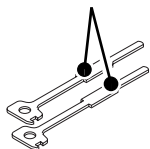
SPARE TDF PANEL

MAIN UNIT NAME	TDF PARTS No.	TDF NAME
KDC-2031SA/SAY	Y33-2140-66	TDF-2031SA
KDC-2031SG/SGY	Y33-2140-67	TDF-2031SG

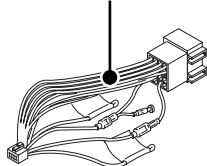
PANEL ASSY
KDC-2031SA/SAY/SG/SGY (A64-3461-02)



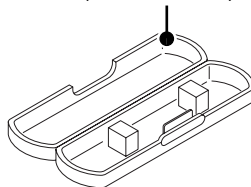
LEVER
(D10-4589-04) x2



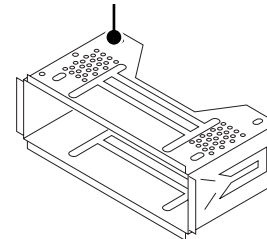
DC CORD
(E30-6413-05)



PLASTIC CABINET ASSY
(A02-2736-03)



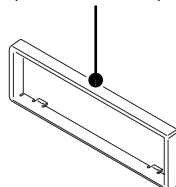
MOUNTING HARDWARE ASSY
(J21-9716-03)



ANTENNA ADAPTOR
(T90-0523-05)



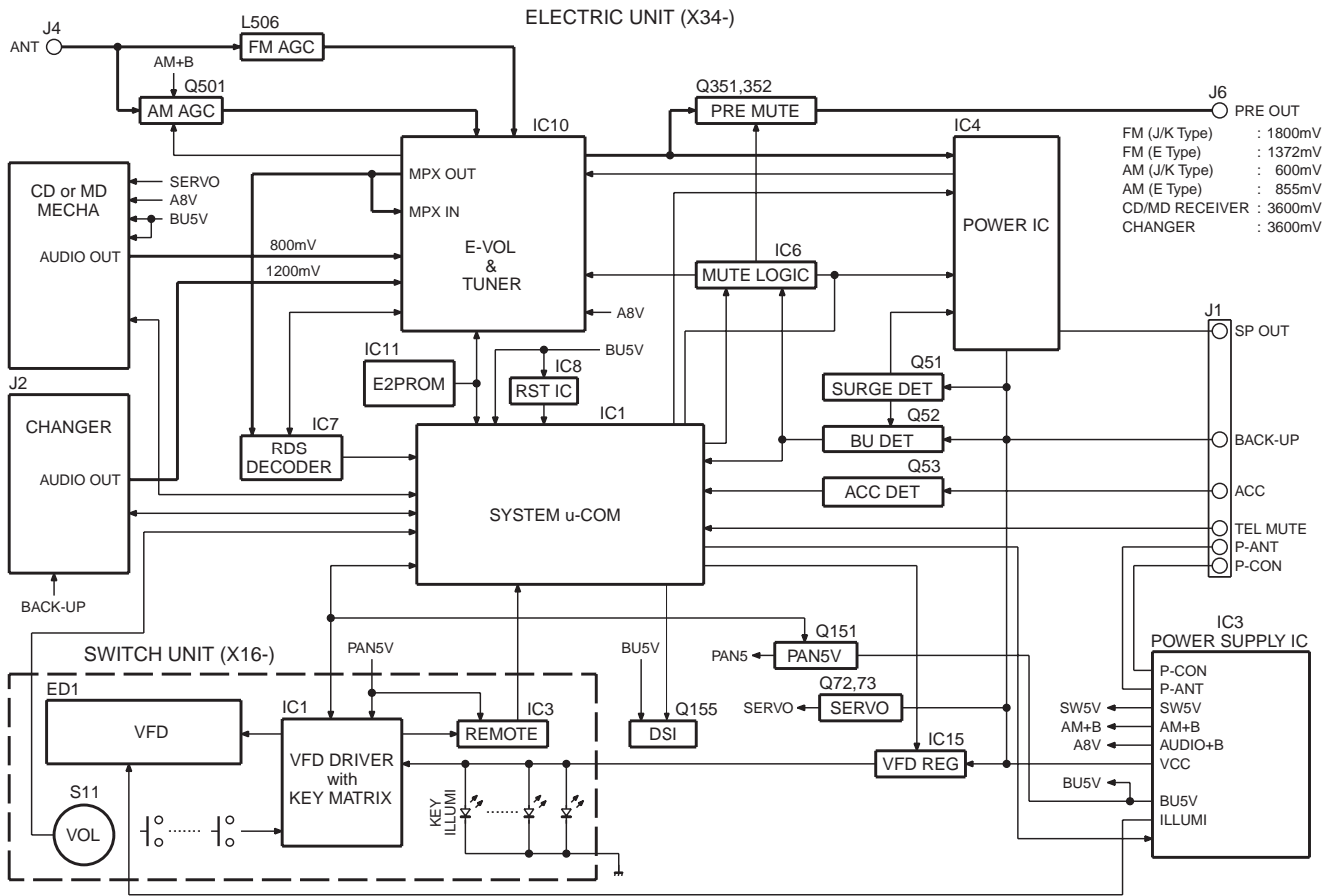
ESCUTCHEON
(B07-3122-01)



This product uses Lead Free solder.

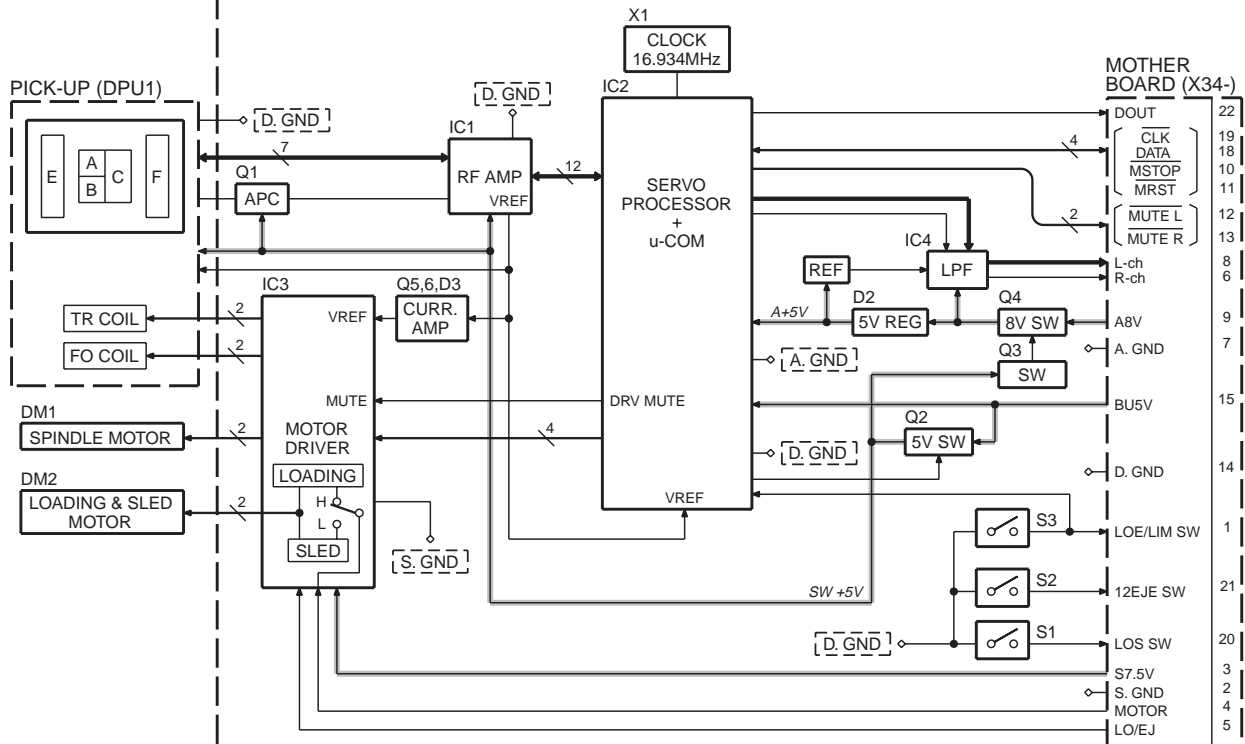


BLOCK DIAGRAM



MECHA ASSY (X92-)

CD PLAYER UNIT (X32-5750-00)



COMPONENTS DESCRIPTION

● ELECTRIC UNIT (X34-3412-7x)

Ref. No.	Application / Function	Operation / Condition
IC1	SYSTEM μ -COM	System control.
IC3	POWER SUPPLY	DC5Vx2, 7.9Vx1, 8.1Vx1, 10.3V, P.CON, P-ANT output.
IC4	POWER IC	Audio signal amplifier.
IC6	MUTE LOGIC	Mute control.
IC7	RDS DECODER	For other models.
IC8	RESET	"L" when detection voltage goes below 3.6V.
IC10	E-VOL & TUNER	E-VOL, Tuner, Stereo decode.
IC11	E2PROM	Saves and writes tuner adjustment data.
IC15	VFD REGULATOR	11.3V output voltage for LED and VFD.
Q51	SERGE DET	"ON" when the base goes "H".
Q52	BU DET	"ON" when the base goes "H".
Q53	ACC DET	"ON" when the base goes "H".
Q71	SERVO+B CONTROL SW	"ON" when the base goes "H".
Q72,73	SERVO+B AVR	Output voltage level : 7.5V.
Q74	IC3 CONTROL SW	"ON" when the base goes "H" (Output voltage : 10.3V).
Q151	PANEL 5V SW	"ON" when the base goes "L".
Q155	DSI ILLUMI SW	"ON" when the base goes "L".
Q252	IC4 STBY SW	"ON" when the base goes "L".
Q330	Q351, 352 MUTE DRIVER	"ON" when the base goes "L".
Q351	Lch PRE MUTE SW	Pre-output is muted when the base goes "H".
Q352	Rch PRE MUTE SW	Pre-output is muted when the base goes "H".
Q501	AM RF AMP	Adjusts for AM-RF gain.

● CD PLAYER UNIT (X32-5750-00)

Ref. No.	Application / Function	Operation / Condition
IC1	RF AMPLIFIER responding to CD-RW	Generation of RF signal based on the signals from the APC circuit and pickup, and generation of servo error (focusing error and tracking error) signals. Detection of dropout, anti-shock, track crossing and off-tracking conditions, included gain control function during CD-RW.
IC2	CD SIGNAL PROCESSOR built-in μ -COM	Focusing, tracking, sled and spindle servo processing. Automatic adjustment (focusing, tracking, gain, offset and balance) operations. Digital signal processing (DSP, PLL, sub-codes, CIRC error correction, audio data interpolation processing) operations, and microcomputer function.
IC3	4ch BTL DRIVER	Focusing coil, tracking coil, spindle motor and sled motor driver, disc loading and eject operation.
IC4	L.P.F. (LOW PASS FILTER)	2nd low pass filter for audio signals.
Q1	APC (AUTOMATIC POWER CONTROL)	LD power control.
Q2	DIGITAL +5V SW	"ON" When P. ON signal goes "L".

COMPONENTS DESCRIPTION

Ref. No.	Application / Function	Operation / Condition
Q3	Q4 SW	"ON" When P. ON signal goes "L" (SW+5V is ON).
Q4	ANALOG +8V SW	"ON" When P. ON signal goes "L" (Q3 is ON).
Q5, 6	CURRENT AMP	Current driver.

● SWITCH UNIT (X16-294x-xx)

Ref. No.	Application / Function	Operation / Condition
IC1	VFD DRIVER	
IC3	REMOTE SENSOR	
Q1	GREEN LED SW	"ON" when the base goes "H".
Q2	RED LED SW	"ON" when the base goes "H".
Q21	PAN SW5V	"ON" when the base goes "H".

MICROCOMPUTER'S TERMINAL DESCRIPTION

● SYSTEM μ -COM : IC1 on X34- (ELECTRIC UNIT)

Pin No.	Active (H/L)	Pin Name	I/O	Application	Processing Operation
1		DC ERR	I	DC offset detection input	
2		LINE MUTE	I	Phone detection	NAVI MUTE : Over 2.5V, TEL MUTE : Below 1V
3		ROTARY CW	I	Rotary encoder input	
4		AVSS	-		
5		TUN TYPE1	I	E-VOL setting switch	Refer to "TUN TYPE" on the TRUTH TABLE
6		TUN TYPE2	I	E-VOL setting switch	Refer to "TUN TYPE" on the TRUTH TABLE
7		AVREF1	-		
8		VFD DATAF	I	Data input from VFD driver	
9		VFD DATAS	O	Data output to VFD driver	
10		VFD CLK	O	Clock output to VFD driver	
11	L	VFD RST	O	Reset output to VFD driver	Display OFF, Key reset, TDF panel OFF : L Display ON, Key scan : H
12		VFD CE	O	Chip enable output to VFD driver	
13		ROTARY CCW	I	Rotary encoder input	
14	L	TDF DET	I	TDF panel detection	TDF panel OFF : H, TDF panel ON : L
15		PWIC BEEP	O	Beep output	
16~19		NC	-		
20	L	TUN ADJ	I	For adjusting IC10	Adjustment=H, PS1-1,2=L, PS1-3=Hi-Z, PS2-1,2=Hi-Z, TUN DATA, CLK=Hi-Z
21		TUN SD	I	Tuner search stop output	H : Station exists, L : Station does not exist

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Active (H/L)	Pin Name	I/O	Application	Processing Operation
22~24		NC	-		
25		AUD SDA	I/O	Volume + tuner I2C data input and output	
26		AUD SCL	I/O	Volume + tuner I2C clock input and output	
27	H	PWIC STBY	O	Power IC standby output	Power IC ON : H, Power IC OFF : L
28	H	VOL MUTE	O	E-VOL mute output	L : Mute OFF, Hi-Z : Mute ON
29	L	PWIC MUTE	O	Power IC mute output	Power OFF : L, Standby : L, Tel mute : L
30		TUN FANC OUT	O	Tuner block (inside the μ -com) check	OK : L, NG : H
31		RESET2	O	Mute for reset	Output L
32		NC	-		
33		VSS1	-		
34		NC	-		
35	L	ACC DET	I	ACC detection	ACC exists : L, ACC does not exist : H
36	L	BU DET	I	Momentary power-down detection	BU exists : L BU does not exist (Momentary power-down) : H
37		NC	-		
38		PS2-2	O	Power supply control output	Refer to "POWER IC CONTROL" on the TRUTH TABLE
39		PS2-1	O	Power supply control output	Refer to "POWER IC CONTROL" on the TRUTH TABLE
40		PS1-1	O	Power supply control output	Refer to "POWER IC CONTROL" on the TRUTH TABLE
41		PS1-2	O	Power supply control output	Refer to "POWER IC CONTROL" on the TRUTH TABLE
42		PS1-3	O	Power supply control output	Refer to "POWER IC CONTROL" on the TRUTH TABLE
43,44		NC	-		
45		CD MUTE	I	CD mute request	L : Mute request
46	L	CD MSTOP	O	CD mecha μ -com stop	H : mecha μ -com operates, L : mecha μ -com is stopped
47		CD LOE LIM SW	I	CD detection (chucking switch)	H : Loading is finished, L : Disc does not exist
48		CD LOEJ	I/O	CD motor control	Refer to "CD MECHA CONTROL OPERATION" on the TRUTH TABLE
49		CD MOTOR	O	CD motor control	Refer to "CD MECHA CONTROL OPERATION" on the TRUTH TABLE
50		NC	-		
51	L	CD MRST	O	CD mecha μ -com reset	H : Normal condition, L : Reset
52		CD SCL	I/O	CD mecha I2C clock output	
53		CD DISC12 SW	I	12cm CD detection	
54		CD LOS SW	I	CD loading detection	
55		CD SDA	I/O	CD mecha I2C data input and output	
56		OEM DISP CE	I/O	External display chip enable	External display
57		OEM DISP CLK	I/O	External display clock	External display
58		OEM DISP DATA	I/O	External display chip data	External display
59		DSI	O	DSI control	DSI ON : H, DSI OFF : L, TDF DET=H (DSI blinks)
60	L	RESET	I		

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Active (H/L)	Pin Name	I/O	Application	Processing Operation
61		NC	-		
62	L	PON FL	O	VFD power supply ON	VFD ON : H, VFD OFF : L TDF DET H (DSI blinks) : L, TDF DET L : H
63		KEY REQ	I	Communication request from VFD driver	L : Key input
64		NC	-		
65		REMOTE	I	Remote control input	
66		NC	-		
67		VSS0	-		
68		VDD1	-		
69		X2	-		
70		X1	-		
71		TEST	-		
72		XT2	-		
73		XT1	-		
74		VDD0	-		
75		AVDD	-		
76~78		TYPE 3~TYPE 1	I	Destination switch	
79		NC	-		
80		TUN SMETER	I	Tuner S-meter input	

● TRUTH TABLE

• TUN TYPE

	TYPE 1	TYPE 2
General models commercially-designated as pure KENWOOD brand (Initial value)	L	L
Initial value setting		

• POWER SUPPLY IC (IC3) CONTROL

SEL1 (Pin No. 11)

PS1-2	PS1-3	PS2-1	ILLUMI	P-CON	P-ANT
L	L	L	OFF	OFF	OFF
L	L	H	ON	OFF	OFF
H	L	H	ON	ON	OFF
H	H	H	ON	ON	ON

SEL2 (Pin No. 12)

PS1-1	PS2-2	AUDIO	SW5	AM
L	L	OFF	OFF	OFF
H	L	ON	ON	OFF
H	H	ON	ON	ON

• CD MECHA CONTROL OPERATION

CD LOEJ	CD MOTOR	CD MECHA OPERATION
L	H	Load
H	H	Eject
Hi-Z	L	Stop
Hi-Z	H	Brake

MICROCOMPUTER'S TERMINAL DESCRIPTION

● CD MECHANISM μ -COM : IC2 on X32- (CD PLAYER UNIT)

Pin No.	Active (H/L)	Pin Name	I/O	Application	Processing Operation
1		TVD	O	Traverse drive output (PWM output).	
2		SPL	O	Spindle motor drive output (PWM output).	
3		NC	-	No connection.	
4		PWM	O	Multipurpose PWM output.	
5		TBAL	O	Tracking balance adjustment output (PWM output).	
6		FBAL	O	Focusing balance adjustment output (PWM output).	
7		NRFDET	I	RF detection signal input.	L : Detection
8		OFT	I	Off-tracking signal input.	H : Detection
9		BDO	I	Drop-out signal input.	H : Detection
10		LDON	O	Laser-on signal output.	H : Focus ON
11		DSL B	O	DSL balance output.	
12		DVDD1	-	Power supply for digital circuit.	
13		DVSS1	-	GND for digital circuit.	
14		AVSS2	-	GND for analog circuit.	For DSL, PLL and A/D converter
15		DSL F	I/O	Loup filter for DSL and bias output for ARF.	
16		ARF	I	RF signal input.	
17		RFSW	I	DSL circuit time constant switch.	
18		PLL F	I/O	Loup filter for PLL.	
19		PLL F2	I/O	Loup filter character switch for PLL.	
20		IREF	I	Reference current input.	
21		RFENV	I	RF envelope signal input.	
22		TRCRS	I	Tracking cross signal input.	
23		TE	I	Tracking error signal input.	
24		FE	I	Focusing error signal input.	
25		AVDD2	-	Power supply for analog circuit.	For DSL, PLL and A/D converter
26		AVSS1	-	GND for analog circuit.	For Lch/Rch audio output
27		OUTR	O	Rch audio output.	
28		AVDD1	-	Power supply for analog circuit.	For Lch/Rch audio output
29		OUTL	O	Lch audio output.	
30		DVSS3	-	GND for digital circuit.	
31		CSEL	-		
32		NC	-	No connection.	
33		ASEL	-		
34		MSEL0	-		
35		MSEL1	-		
36-39		NC	-	No connection.	
40		VREFP	-	Reference power supply input for A/D converter.	
41		HOT	-		

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Active (H/L)	Pin Name	I/O	Application	Processing Operation
42		8EJE SW	-		
43		12EJE/SDET SW	-		
44		LOE/LIM SW	I	Loading-end detection / Pick-up inner circumference detection.	H : Loading-end detection L : Pick-up inner circumference detection
45-49		NC	-	No connection.	
50		DVDD2	-	Power supply for digital circuit.	
51		X1	I	Main clock input.	
52		X2	O	Main clock output.	
53		DVSS2	-	GND for digital circuit.	
54		XSUB1	-		
55		NC	-	No connection.	
56		TEST1	-	Test terminal.	Normal condition : "H" fixed
57		TEST2	-	Test terminal.	Normal condition : "H" fixed
58,59		NC	-	No connection.	
60		DRV MUTE	O	Driver mute control.	L : Mute ON, H : Mute OFF
61	L	MUTE L	O	Audio Lch mute output.	
62	L	MUTE R	O	Audio Rch mute output.	
63	L	RST	I	LSI reset input.	
64		OCD CLK	-		
65	L	MSTOP	I	Standby detection.	
66		DATA	I/O	I2C bus data line (Communication line to system μ -com).	During serial writer is connected.
67		SBIO	I	Data input.	During serial writer is connected.
68	L	CLK	I/O	I2C bus clock line (Communication line to system μ -com).	During serial writer is connected.
69		TX	O	Digital audio interface signal output.	
70		NC	-	No connection.	
71		XSEL	-		
72		MCNT	I	Loading control / Eject control.	L : OFF (Host control), H : Mecha μ -com control
73		P. ON	O	Audio & Servo power supply control.	L : Power supply ON. H : Power supply OFF
74,75		NC	-	No connection.	
76		CD-RW	O	CD-RW control.	H : CD-RW, L : Normal disc
77		NC	-	No connection.	
78		DVDD3	-	Power supply for digital circuit.	
79		FOD	O	Focusing drive output (PWM output).	
80		TRD	O	Tracking drive output (PWM output).	

TEST MODE

How to enter the test mode

While simultaneously press PRESET "1" key and PRESET "3" key, press "RESET" button.

How to release the test mode

Press "RESET" button. (The release cannot be achieved in the conditions of POWER OFF and ACC OFF.)

Initial conditions of the test mode

- The source is "STANDBY".
- The displays all lit up.
- The volume is at -10dB (The display shows "30".)
- LOUD is "OFF".
- SYSTEM Q is "NATURAL".
- BEEP is sounded at all time with the key depressed for less than 1 second.

Special displays when all indicator lights are lighted

When "PRESET" keys are pressed while all indicators for the STANDBY sources are lighted, the following displays will appear.

PRESET "1" key	<ul style="list-style-type: none"> • Version display (4 digits : month, date) (4digits : hour, minute) (Display) : XXXX xxxx
PRESET "2" key	<ul style="list-style-type: none"> • Serial number display (4 digits) (4 digits) (Display) : XXXX xxxx
PRESET "3" key	<ul style="list-style-type: none"> • When pressed for less than 1 second : POWER ON time display (STANDBY source time is not counted.) (Display) : ___X xxxx MAX 60,000 (hours) * The display is cleared by pressing the key for more than 2 seconds.
PRESET "4" key	<ul style="list-style-type: none"> • When pressed for less than 1 second : CD operation time display (Display) : ___X xxxx MAX 60,000 (hours) * The display is cleared by pressing the key for more than 2 seconds.

PRESET "5" key	<ul style="list-style-type: none"> • When pressed for less than 1 second : CD EJECT number display (Display) : ___X xxxx MAX 60,000 (times) * The display is cleared by pressing the key for more than 2 seconds.
PRESET "6" key	<ul style="list-style-type: none"> • When pressed for less than 1 second : Panel open/close number display (Display) : ___X xxxx MAX 600,000 (times) * The display is cleared by pressing the key for more than 2 seconds.
"FM" key	<ul style="list-style-type: none"> • ROM CORRECTION version display (Display) Effective : Rxxx (x : number) Not effective (When not able to read) : R --- Not effective (When version is different) : R***
"AM" key	<ul style="list-style-type: none"> • IC10 adjustment status (Refer to "ADJUSTMENT" on the following page.) (Display) Adjustment complete : E2OK Adjustment not completed : E2ER Communication error : ICER * When other than "E2P _ OK _ _", Pin No. 30 will become "H".
"1◀◀" key	<ul style="list-style-type: none"> • Mechanism error detection status • Communication error → Error No. 1 → Error No. 2 → Error No. 3 → Communication error (Error No. 1 is the most recent error.) (Display) Communication OK : ICOK Communication error : ICER Not detected : En -- (n : 1~3) Detected : En** (** : error code) * The display is cleared by pressing the key for more than 2 seconds.

SPECIAL MODE

ADJUSTMENT

● DC offset error detection confirmation mode

Confirmation mode :

While depressing PRESET “3” key and PRESET “6” key simultaneously, press on the “RESET” button.

(Display) Detected : DCER

Not detected : DCOK

- * By pressing “CLK” key while “DCER” is being displayed, detection status is cleared. This will result in the display of “DCOK”.

Release Method : Press “RESET” button.

● Mechanism memory clear confirmation mode

Confirmation mode :

While depressing “ATT” key and “Q” key simultaneously, press “RESET” button.

(Display) : MCLR

- * Two seconds after the confirmation mode boots up, Mechanism memory clear as a result is displayed.

(Display) Clear status display normal completion : CD _ O

Clear status display abnormal completion : CD _ –

Release Method : Press “RESET” button.

After replacing the following parts, adjust as follows.

REPLACED PARTS		ADJUSTMENT ITEMS		
Ref. No.	Function / Parts name	1st AM MIX	2nd AM MIX	FM antenna
IC10	E-VOL & TUNER	YES	YES	YES
IC11	E2PROM	YES	YES	YES
L507	VCO COIL	YES	YES	YES
L508	1st AM MIX IFT	YES	-	-
L509	2nd AM MIX IFT	-	YES	-
L518	FM ANTENNA COIL	-	-	YES
D504	VARIABLE CAPACITANCE DIODE	YES	YES	YES
D506	VARIABLE CAPACITANCE DIODE	YES	YES	YES
X501	CRYSTAL RESONATOR	YES	YES	YES

● 1st AM MIX / 2nd AM MIX ADJUSTMENT

ADJUSTMENT POINT : L508 (1st AM MIX) / L509 (2nd AM MIX)

VOLTAGE VALUE CHECK POINT : S-METER check land (X34-)

Adjust so that S-METER voltage value becomes maximum.

• SG setting

DESTINATION	FREQUENCY	MODULATION	ANTENNA INPUT
Europe	999kHz	OFF	35dB μ V (EMF)
Except Europe	1000kHz	OFF	35dB μ V (EMF)

● FM ANTENNA ADJUSTMENT

ADJUSTMENT POINT : L518

VOLTAGE VALUE CHECK POINT : S-METER check land (X34-)

Adjust so that S-METER voltage value becomes maximum.

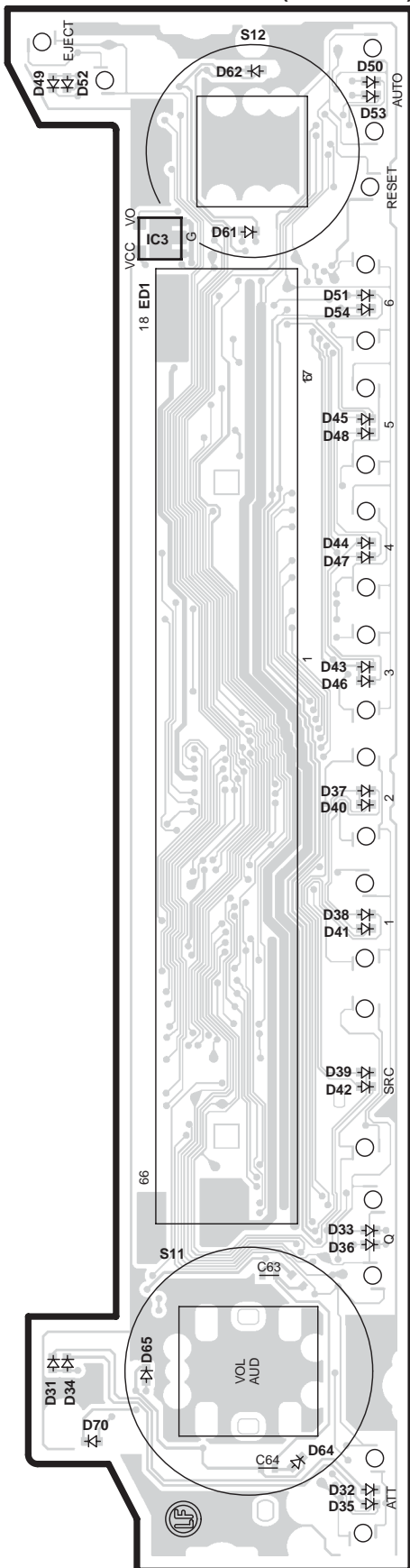
• SG setting

DESTINATION	FREQUENCY	MODULATION	ANTENNA INPUT
Europe	87.5MHz	OFF	5dB μ V (LOAD) or 11dB μ V (EMF)
Except Europe	87.9MHz	OFF	5dB μ V (LOAD) or 11dB μ V (EMF)

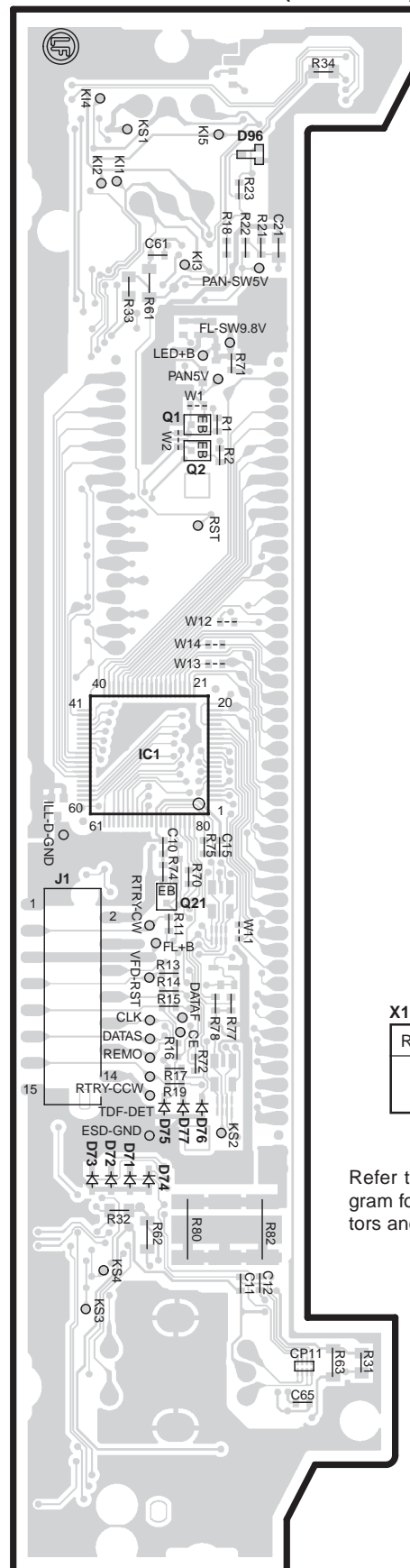
PC BOARD (COMPONENT SIDE VIEW)

(FOIL SIDE VIEW)

SWITCH UNIT X16-294x-xx (J76-0055-02)



SWITCH UNIT X16-294x-xx (J76-0055-02)



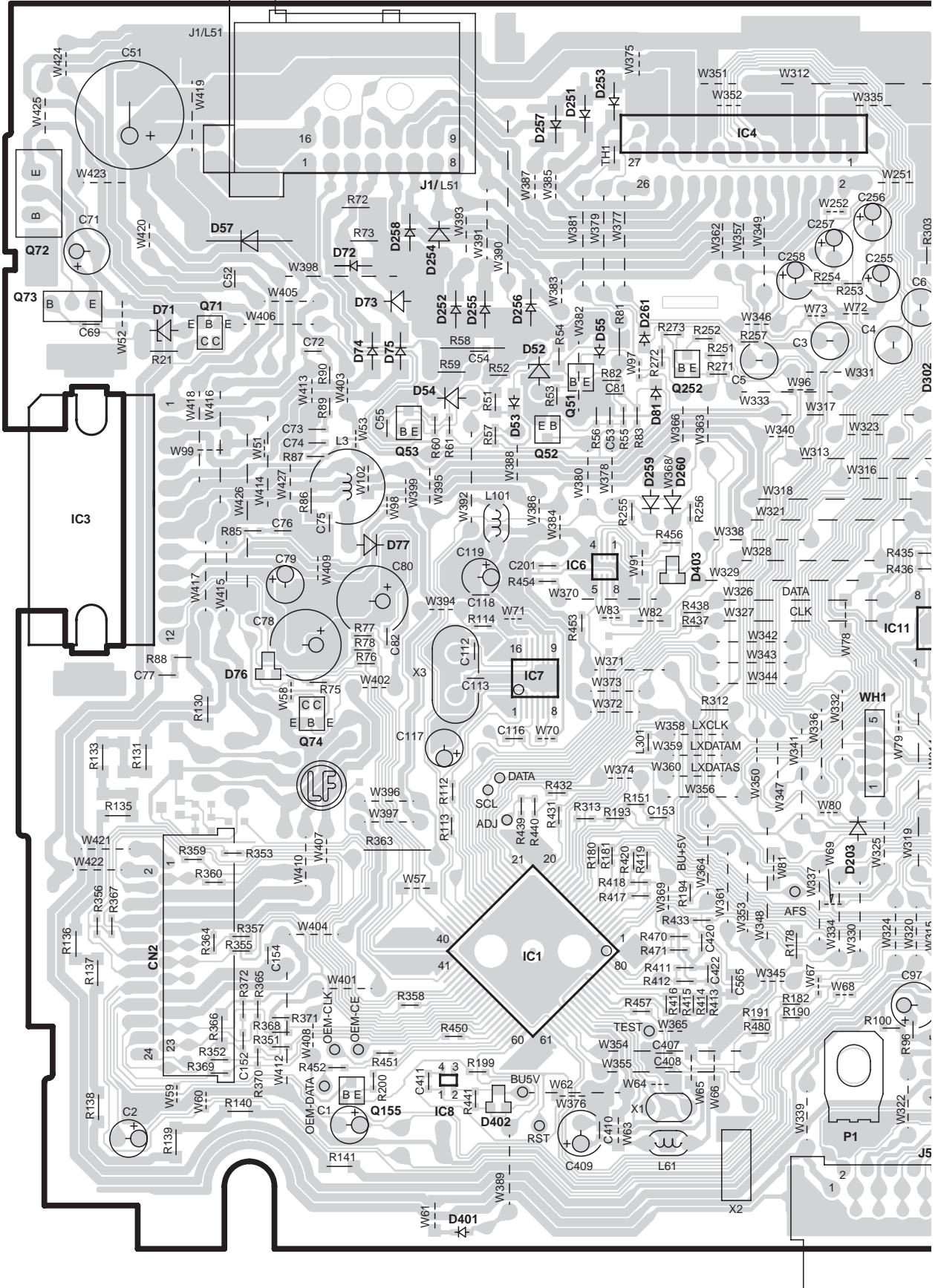
X16-294x-xx

Ref. No.	Address
IC1	4D
Q21	5D

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

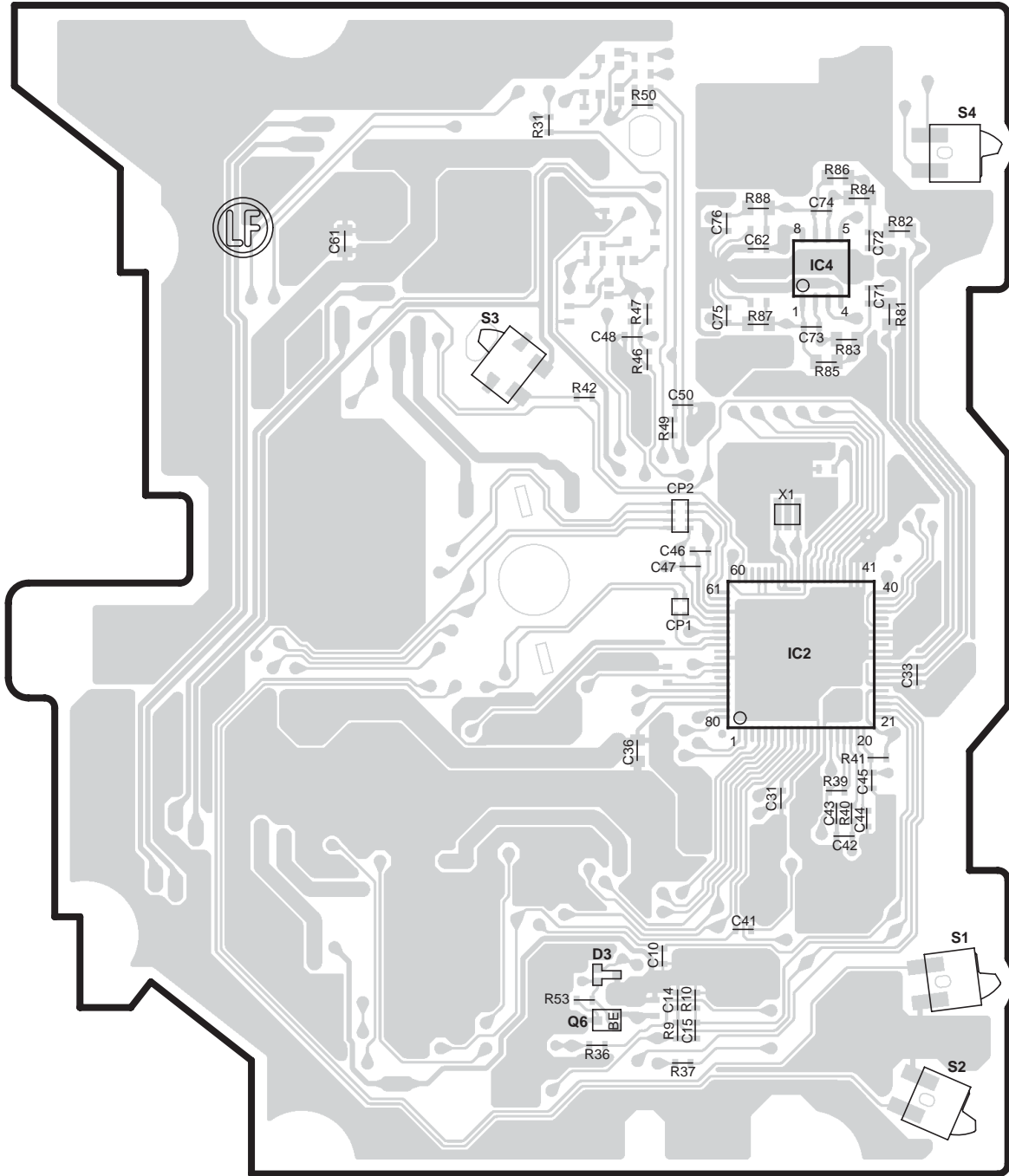
PC BOARD (FOIL SIDE VIEW)

ELECTRIC UNIT X34-3412-7x (J76-0048-12)



PC BOARD (COMPONENT SIDE VIEW)

CD PLAYER UNIT X32-5750-00 (J76-0059-02)



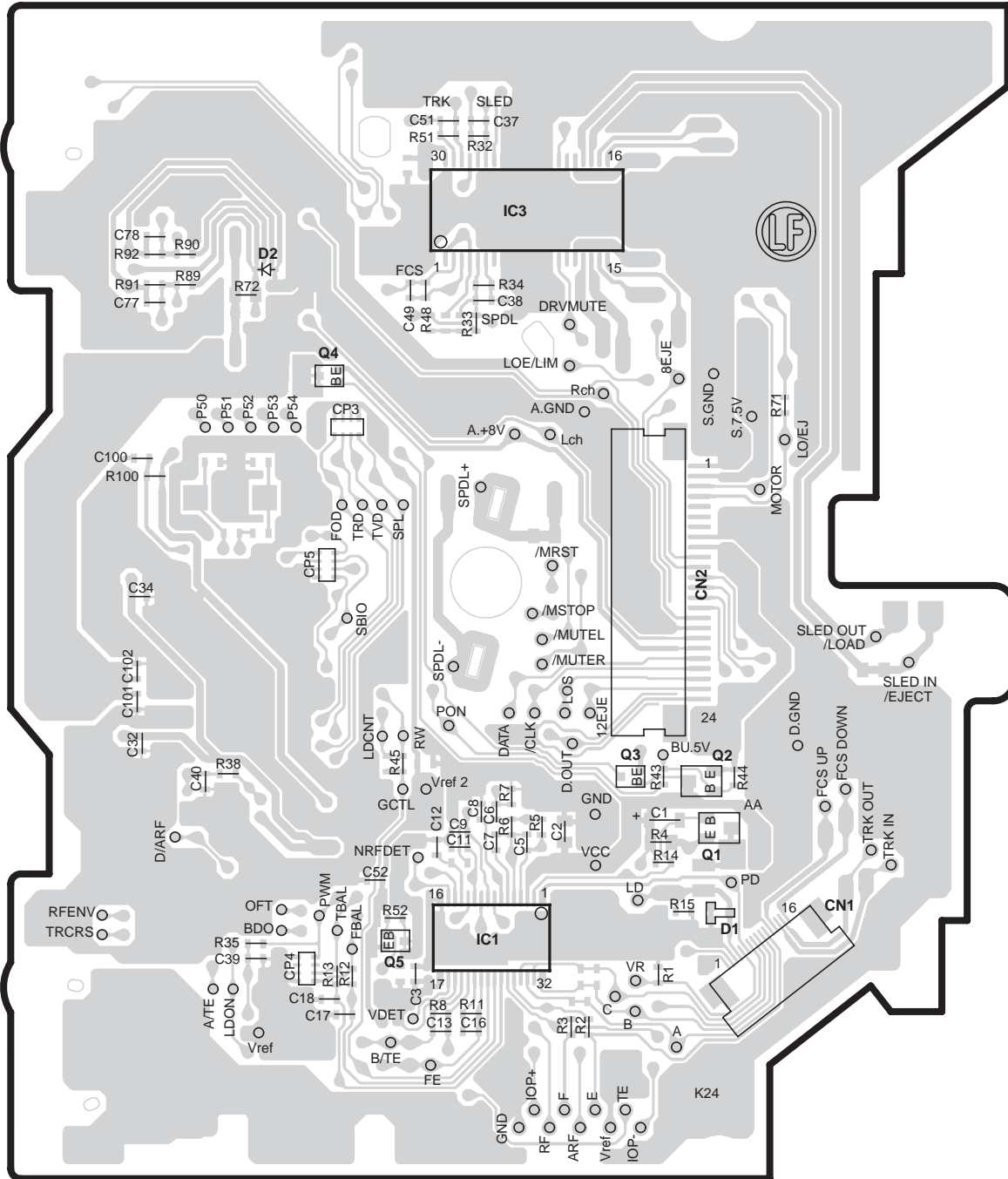
X32-5750-00

Ref. No.	Address
IC2	4S
IC4	2S
Q6	5R

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

PC BOARD (FOIL SIDE VIEW)

CD PLAYER UNIT X32-5750-00 (J76-0059-02)

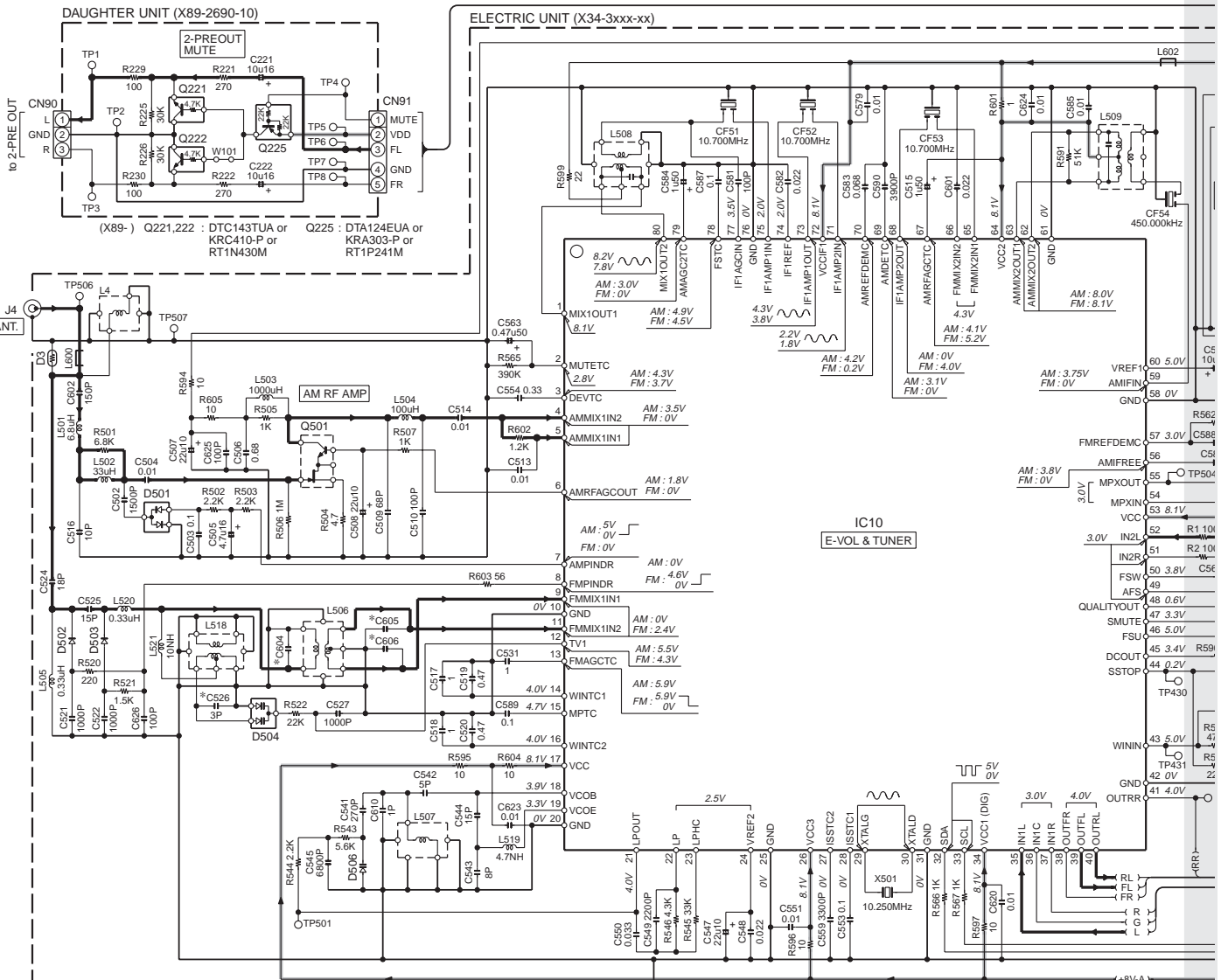


X32-5750-00

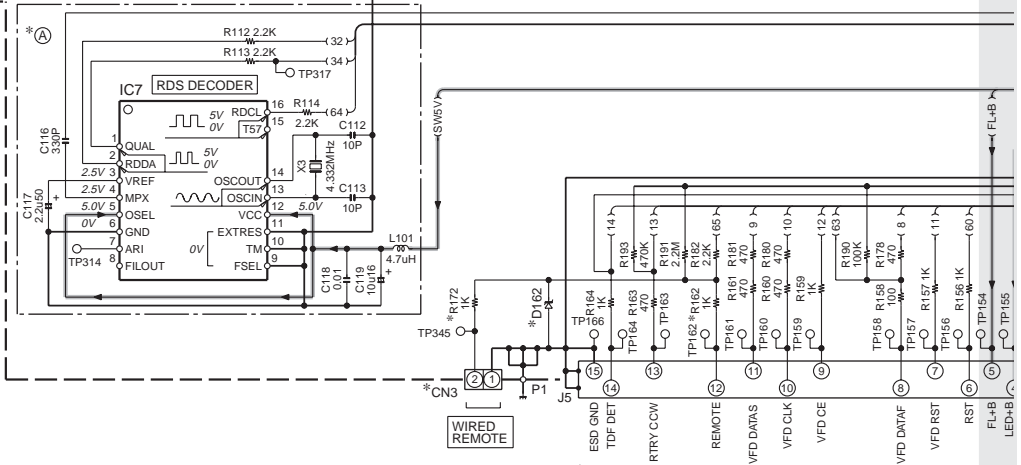
Ref. No.	Address
IC1	5W
IC3	2W
Q1	5X
Q2	4X
Q3	4W
Q4	3V
Q5	5V

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

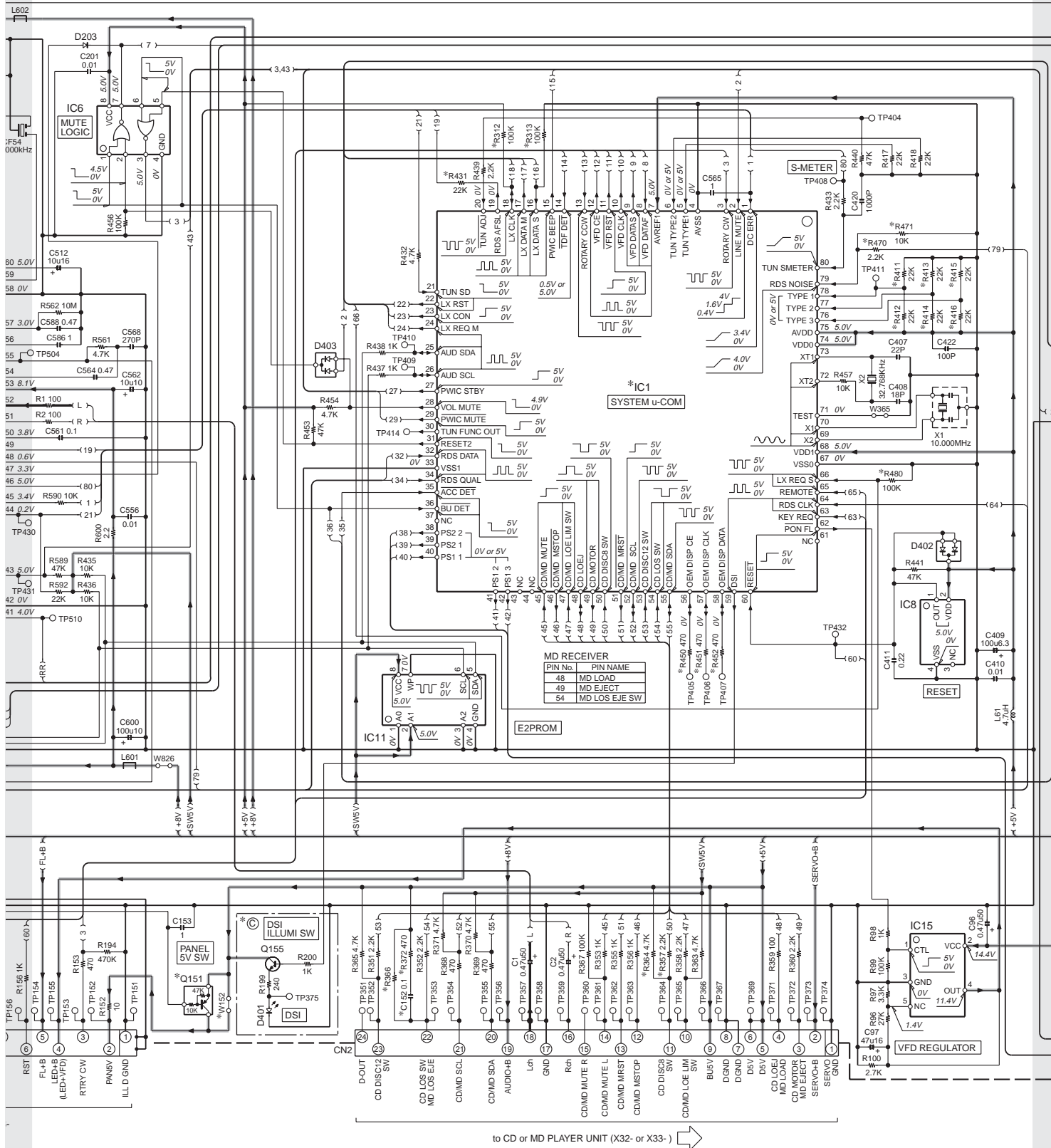
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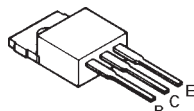
CATEGORY/ FUNCTION	MODEL NAME	DESTI- NATION	DAUGHTER UNIT X89-2690-10
CD RECEIVER (MP3/WMA)	E303/S	J	YES
	KDC-MP2028	K	YES
	KDC-MP228	K	YES
	KDC-MP3029	M	YES
14-SEGMENT DISPLAY	KDC-MP4029/G	M	YES
	KDC-W4031/Y	E	YES
	KDC-W409/Y	E	YES
	KDC-W431/GY	E	YES
CD RECEIVER	KDC-W4531/Y	E	YES
	KDC-WF431A	E	YES
	KDC-228	K	YES
	KDC-3029	M	YES
14-SEGMENT DISPLAY	KDC-3029R	M	YES
	KDC-3031A/Y	E	YES
	KDC-3031G/Y	E	YES
	KDC-309A	E	YES
CD RECEIVER	KDC-309G	E	YES
	KDC-F331A	E	YES
	KDC-F331G	E	YES
	E202	J	YES
CD RECEIVER	RDT-101	J	YES
	KDC-1028	K	YES
	KDC-128/CR	K	YES
	KDC-129/S	M	YES
7-SEGMENT DISPLAY	KDC-229	M	YES
	KDC-2031SA/Y	E	YES
	KDC-2031SG/Y	E	YES
	E303MD	J	YES



X16-
J1



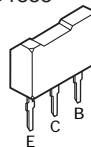
2SB1565



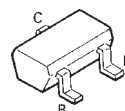
DTA114EE
DTC143TUA
2SA1362
2SA1576A



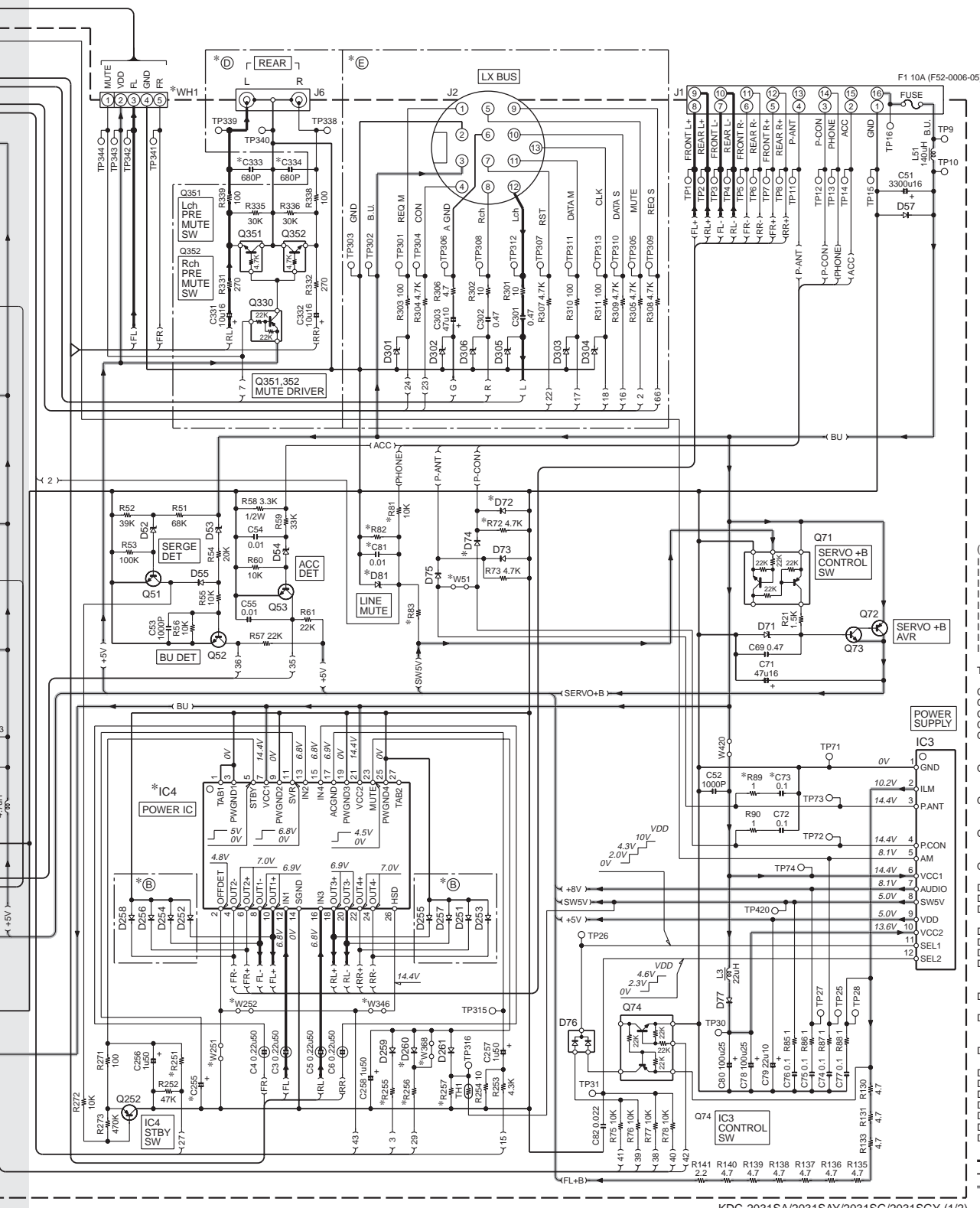
2SD1858



2SC4081



KDC-2031SA/2031SAY
KDC-2031SG/2031SGY



- (X34 -
- IC1 : *
- IC3 : BD4912-V4
- IC4 : *
- IC6 : TC7W02FU-F
- IC7 : E-TDA7479AD
- IC8 : S-80836CENN-B
- IC10 : E-TDA7516
- IC11 : BR24L04FV-W
- IC15 : BA00CCWT

- TH1 : PRF21BE4710B2

- Q51-53,155 : 2SC4081
- Q71,74 : UMC2N
- Q72 : 2SB1565(E,F)
- Q73 : 2SD1856
- Q151 : DT114YUA or KRA307-P or RT1P144M

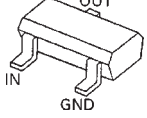
- Q252 : 2SA1576A or KTA2014P(Y,GR) or 2SA1063A
- Q330 : DT1A124EUA or KRA303-P or RT1P241M
- Q351,352 : DT1C143TUA or KRC410-P or RT1N430M
- Q501 : HN3G01J(BL)-F

- D3 : IMSA-6801-E
- D52,54,305,306 : MAZ4068N-M
- D53 : UDZ56.8B or 02D26.8F-Y
- D55,261 : 1S3355
- D57 : SZV60-A
- D71 : MAZ4082N-L
- D72,74,75,251-253,255-258 : D1F60-5063 or 1SR154-400
- D73,77,254 : AM012NF or 10EDA20
- D76,402,403 : DAN202U or KDS121-P or MC2848
- D81 : UDZ54.7B or 02D24.7F-Y
- D162,301-304 : MAZ4062-L
- D203,259,260 : 1S133
- D401 : B30-1567-05
- D501 : RN739F
- D502,503 : KP231ETR-G
- D504 : KV1430STL-G
- D506 : HVC383B-E

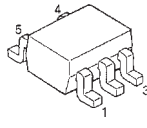
— SIGNAL LINE
— GND LINE
— +B LINE

KDC-2031SA/2031SAY/2031SG/2031SGY (1/2)

DTA124EUA
DTC124EUA



UMC2N



DAN202U



DA204U
DTA114YUA

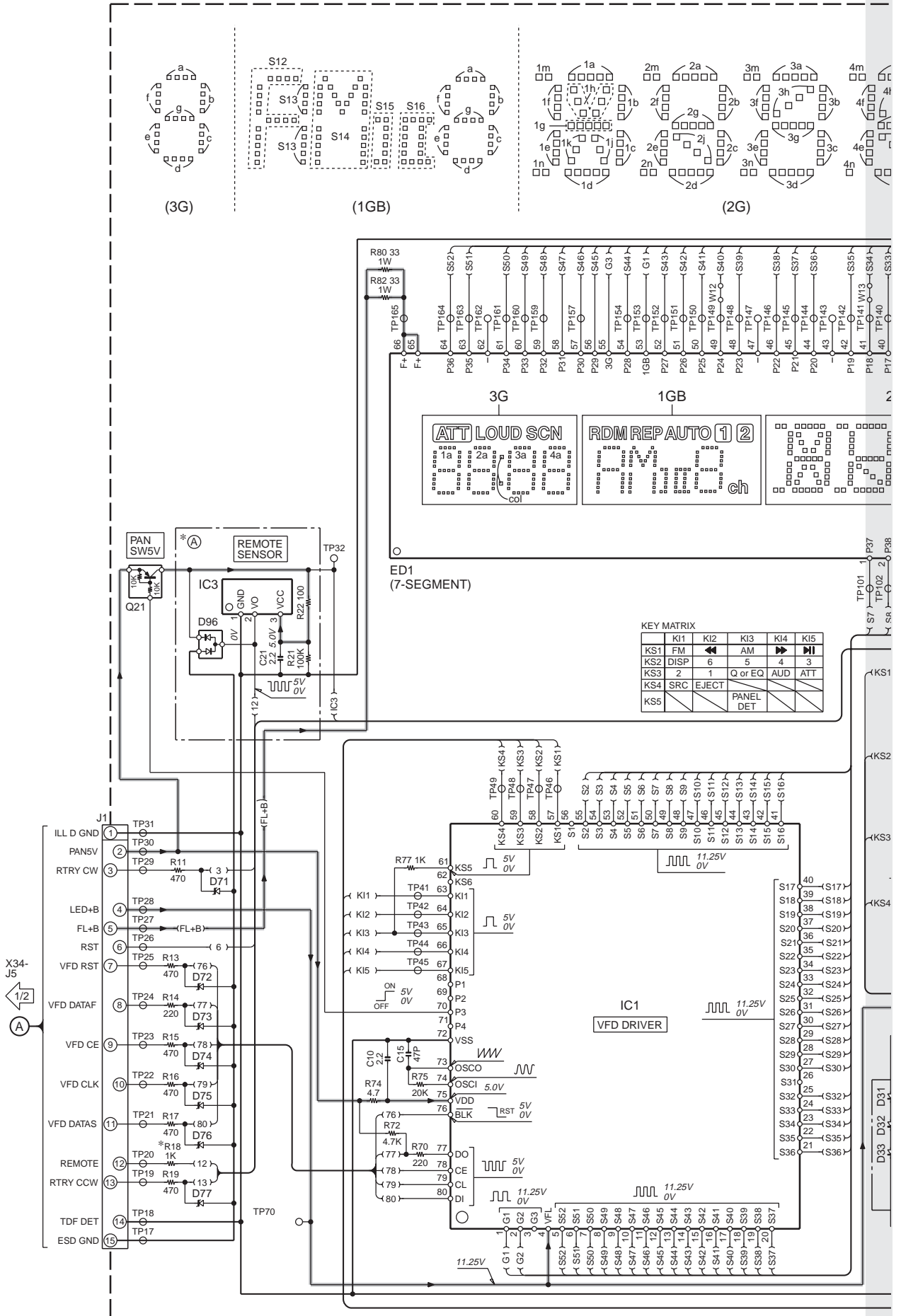


(X34-3xxx-xx)

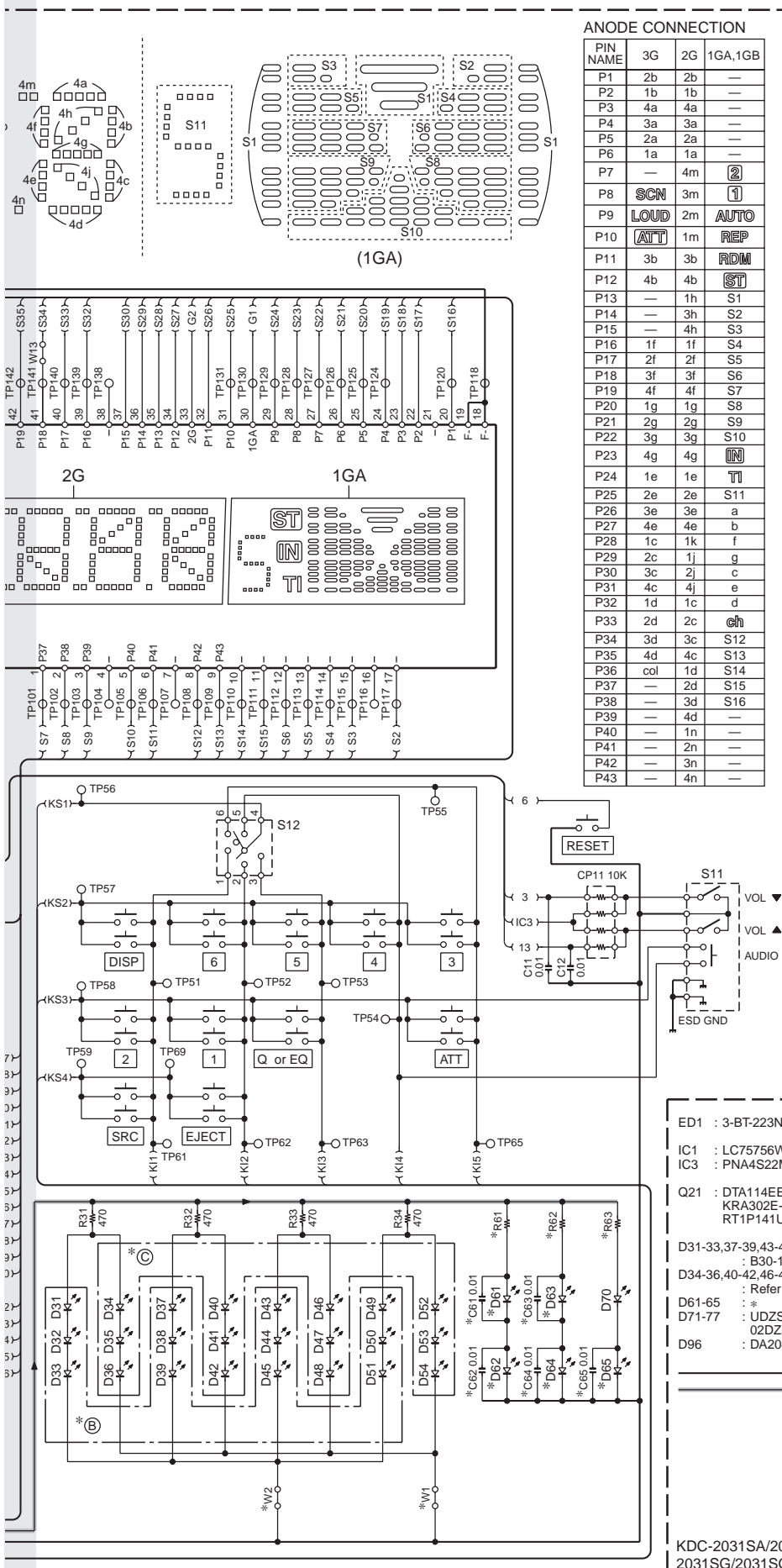
CATEGORY/ FUNCTION	MODEL NAME	DESTI- NATION	X34-340x-xx	X34-341x-xx	X34-365x-xx	(A)	(B)	(C)	(D)	(E)	C73	C81	C152	C255	C333, 334	C526	C604	C605, 606	CN3	D72, 74	D81	D162	D260	Q151	IC1	
CD RECEIVER (MP3/WMA)	E303/S	J	0-01	-	-	-	YES	YES	YES	YES	YES	YES	-	33u	-	YES	68P	6P	-	YES	YES	YES	YES	YES	784225GC256A	
	KDC-MP2028	K	0-10	-	-	-	YES	YES	YES	YES	YES	YES	-	33u	-	-	47P	1P	-	YES	YES	YES	YES	YES	784225GC256A	
14-SEGMENT DISPLAY	KDC-MP228	K	0-11	-	-	-	YES	YES	YES	YES	YES	YES	-	33u	-	-	47P	1P	-	YES	YES	YES	YES	YES	784225GC256A	
	KDC-MP3029	M	0-22	-	-	-	YES	YES	YES	YES	YES	YES	-	10u	-	-	47P	1P	-	YES	YES	YES	YES	YES	784225GC256A	
	KDC-MP4029/G	M	0-21	-	-	-	YES	YES	YES	YES	YES	YES	-	33u	-	-	47P	1P	-	YES	YES	YES	YES	YES	784225GC256A	
	KDC-W4031/Y	E	2-72	-	-	-	YES	YES	YES	YES	YES	YES	-	33u	YES	-	47P	1P	YES	YES	YES	YES	YES	YES	784225GC256A	
	KDC-W409/Y	E	2-72	-	-	-	YES	YES	YES	YES	YES	YES	-	33u	YES	-	47P	1P	YES	YES	YES	YES	YES	YES	784225GC256A	
	KDC-W431GY	E	2-73	-	-	-	YES	YES	YES	YES	YES	YES	-	10u	YES	-	47P	1P	-	YES	YES	YES	YES	YES	YES	784225GC256A
	KDC-W4531Y	E	2-71	-	-	-	YES	YES	YES	YES	YES	YES	-	33u	YES	-	47P	1P	YES	YES	YES	YES	YES	YES	784225GC256A	
KDC-WF431A	E	2-74	-	-	-	YES	YES	YES	YES	YES	YES	-	10u	YES	-	47P	1P	YES	YES	YES	YES	YES	YES	784225GC256A		
CD RECEIVER	KDC-228	K	-	0-10	-	-	YES	YES	YES	YES	YES	YES	-	10u	-	-	47P	1P	-	YES	YES	YES	YES	YES	784225GC257A	
	KDC-2029	M	-	-	0-22	-	YES	YES	YES	YES	YES	YES	-	10u	-	-	47P	1P	-	YES	YES	YES	YES	YES	784225GC257A	
	KDC-3029	M	-	-	0-23	-	YES	YES	YES	YES	YES	YES	-	10u	-	-	47P	1P	-	YES	YES	YES	YES	YES	784225GC257A	
	KDC-3029R	M	-	-	0-21	YES	-	YES	YES	YES	YES	YES	-	10u	YES	-	47P	1P	-	YES	YES	YES	YES	YES	784225GC257A	
	KDC-3031A/Y	E	-	2-71	-	YES	-	YES	YES	YES	YES	YES	-	10u	YES	-	47P	1P	YES	YES	YES	YES	YES	YES	784225GC257A	
	KDC-3031G/Y	E	-	2-72	-	YES	-	YES	YES	YES	YES	YES	-	10u	YES	-	47P	1P	YES	YES	YES	YES	YES	YES	784225GC257A	
	KDC-309A	E	-	2-71	-	YES	-	YES	YES	YES	YES	YES	-	10u	YES	-	47P	1P	YES	YES	YES	YES	YES	YES	784225GC257A	
14-SEGMENT DISPLAY	KDC-309G	E	-	2-72	-	YES	-	YES	YES	YES	YES	-	10u	YES	-	47P	1P	YES	YES	YES	YES	YES	YES	YES	784225GC257A	
	KDC-F331A	E	-	2-73	-	YES	-	YES	YES	YES	YES	-	10u	YES	-	47P	1P	YES	YES	YES	YES	YES	YES	YES	784225GC257A	
	KDC-F331G	E	-	2-74	-	YES	-	YES	YES	YES	YES	-	10u	YES	-	47P	1P	YES	YES	YES	YES	YES	YES	YES	784225GC257A	
	E202	J	-	-	0-00	-	YES	-	YES	-	YES	-	-	10u	-	YES	68P	6P	-	-	-	-	-	-	784225GC258A	
	RDT-101	J	-	-	0-01	-	YES	-	YES	-	YES	-	-	10u	-	YES	68P	6P	-	-	-	-	-	-	784225GC258A	
	KDC-1028	K	-	0-11	-	-	YES	YES	YES	YES	YES	YES	-	10u	-	-	47P	1P	-	YES	YES	YES	YES	YES	784225GC258A	
	KDC-128/CR	K	-	0-12	-	-	YES	YES	YES	YES	YES	YES	-	10u	-	-	47P	1P	-	YES	YES	YES	YES	YES	784225GC258A	
7-SEGMENT DISPLAY	KDC-129/S	M	-	-	0-25	-	YES	YES	YES	YES	YES	-	10u	-	-	47P	1P	-	YES	YES	YES	YES	YES	YES	784225GC258A	
	KDC-229	M	-	-	0-24	-	YES	YES	YES	YES	YES	-	10u	-	-	47P	1P	-	YES	YES	YES	YES	YES	YES	784225GC258A	
	KDC-2031SA/Y	E	-	2-75	-	-	YES	YES	YES	YES	YES	-	10u	YES	-	47P	1P	YES	YES	YES	YES	YES	YES	YES	784225GC258A	
	KDC-2031SG/Y	E	-	2-76	-	-	YES	YES	YES	YES	YES	-	10u	YES	-	47P	1P	YES	YES	YES	YES	YES	YES	YES	784225GC258A	
	E303MD	J	0-02	-	-	-	-	-	-	-	-	-	-	-	-	YES	68P	6P	-	-	YES	-	-	-	784225GC259A	

CATEGORY/ FUNCTION	MODEL NAME	DESTI- NATION	X34-340x-xx	X34-341x-xx	X34-365x-xx	IC4	R72	R81	R82	R83	R89	R162	R172	R251	R255	R256	R257	R312, 313,480	R357, 364	R366	R372	R411	R412	R413	R414
CD RECEIVER (MP3/WMA)	E303/S	J	0-01	-	-	E-TDA7560A	YES	YES	47K	100K	YES	YES	-	33K	220	22K	30K	YES	YES	4.7K	-	-	YES	-	YES
	KDC-MP2028	K	0-10	-	-	E-TDA7560A	YES	YES	22K	47K	YES	YES	YES	33K	220	22K	30K	YES	YES	4.7K	-	YES	-	YES	-
14-SEGMENT DISPLAY	KDC-MP228	K	0-11	-	-	E-TDA7560A	YES	YES	22K	47K	YES	YES	YES	33K	220	22K	30K	YES	YES	4.7K	-	YES	-	YES	-
	KDC-MP3029	M	0-22	-	-	TB2904HQ	YES	YES	22K	47K	YES	YES	-	150K	330	150K	12K	-	-	4.7K	-	YES	-	YES	-
	KDC-MP4029/G	M	0-21	-	-	E-TDA7560A	YES	YES	22K	47K	YES	YES	-	33K	220	22K	30K	YES	YES	4.7K	-	YES	-	YES	-
	KDC-W4031/Y	E	2-72	-	-	E-TDA7560A	YES	YES	22K	47K	-	YES	YES	33K	220	22K	30K	-	-	4.7K	-	-	YES	YES	-
	KDC-W409/Y	E	2-72	-	-	E-TDA7560A	YES	YES	22K	47K	-	YES	YES	33K	220	22K	30K	-	-	4.7K	-	-	YES	YES	-
	KDC-W431GY	E	2-73	-	-	TB2904HQ	YES	YES	22K	47K	-	-	150K	330	150K	12K	-	-	4.7K	-	YES	-	YES	-	YES
	KDC-W4531Y	E	2-71	-	-	E-TDA7560A	YES	YES	22K	47K	-	YES	YES	33K	220	22K	30K	YES	YES	4.7K	-	-	YES	YES	-
KDC-WF431A	E	2-74	-	-	TB2904HQ	YES	YES	22K	47K	-	YES	YES	150K	330	150K	12K	-	-	4.7K	-	-	YES	YES	-	
CD RECEIVER	KDC-228	K	-	0-10	-	TB2903HQ	YES	YES	22K	47K	YES	YES	YES	150K	330	150K	12K	YES	-	4.7K	-	YES	-	YES	-
	KDC-2029	M	-	-	0-22	TB2903HQ	YES	YES	22K	47K	YES	YES	-	150K	330	150K	12K	YES	-	4.7K	-	YES	-	YES	-
	KDC-3029	M	-	-	0-23	TB2903HQ	YES	YES	22K	47K	YES	YES	-	150K	330	150K	12K	YES	-	4.7K	-	YES	-	YES	-
	KDC-3029R	M	-	-	0-21	TB2903HQ	YES	YES	22K	47K	-	YES	-	150K	330	150K	12K	YES	-	4.7K	-	YES	-	YES	-
	KDC-3031A/Y	E	-	2-71	-	TB2904HQ	YES	YES	22K	47K	-	YES	YES	150K	330	150K	12K	-	-	4.7K	-	-	YES	YES	-
	KDC-3031G/Y	E	-	2-72	-	TB2904HQ	YES	YES	22K	47K	-	YES	YES	150K	330	150K	12K	-	-	4.7K	-	-	YES	YES	-
	KDC-309A	E	-	2-71	-	TB2904HQ	YES	YES	22K	47K	-	YES	YES	150K	330	150K	12K	-	-	4.7K	-	-	YES	YES	-
14-SEGMENT DISPLAY	KDC-309G	E	-	2-72	-	TB2904HQ	YES	YES	22K	47K	-	YES	YES	150K	330	150K	12K	-	-	4.7K	-	-	YES	YES	-
	KDC-F331A	E	-	2-73	-	TB2904HQ	YES	YES	22K	47K	-	YES	YES	150K	330	150K	12K	-	-	4.7K	-	-	YES	YES	-
	KDC-F331G	E	-	2-74	-	TB2904HQ	YES	YES	22K	47K	-	YES	YES	150K	330	150K	12K	-	-	4.7K	-	-	YES	YES	-
	E202	J	-	-	0-00	TB2903HQ	-	-	47K	-	YES	-	-	150K	330	150K	12K	-	YES	4.7K	-	-	YES	-	YES
	RDT-101	J	-	-	0-01	TB2904HQ	-	-	47K	-	YES	-	-	150K	330	150K	12K	-	YES	4.7K	-	-	YES	-	YES
	KDC-1028	K	-	0-11	-	TB2903HQ	YES	YES	22K	47K	YES	YES	-	150K	330	150K	12K	-	-	4.7K	-	YES	-	YES	-
	KDC-128/CR	K	-	0-12	-	TB2904HQ	YES	YES	22K	47K	YES	YES	-	150K	330	150K	12K	-	-	4.7K	-	YES	-	YES	-
7-SEGMENT DISPLAY	KDC-129/S	M	-	-	0-25	TB2904HQ	YES	YES	22K	47K	YES	-	-	150K	330	150K	12K	-	-	4.7K	-	YES	-	YES	-
	KDC-229	M	-	-	0-24	TB2903HQ	YES	YES	22K	47K	YES	-	-	150K	330	150K	12K	-	-	4.7K	-	YES	-	YES	-
	KDC-2031SA/Y	E	-	2-75	-	TB2904HQ	YES	YES	22K	47K	-	-	-	150K	330	150K	12K	-	-	4.7K	-	-	YES	YES	-
	KDC-2031SG/Y	E	-	2-76	-	TB2904HQ	YES	YES	22K	47K	-	-	-	150K	330										

SWITCH UNIT (X16-294x-xx)



KDC-2031SA/2031SAY KDC-2031SG/2031SGY



ANODE CONNECTION

PIN NAME	3G	2G	1GA,1GB
P1	2b	2b	—
P2	1b	1b	—
P3	4a	4a	—
P4	3a	3a	—
P5	2a	2a	—
P6	1a	1a	—
P7	—	4m	2
P8	SCN	3m	1
P9	LOUD	2m	AUTO
P10	ATT	1m	REP
P11	3b	3b	RDM
P12	4b	4b	ST
P13	—	1h	S1
P14	—	3h	S2
P15	—	4h	S3
P16	1f	1f	S4
P17	2f	2f	S5
P18	3f	3f	S6
P19	4f	4f	S7
P20	1g	1g	S8
P21	2g	2g	S9
P22	3g	3g	S10
P23	4g	4g	IN
P24	1e	1e	T1
P25	2e	2e	S11
P26	3e	3e	a
P27	4e	4e	b
P28	1c	1k	f
P29	2c	1j	g
P30	3c	2j	c
P31	4c	4j	e
P32	1d	1c	d
P33	2d	2c	gh
P34	3d	3c	S12
P35	4d	4c	S13
P36	cd	1d	S14
P37	—	2d	S15
P38	—	3d	S16
P39	—	4d	—
P40	—	1n	—
P41	—	2n	—
P42	—	3n	—
P43	—	4n	—

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

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

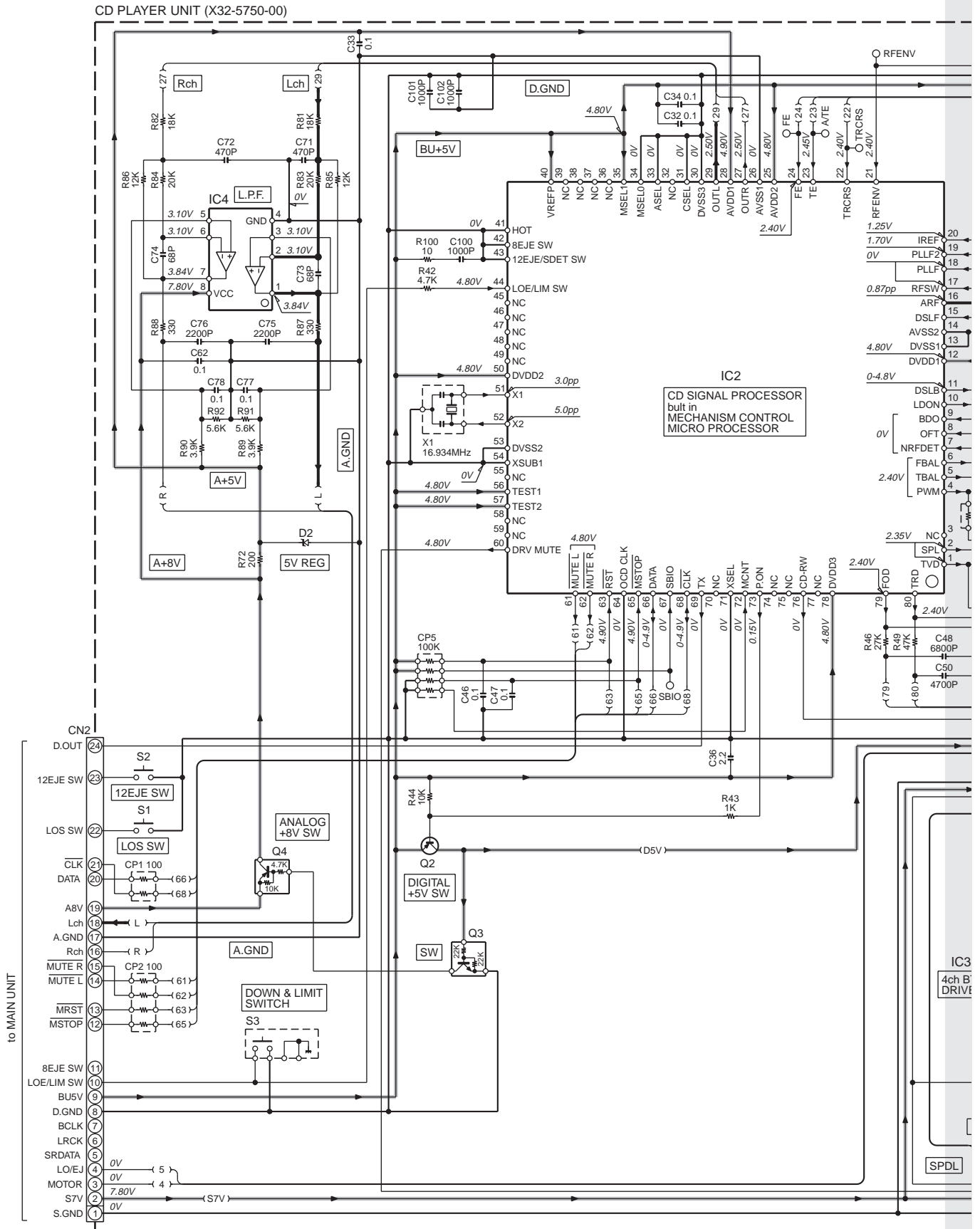
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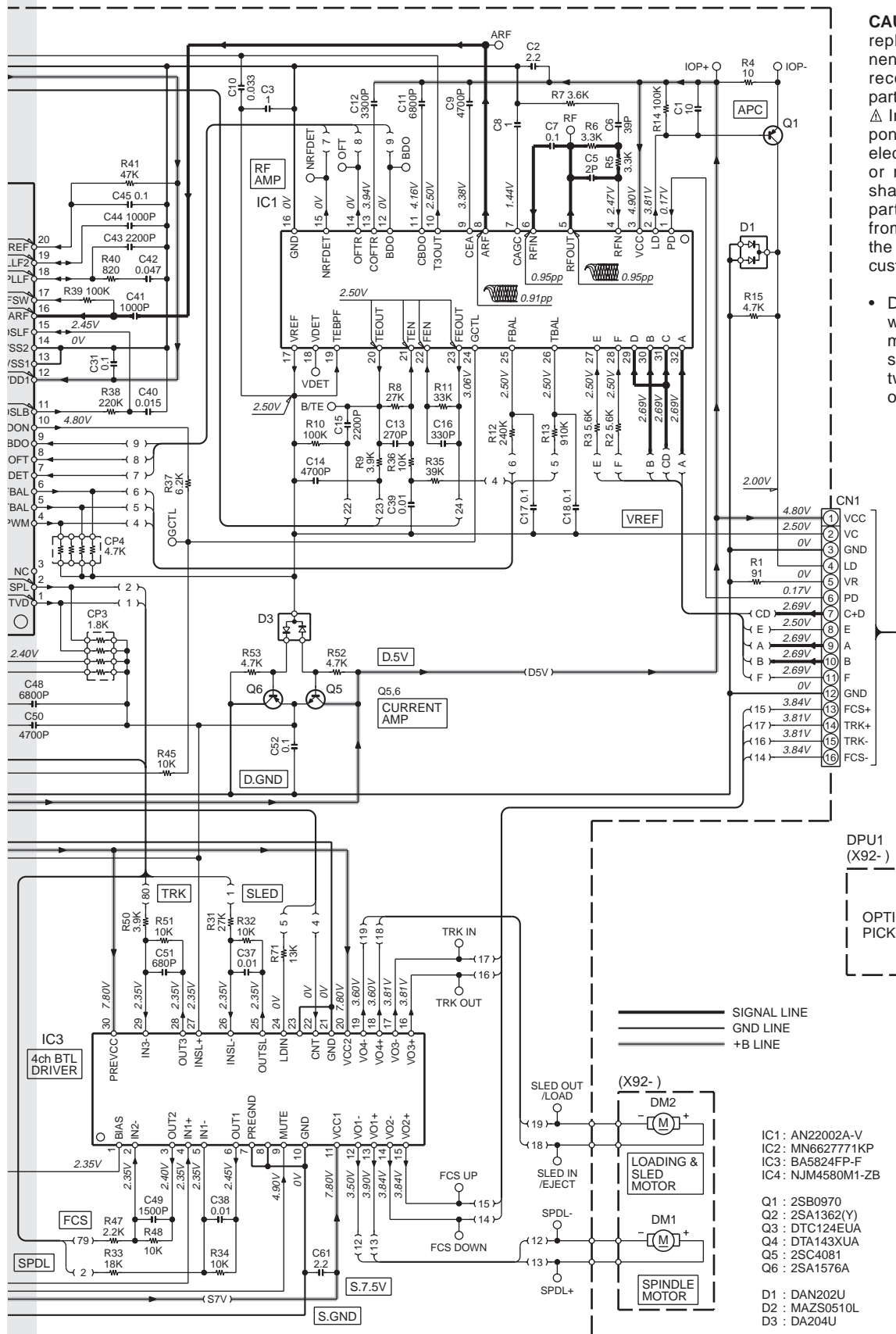
MODEL NAME	DESTI-NATION	UNIT No.	(A)	(B)	(C)	D61-65	R1-8	R61	R62	R63	W1	W2
E202	J	0-01	—	—	—	—	—	300	300	470	YES	—
RDT101	J	0-02	—	—	—	B30-1729-05	—	620	620	620	YES	—
KDC-102B	K	0-10	YES	YES	—	B30-1567-05	YES	1K	680	680	—	YES
KDC-129/S	M	0-21	—	—	—	B30-1533-05	—	620	560	560	YES	—
KDC-2031SA/Y	E	2-71	—	—	—	B30-1567-05	—	1K	680	680	—	YES
KDC-2031SG/Y	E	0-21	—	—	—	B30-1533-05	—	620	560	560	YES	—

- ED1 : 3-BT-223N
- IC1 : LC75756W
- IC3 : PNA4S22M
- Q21 : DTA114EE or KRA302E-P or RT1P141U
- D31-33,37-39,43-45,49-51,70 : B30-1567-05 (COLOR:RED)
- D34-36,40-42,46-48,52-54 : Refer to the parts list.
- D61-65 : *
- D71-77 : UDZS5.6B or 02DZ5.6F-Y
- D96 : DA204U



KDC-2031SA/2031SAY/
2031SG/2031SGY (2/2)



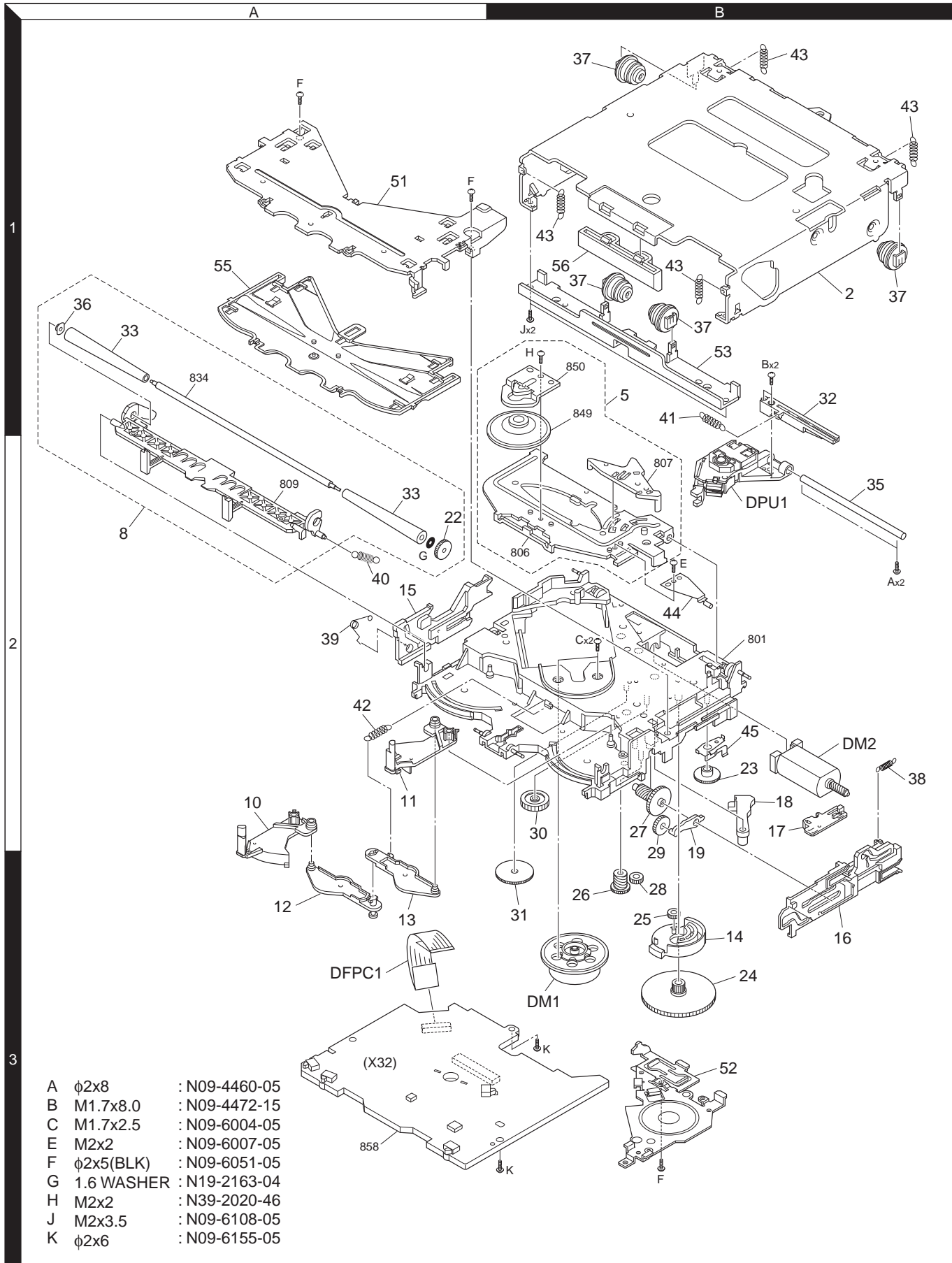


CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).

⚠ 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.

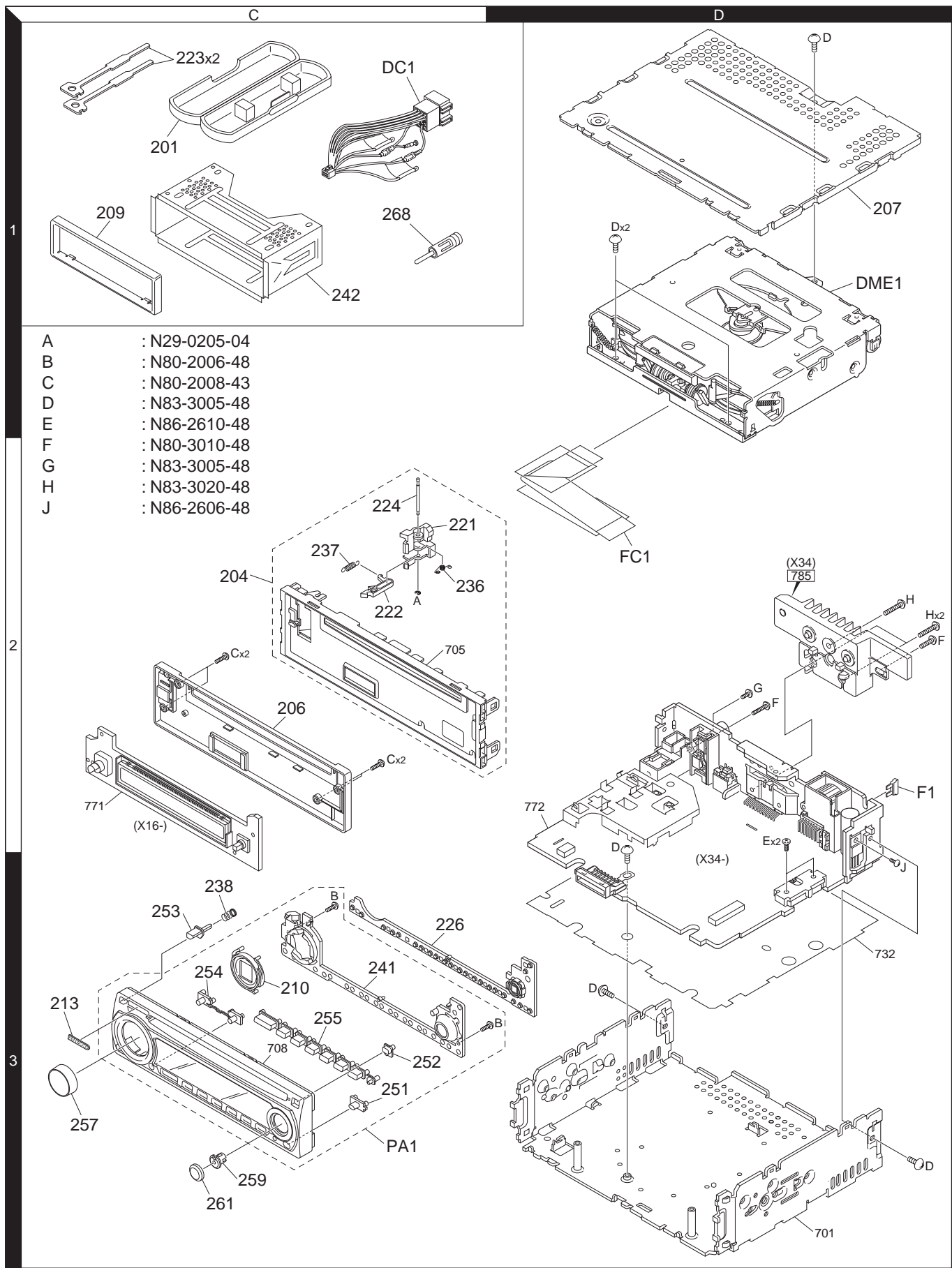
- DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

EXPLODED VIEW (CD MECHANISM)



A	φ2x8	: N09-4460-05
B	M1.7x8.0	: N09-4472-15
C	M1.7x2.5	: N09-6004-05
E	M2x2	: N09-6007-05
F	φ2x5(BLK)	: N09-6051-05
G	1.6 WASHER	: N19-2163-04
H	M2x2	: N39-2020-46
J	M2x3.5	: N09-6108-05
K	φ2x6	: N09-6155-05

EXPLODED VIEW (UNIT)



- A : N29-0205-04
- B : N80-2006-48
- C : N80-2008-43
- D : N83-3005-48
- E : N86-2610-48
- F : N80-3010-48
- G : N83-3005-48
- H : N83-3020-48
- J : N86-2606-48

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

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-2031SA/2031SAY/2031SG/2031SGY					
201	1C	*	A02-2736-03	PLASTIC CABINET ASSY	
204	2C		A22-2863-13	SUB PANEL ASSY	
206	2C	*	A46-1815-01	REAR COVER	
207	1D	*	A52-0804-12	TOP PLATE	
PA1	3C	*	A64-3461-02	PANEL ASSY	
-			B46-0100-50	WARRANTY CARD	E4E5
-			B46-0182-14	ID CARD	E4E5
-			B46-0606-04	ID CARD	E7E6
-		*	B64-2937-00	INST. MANUAL (ENGLISH)	
-		*	B64-2938-00	INST. MANUAL (FRE, GER, DUT)	E4E5
-		*	B64-2938-00	INST. MANUAL (ITA, SPA, POR)	E4E5
-		*	B64-2942-00	INST. MANUAL (RUSSIAN)	E7E6
209	1C	*	B07-3122-01	ESCUTCHEON	
210	3C	*	B19-2304-03	LIGHTING BOARD	
213	3C		B43-1518-04	BADGE	
221	2C		D10-4446-03	LEVER	
222	2C		D10-4447-03	LEVER	
223	1C		D10-4589-04	LEVER	
224	2C		D21-2329-04	SHAFT	
226	3C	*	E29-2027-02	CONDUCTIVE RUBBER	
△ DC1	1C	*	E30-6413-05	DC CORD	
△ DC1	1C	*	E30-6427-05	DC CORD	
FC1	2D	*	E39-0718-05	FLAT CABLE	
△ F1	2D		F52-0006-05	FUSE (MINI BLADE TYPE) (10A)	
△ F1	2D		F52-0023-05	FUSE (MINI BLADE TYPE) (10A)	
236	2C		G01-2987-04	TORSION COIL SPRING	
237	2C		G01-3096-04	EXTENSION SPRING	
238	3C	*	G01-3244-04	COMPRESSION SPRING	
-		*	H10-4919-12	POLYSTYRENE FOAMED FIXTURE	
-			H25-0329-04	PROTECTION BAG (280X450X0.03)	E7E6
-			H25-0337-04	PROTECTION BAG (180X300X0.03)	
-			H25-1111-04	PROTECTION BAG (280X450X0.03)	E4E5
-		*	H54-3308-03	ITEM CARTON CASE (KDC-2031SA)	E4
-		*	H54-3309-03	ITEM CARTON CASE (KDC-2031SG)	E5
-		*	H54-3317-03	ITEM CARTON CASE (KDC-2031SAY)	E7
-		*	H54-3318-03	ITEM CARTON CASE (KDC-2031SGY)	E6
241	3C	*	J19-7046-01	HOLDER	
242	1C		J21-9716-03	MOUNTING HARDWARE ASSY	
251	3C	*	K24-4279-04	PUSH KNOB (CLK)	
252	3C	*	K24-4280-04	PUSH KNOB (EJECT)	
253	3C	*	K24-4281-04	PUSH KNOB (RELEASE)	
254	3C	*	K25-1689-03	PUSH KNOB (ATT/Q)	
255	3C	*	K25-1690-02	PUSH KNOB (SRC/PRESET/RESET)	
257	3C	*	K29-7132-03	KNOB ASSY (VOL)	
259	3C	*	K29-7134-03	KNOB BASE (FM/AM)	
261	3C	*	K29-7140-03	KEY TOP (FM/AM)	
A	2C		N29-0205-04	RETAINING RING (1.5)	
B	3C		N80-2006-48	PAN HEAD TAPTITE SCREW	
C	2C		N80-2008-43	PAN HEAD TAPTITE SCREW	
D	3D	*	N83-3005-48	PAN HEAD TAPTITE SCREW	
E	2D	*	N86-2610-48	BINDING HEAD TAPTITE SCREW	

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
268	1C		T90-0523-05	ANTENNA ADAPTOR	
268	1C		T90-0534-05	ANTENNA ADAPTOR	
DME1	1D	*	X92-5090-00	MECHANISM ASSY	
SWITCH UNIT (X16-294x-xx)					
D31-33			B30-1567-05	LED (RED)	E4E7
D34-36			B30-1533-05	LED (PG)	E5E6
D37-39			B30-1567-05	LED (RED)	E4E7
D40-42			B30-1533-05	LED (PG)	E5E6
D43-45			B30-1567-05	LED (RED)	E4E7
D46-48			B30-1533-05	LED (PG)	E5E6
D49-51			B30-1567-05	LED (RED)	E4E7
D52-54			B30-1533-05	LED (PG)	E5E6
D61-65			B30-1533-05	LED (PG)	E5E6
D61-65			B30-1567-05	LED (RED)	E4E7
D70			B30-1567-05	LED (RED)	
C10			CK73GB0J225K	CHIP C 2.2UF K	
C11,12			CK73GB1H103K	CHIP C 0.010UF K	
C15			CC73GCH1H470J	CHIP C 47PF J	
J1		*	E59-0840-05	RECTANGULAR PLUG	
CP11			RK74HB1J103J	CHIP-COM 10K J 1/16W	
R11			RK73GB2A471J	CHIP R 470 J 1/10W	
R13			RK73GB2A471J	CHIP R 470 J 1/10W	
R14			RK73GB2A221J	CHIP R 220 J 1/10W	
R15-17			RK73GB2A471J	CHIP R 470 J 1/10W	
R19			RK73GB2A471J	CHIP R 470 J 1/10W	
R31-34			RK73FB2B471J	CHIP R 470 J 1/8W	
R61			RK73EB2E102J	CHIP R 1.0K J 1/4W	E4E7
R61			RK73EB2E621J	CHIP R 620 J 1/4W	E5E6
R62,63			RK73EB2E561J	CHIP R 560 J 1/4W	E5E6
R62,63			RK73EB2E681J	CHIP R 680 J 1/4W	E4E7
R70			RK73GB2A221J	CHIP R 220 J 1/10W	
R72			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R74			RK73GB2A4R7J	CHIP R 4.7 J 1/10W	
R75			RK73GB2A203J	CHIP R 20K J 1/10W	
R77			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R80		*	RK73SB3A330J	CHIP R 33 J 1W	
R82		*	RK73SB3A330J	CHIP R 33 J 1W	
W1			R92-1252-05	CHIP R 0 OHM J 1/16W	E5E6
W2			R92-1252-05	CHIP R 0 OHM J 1/16W	E4E7
W12,13			R92-1252-05	CHIP R 0 OHM J 1/16W	
S12			S70-0106-05	TACT SWITCH	
S11		*	T99-0457-05	ROTARY ENCODER	
D71-77			UDZS5.6B	ZENER DIODE	
D71-77		*	02DZ5.6F-Y	ZENER DIODE	
ED1		*	3-BT-223N	FLUORESCENT INDICATOR TUBE	
IC1		*	LC75756W	MOS-IC	
Q21			DTA114EE	DIGITAL TRANSISTOR	
Q21		*	KRA302E-P	DIGITAL TRANSISTOR	
Q21			RT1P141U	TRANSISTOR	

E4 : KDC-2031SA E5 : KDC-2031SG E6 : KDC-2031SGY E7 : KDC-2031SAY
(E : Europe K : North America M : Other Areas W : Without Europe)

△ Indicates safety critical components.

PARTS LIST

Ref. No.	Add	New	Parts No.	Description	Destination	Ref. No.	Add	New	Parts No.	Description	Destination
CD PLAYER UNIT (X32-5750-00)						R8			RK73GB2A273J	CHIP R 27K J 1/10W	
C1			C93-1215-05	CERAMIC 10UF K		R9			RK73GB2A392J	CHIP R 3.9K J 1/10W	
C2			CK73FB1A225K	CHIP C 2.2UF K		R10			RK73GB2A104J	CHIP R 100K J 1/10W	
C3			CK73GB0J105K	CHIP C 1.0UF K		R11			RK73GB2A333J	CHIP R 33K J 1/10W	
C5			CC73GCH1H020C	CHIP C 2.0PF C		R12			RK73GB2A244J	CHIP R 240K J 1/10W	
C6			CC73GCH1H390J	CHIP C 39PF J		R13			RK73GB2A914J	CHIP R 910K J 1/10W	
C7			CK73GB1C104K	CHIP C 0.10UF K		R14			RK73GB2A104J	CHIP R 100K J 1/10W	
C8			CK73GB0J105K	CHIP C 1.0UF K		R15			RK73GB2A472J	CHIP R 4.7K J 1/10W	
C9			CK73GB1H472K	CHIP C 4700PF K		R31			RK73GB2A273J	CHIP R 27K J 1/10W	
C10			CK73GB1C333K	CHIP C 0.033UF K		R32			RK73GB2A103J	CHIP R 10K J 1/10W	
C11			CK73GB1H682K	CHIP C 6800PF K		R33			RK73GB2A183J	CHIP R 18K J 1/10W	
C12			CK73GB1H332K	CHIP C 3300PF K		R34			RK73GB2A103J	CHIP R 10K J 1/10W	
C13			CC73GCH1H271J	CHIP C 270PF J		R35			RK73GB2A393J	CHIP R 39K J 1/10W	
C14			CK73GB1H472K	CHIP C 4700PF K		R36			RK73GB2A103J	CHIP R 10K J 1/10W	
C15			CK73GB1H222K	CHIP C 2200PF K		R37			RK73GB2A622J	CHIP R 6.2K J 1/10W	
C16			CC73GCH1H331J	CHIP C 330PF J		R38			RK73GB2A224J	CHIP R 220K J 1/10W	
C17,18			CK73GB1C104K	CHIP C 0.10UF K		R39			RK73GB2A104J	CHIP R 100K J 1/10W	
C31-34			CK73GB1C104K	CHIP C 0.10UF K		R40			RK73GB2A821J	CHIP R 820 J 1/10W	
C36			CK73FB1A225K	CHIP C 2.2UF K		R41			RK73GB2A473J	CHIP R 47K J 1/10W	
C37-39			CK73GB1H103K	CHIP C 0.010UF K		R42			RK73GB2A472J	CHIP R 4.7K J 1/10W	
C40			CK73GB1H153K	CHIP C 0.015UF K		R43			RK73GB2A102J	CHIP R 1.0K J 1/10W	
C41			CK73GB1H102K	CHIP C 1000PF K		R44,45			RK73GB2A103J	CHIP R 10K J 1/10W	
C42			CK73GB1E473K	CHIP C 0.047UF K		R46			RK73GB2A273J	CHIP R 27K J 1/10W	
C43			CK73GB1H222K	CHIP C 2200PF K		R47			RK73GB2A222J	CHIP R 2.2K J 1/10W	
C44			CK73GB1H102K	CHIP C 1000PF K		R48			RK73GB2A103J	CHIP R 10K J 1/10W	
C45-47			CK73GB1C104K	CHIP C 0.10UF K		R49			RK73GB2A473J	CHIP R 47K J 1/10W	
C48			CK73GB1H682K	CHIP C 6800PF K		R50			RK73GB2A392J	CHIP R 3.9K J 1/10W	
C49			CK73GB1H152K	CHIP C 1500PF K		R51			RK73GB2A103J	CHIP R 10K J 1/10W	
C50			CK73GB1H472K	CHIP C 4700PF K		R52,53			RK73GB2A472J	CHIP R 4.7K J 1/10W	
C51			CK73GB1H681K	CHIP C 6800PF K		R71			RK73GB2A133J	CHIP R 13K J 1/10W	
C52			CK73GB1C104K	CHIP C 0.10UF K		R72			RK73FB2B201J	CHIP R 200 J 1/8W	
C61			CK73FB1A225K	CHIP C 2.2UF K		R81,82			RK73FB2B183J	CHIP R 18K J 1/8W	
C62			CK73GB1C104K	CHIP C 0.10UF K		R83,84			RK73FB2B203J	CHIP R 20K J 1/8W	
C71,72			CK73GB1H471K	CHIP C 470PF K		R85,86			RK73FB2B123J	CHIP R 12K J 1/8W	
C73,74			CC73GCH1H680J	CHIP C 68PF J		R87,88			RK73FB2B331J	CHIP R 330 J 1/8W	
C75,76			CK73GB1H222K	CHIP C 2200PF K		R89,90			RK73GB2A392J	CHIP R 3.9K J 1/10W	
C77,78			CK73GB1C104K	CHIP C 0.10UF K		R91,92			RK73GB2A562J	CHIP R 5.6K J 1/10W	
C100-102			CK73GB1H102K	CHIP C 1000PF K		R100			RK73GB2A100J	CHIP R 10 J 1/10W	
CN1			E41-2068-05	FLAT CABLE CONNECTOR		S1,2			S68-0863-05	PUSH SWITCH	
CN1			E41-2085-15	FLAT CABLE CONNECTOR		S3			S68-0862-05	PUSH SWITCH	
CN2			E41-2083-05	FLAT CABLE CONNECTOR		D1			DAN202U	DIODE	
X1			L78-0851-05	RESONATOR (16.934MHZ)		D2			MAZS0510L	ZENER DIODE	
CP1			RK74GA1J101J	CHIP-COM 100 J 1/16W		D3			DA204U	DIODE	
CP2			RK74GB1J101J	CHIP-COM 100 J 1/16W		IC1	*		AN22002A-V	ANALOGUE IC	
CP3			RK74GB1J182J	CHIP-COM 1.8K J 1/16W		IC2			MN6627771KP	MOS-IC	
CP4			RK74GB1J472J	CHIP-COM 4.7K J 1/16W		IC3			BA5824FP-F	ANALOGUE IC	
CP5			RK74GB1J104J	CHIP-COM 100K J 1/16W		IC4			NJM4580M1-ZB	ANALOGUE IC	
R1			RK73GB2A910J	CHIP R 91 J 1/10W		Q1			2SB0970	TRANSISTOR	
R2,3			RK73GB2A562J	CHIP R 5.6K J 1/10W		Q2			2SA1362(Y)	TRANSISTOR	
R4			RK73FB2B100J	CHIP R 10 J 1/8W		Q3			DTC124EUA	DIGITAL TRANSISTOR	
R5,6			RK73GB2A332J	CHIP R 3.3K J 1/10W		Q4			DTA143XUA	DIGITAL TRANSISTOR	
R7			RK73GB2A362J	CHIP R 3.6K J 1/10W		Q5			2SC4081	TRANSISTOR	
						Q6			2SA1576A	TRANSISTOR	

E4 : KDC-2031SA E5 : KDC-2031SG E6 : KDC-2031SGY E7 : KDC-2031SAY
(E : Europe K : North America M : Other Areas W : Without Europe)

△ Indicates safety critical components.

PARTS LIST

Ref. No.	Add	New	Parts No.	Description	Destination	Ref. No.	Add	New	Parts No.	Description	Destination
ELECTRIC UNIT (X34-3412-7x)											
D401			B30-1567-05	LED (RED)		C531			CK73FB1C105K	CHIP C 1.0UF	K
C1,2			CD04AT1HR47M	ELECTRO 0.47UF 50WV		C541			CC73GCH1H271J	CHIP C 270PF	J
C3-6			C90-5684-05	ELECTRO 0.22UF 50WV		C542			CC73GCH1H050C	CHIP C 5.0PF	C
C3-6		*	C90-6735-05	ELECTRO 0.22UF 50WV		C543			CC73GCH1H080D	CHIP C 8.0PF	D
C51			C90-5683-05	ELECTRO 3300UF 16WV		C544			CC73GCH1H150J	CHIP C 15PF	J
C52,53			CK73GB1H102K	CHIP C 1000PF K		C545			CK73GB1H682K	CHIP C 6800PF	K
C54,55			CK73GB1H103K	CHIP C 0.010UF K		C547			CD04AT1A220M	ELECTRO 22UF	10WV
C69			CK73GB1A474K	CHIP C 0.47UF K		C548			CK73GB1E223K	CHIP C 0.022UF	K
C71			CD04AS1C470M	ELECTRO 47UF 16WV		C548			CK73GB1H223K	CHIP C 0.022UF	K
C72			CK73GB1H104K	CHIP C 0.10UF K		C549			CK73GB1H222K	CHIP C 2200PF	K
C74-77			CK73GB1C104K	CHIP C 0.10UF K		C550			CK73GB1E333K	CHIP C 0.033UF	K
C78		*	CD04AT1E101M	ELECTRO 100UF 25WV		C550			CK73GB1H333K	CHIP C 0.033UF	K
C79			CD04AS1A220M	ELECTRO 22UF 10WV		C551			CK73GB1H103K	CHIP C 0.010UF	K
C80		*	CD04AT1E101M	ELECTRO 100UF 25WV		C553			CK73GB1C104K	CHIP C 0.10UF	K
C81			CK73GB1H103K	CHIP C 0.010UF K		C554			CK73GB1A334K	CHIP C 0.33UF	K
C82			CK73GB1E223K	CHIP C 0.022UF K		C556			CK73GB1H103K	CHIP C 0.010UF	K
C82			CK73GB1H223K	CHIP C 0.022UF K		C559			CK73GB1H332K	CHIP C 3300PF	K
C96			CD04AS1HR47M	ELECTRO 0.47UF 50WV		C561			CK73FB1H104K	CHIP C 0.10UF	K
C97			CD04AS1C470M	ELECTRO 47UF 16WV		C562			CD04AT1A100M	ELECTRO 10UF	10WV
C153			CK73GB0J105K	CHIP C 1.0UF K		C563			CD04AT1HR47M	ELECTRO 0.47UF	50WV
C201			CK73GB1H103K	CHIP C 0.010UF K		C564			CK73GB1A474K	CHIP C 0.47UF	K
C255			CD04AS1C100M	ELECTRO 10UF 16WV		C565			CK73FB1C105K	CHIP C 1.0UF	K
C256			CD04AS1H010M	ELECTRO 1UF 50WV		C568			CC73GCH1H271J	CHIP C 270PF	J
C257			CD04AT1H010M	ELECTRO 1UF 50WV		C579			CK73GB1H103K	CHIP C 0.010UF	K
C258			CD04AS1H010M	ELECTRO 1UF 50WV		C581			CC73GCH1H101J	CHIP C 100PF	J
C331,332			CD04AT1C100M	ELECTRO 10UF 16WV		C582			CK73GB1E223K	CHIP C 0.022UF	K
C333,334			CC73GCH1H681J	CHIP C 680PF J		C582			CK73GB1H223K	CHIP C 0.022UF	K
C407			CC73GCH1H220J	CHIP C 22PF J		C583			CK73GB1C683K	CHIP C 0.068UF	K
C408			CC73GCH1H180J	CHIP C 18PF J		C583			CK73GB1H683K	CHIP C 0.068UF	K
C409			CD04AS0J101M	ELECTRO 100UF 6.3WV		C584			CD04AT1H010M	ELECTRO 1UF	50WV
C410			CK73GB1H103K	CHIP C 0.010UF K		C585			CK73GB1H103K	CHIP C 0.010UF	K
C411			CK73GB1A224K	CHIP C 0.22UF K		C586			CK73GB0J105K	CHIP C 1.0UF	K
C420			CC73GCH1H102J	CHIP C 1000PF J		C587			CK73GB1C104K	CHIP C 0.10UF	K
C422			CC73GCH1H101J	CHIP C 100PF J		C588			CK73GB1A474K	CHIP C 0.47UF	K
C502			CK73GB1H152K	CHIP C 1500PF K		C589			CK73GB1C104K	CHIP C 0.10UF	K
C503			CK73GB1C104K	CHIP C 0.10UF K		C590			CK73GB1H392K	CHIP C 3900PF	K
C504			CK73GB1H103K	CHIP C 0.010UF K		C600			CD04AT1A101M	ELECTRO 100UF	10WV
C505			CD04AT1C4R7M	ELECTRO 4.7UF 16WV		C601			CK73GB1E223K	CHIP C 0.022UF	K
C506			CK73GB1A684K	CHIP C 0.68UF K		C601			CK73GB1H223K	CHIP C 0.022UF	K
C507,508			CD04AT1A220M	ELECTRO 22UF 10WV		C602			CC73GCH1H151J	CHIP C 150PF	J
C509			CC73GCH1H680J	CHIP C 68PF J		C604			CC73GCH1H470J	CHIP C 47PF	J
C510			CC73GCH1H101J	CHIP C 100PF J		C605,606			CC73GCH1H010C	CHIP C 1.0PF	C
C512			CD04AT1C100M	ELECTRO 10UF 16WV		C610			CC73GCH1H010C	CHIP C 1.0PF	C
C513,514			CK73GB1H103K	CHIP C 0.010UF K		C620			CK73GB1H103K	CHIP C 0.010UF	K
C515			CD04AT1H010M	ELECTRO 1UF 50WV		C623,624			CK73GB1H103K	CHIP C 0.010UF	K
C516			CC73GCH1H100D	CHIP C 10PF D		C625,626			CC73GCH1H101J	CHIP C 100PF	J
C517,518			CK73FB1C105K	CHIP C 1.0UF K		CN2		*	E41-2244-05	FLAT CABLE CONNECTOR	
C519,520			CK73FB1C474K	CHIP C 0.47UF K		J1			E58-0991-05	RECTANGULAR RECEPTACLE	
C521,522			CC73GCH1H102J	CHIP C 1000PF J		J4			E04-0326-05	RF COAXIAL CABLE RECEPTACLE	
C524			CC73GCH1H180J	CHIP C 18PF J		J5		*	E58-0992-05	RECTANGULAR RECEPTACLE	
C525			CC73GCH1H150J	CHIP C 15PF J		J6			E63-0898-05	PIN JACK	
C527			CC73GCH1H102J	CHIP C 1000PF J		P1			E23-0745-05	TERMINAL	
						W251			E31-0001-00	JUMPER WIRE	
						W300-302			E31-0001-00	JUMPER WIRE	

PARTS LIST

ELECTRIC UNIT (X34-3412-7x)

Ref. No.	Add	New	Parts No.	Description	Destination	Ref. No.	Add	New	Parts No.	Description	Destination
W304-311			E31-0001-00	JUMPER WIRE		R60			RK73GB2A103J	CHIP R 10K J 1/10W	
W313-324			E31-0001-00	JUMPER WIRE		R61			RK73GB2A223J	CHIP R 22K J 1/10W	
W326-329			E31-0001-00	JUMPER WIRE		R72,73			RD14BB2C472J	RD 4.7K J 1/6W	
W331-337			E31-0001-00	JUMPER WIRE		R75-78			RK73GB2A103J	CHIP R 10K J 1/10W	
W339-341			E31-0001-00	JUMPER WIRE		R81			RD14BB2C103J	RD 10K J 1/6W	
W346,347			E31-0001-00	JUMPER WIRE		R82			RK73GB2A223J	CHIP R 22K J 1/10W	
W349-353			E31-0001-00	JUMPER WIRE		R83			RK73GB2A473J	CHIP R 47K J 1/10W	
W355-357			E31-0001-00	JUMPER WIRE		R85			RK73GB2A1R0J	CHIP R 1.0 J 1/10W	
W361-366			E31-0001-00	JUMPER WIRE		R86			RK73EB2E1R0J	CHIP R 1.0 J 1/4W	
W368-372			E31-0001-00	JUMPER WIRE		R87,88			RK73GB2A1R0J	CHIP R 1.0 J 1/10W	
W374-393			E31-0001-00	JUMPER WIRE		R90			RK73GB2A1R0J	CHIP R 1.0 J 1/10W	
W395-399			E31-0001-00	JUMPER WIRE		R96			RK73GH2A273D	CHIP R 27K D 1/10W	
W401-410			E31-0001-00	JUMPER WIRE		R97	*		RK73GH2A332D	CHIP R 3.3K D 1/10W	
W412-427			E31-0001-00	JUMPER WIRE		R98			RK73EB2E102J	CHIP R 1.0K J 1/4W	
W801			E31-0001-00	JUMPER WIRE		R99			RK73GB2A104J	CHIP R 100K J 1/10W	
W830			E31-0001-00	JUMPER WIRE		R100			RK73GB2A272J	CHIP R 2.7K J 1/10W	
CF51-53		*	L72-0805-05	CERAMIC FILTER (10.7MHZ)		R130,131			RK73EB2E4R7J	CHIP R 4.7 J 1/4W	
CF54		*	L72-0804-05	CERAMIC FILTER (450KHZ)		R133			RK73EB2E4R7J	CHIP R 4.7 J 1/4W	
L3			L33-1978-05	CHOKE COIL (22UH)		R135-140			RK73EB2E4R7J	CHIP R 4.7 J 1/4W	
L4		*	L33-2260-05	CHOKE COIL (52UH)		R141			RK73EB2E2R2J	CHIP R 2.2 J 1/4W	
L51			L33-1988-05	CHOKE COIL ASSY (140UH)		R152			RK73EB2E100J	CHIP R 10 J 1/4W	
L61			L40-4795-91	SMALL FIXED INDUCTOR (4.7UH, J)		R153			RK73EB2E471J	CHIP R 470 J 1/4W	
L501			L40-6891-58	SMALL FIXED INDUCTOR (6.8UH)		R156,157			RK73EB2E102J	CHIP R 1.0K J 1/4W	
L502			L40-3301-58	SMALL FIXED INDUCTOR (33UH)		R158			RK73EB2E101J	CHIP R 100 J 1/4W	
L503			L40-1021-56	SMALL FIXED INDUCTOR (1UH)		R159			RK73EB2E102J	CHIP R 1.0K J 1/4W	
L504			L40-1011-58	SMALL FIXED INDUCTOR (100UH)		R160,161			RK73EB2E471J	CHIP R 470 J 1/4W	
L505		*	L40-3381-58	SMALL FIXED INDUCTOR (0.33UH)		R163			RK73EB2E471J	CHIP R 470 J 1/4W	
L506		*	L31-0977-15	FM-RF COIL		R164			RK73EB2E102J	CHIP R 1.0K J 1/4W	
L507		*	L32-0941-15	FM OSCILLATING COIL		R178			RK73EB2E471J	CHIP R 470 J 1/4W	
L508		*	L30-0776-15	FM IFT		R180,181			RK73GB2A471J	CHIP R 470 J 1/10W	
L509		*	L30-0777-15	AM IFT		R182			RK73GB2A222J	CHIP R 2.2K J 1/10W	
L518		*	L31-0976-15	FM-RF COIL		R190			RK73GB2A104J	CHIP R 100K J 1/10W	
L519		*	L40-4763-72	SMALL FIXED INDUCTOR (4.7NH)		R191			RK73GB2A225J	CHIP R 2.2M J 1/10W	
L520		*	L40-3381-58	SMALL FIXED INDUCTOR (0.33UH)		R193,194			RK73GB2A474J	CHIP R 470K J 1/10W	
L521		*	L40-1073-72	SMALL FIXED INDUCTOR (10NH)		R199			RK73GB2A241J	CHIP R 240 J 1/10W	
L600		*	L92-0607-05	CHIP FERRITE		R200			RK73GB2A102J	CHIP R 1.0K J 1/10W	
L601,602			L92-0397-05	CHIP FERRITE		R251			RK73GB2A154J	CHIP R 150K J 1/10W	
X1			L78-0879-05	RESONATOR (10.000MHZ)		R252			RK73GB2A473J	CHIP R 47K J 1/10W	
X2			L77-2793-05	CRYSTAL RESONATOR (32.768KHZ)		R253			RK73GB2A432J	CHIP R 4.3K J 1/10W	
X501			L77-2077-05	CRYSTAL RESONATOR (10.250MHZ)		R254			RK73GB2A100J	CHIP R 10 J 1/10W	
F	2D	*	N80-3010-48	PAN HEAD TAPTITE SCREW		R255			RK73GB2A331J	CHIP R 330 J 1/10W	
G	2D	*	N83-3005-48	PAN HEAD TAPTITE SCREW		R256			RK73GB2A154J	CHIP R 150K J 1/10W	
H	2D	*	N83-3020-48	PAN HEAD TAPTITE SCREW		R257			RK73GB2A123J	CHIP R 12K J 1/10W	
J	3D		N86-2606-48	BINDING HEAD TAPTITE SCREW		R271			RK73GB2A101J	CHIP R 100 J 1/10W	
R1,2			RK73GB2A101J	CHIP R 100 J 1/10W		R272			RK73GB2A103J	CHIP R 10K J 1/10W	
R21			RD14BB2C152J	RD 1.5K J 1/6W		R273			RK73GB2A474J	CHIP R 470K J 1/10W	
R51			RK73FB2B683J	CHIP R 68K J 1/8W		R331,332			RK73GB2A271J	CHIP R 270 J 1/10W	
R52			RK73GB2A393J	CHIP R 39K J 1/10W		R335,336			RK73GB2A303J	CHIP R 30K J 1/10W	
R53			RK73GB2A104J	CHIP R 100K J 1/10W		R338,339			RD14BB2C101J	RD 100 J 1/6W	
R54			RK73FB2B203J	CHIP R 20K J 1/8W		R351,352			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R55,56			RK73GB2A103J	CHIP R 10K J 1/10W		R353			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R57			RK73GB2A223J	CHIP R 22K J 1/10W		R355,356			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R58			RD14DB2H332J	SMALL-RD 3.3K J 1/2W		R358			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R59			RD14BB2C333J	RD 33K J 1/6W		R359			RK73GB2A101J	CHIP R 100 J 1/10W	
						R360			RK73GB2A222J	CHIP R 2.2K J 1/10W	

E4 : KDC-2031SA E5 : KDC-2031SG E6 : KDC-2031SGY E7 : KDC-2031SAY
(E : Europe K : North America M : Other Areas W : Without Europe)

△ Indicates safety critical components.

PARTS LIST

ELECTRIC UNIT (X34-3412-7x)

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation	Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
R363			RD14BB2C472J	RD 4.7K J 1/6W		W64			R92-1252-05	CHIP R 0 OHM J 1/16W	
R365			RK73GB2A472J	CHIP R 4.7K J 1/10W		W65,66			R92-2053-05	CHIP R 0 OHM J 1/8W	
R366			RK73EB2E472J	CHIP R 4.7K J 1/4W		W68			R92-1252-05	CHIP R 0 OHM J 1/16W	
R367			RK73GB2A104J	CHIP R 100K J 1/10W		W71			R92-1252-05	CHIP R 0 OHM J 1/16W	
R368,369			RK73GB2A471J	CHIP R 470 J 1/10W		W72			R92-2053-05	CHIP R 0 OHM J 1/8W	
R370,371			RK73GB2A472J	CHIP R 4.7K J 1/10W		W73			R92-1252-05	CHIP R 0 OHM J 1/16W	
R412,413			RK73GB2A223J	CHIP R 22K J 1/10W		W75			R92-2053-05	CHIP R 0 OHM J 1/8W	
R415			RK73GB2A223J	CHIP R 22K J 1/10W	E5E6	W76			R92-1252-05	CHIP R 0 OHM J 1/16W	
R416-418			RK73GB2A223J	CHIP R 22K J 1/10W	E4E7	W78			R92-2053-05	CHIP R 0 OHM J 1/8W	
R417,418			RK73GB2A223J	CHIP R 22K J 1/10W	E5E6	W79,80			R92-1252-05	CHIP R 0 OHM J 1/16W	
R432			RK73GB2A472J	CHIP R 4.7K J 1/10W		W81,82			R92-2053-05	CHIP R 0 OHM J 1/8W	
R433			RK73GB2A222J	CHIP R 2.2K J 1/10W		W83			R92-1252-05	CHIP R 0 OHM J 1/16W	
R435,436			RK73GB2A103J	CHIP R 10K J 1/10W		W87			R92-2053-05	CHIP R 0 OHM J 1/8W	
R437,438			RK73GB2A102J	CHIP R 1.0K J 1/10W		W88,89			R92-1252-05	CHIP R 0 OHM J 1/16W	
R439			RK73GB2A222J	CHIP R 2.2K J 1/10W		W90,91			R92-2053-05	CHIP R 0 OHM J 1/8W	
R440,441			RK73GB2A473J	CHIP R 47K J 1/10W		W92			R92-1252-05	CHIP R 0 OHM J 1/16W	
R453			RK73GB2A473J	CHIP R 47K J 1/10W		W93			R92-2053-05	CHIP R 0 OHM J 1/8W	
R454			RK73GB2A472J	CHIP R 4.7K J 1/10W		W96-98			R92-1252-05	CHIP R 0 OHM J 1/16W	
R456			RK73GB2A104J	CHIP R 100K J 1/10W		W99			R92-2053-05	CHIP R 0 OHM J 1/8W	
R457			RK73GB2A103J	CHIP R 10K J 1/10W		W102			R92-2053-05	CHIP R 0 OHM J 1/8W	
R471			RK73GB2A103J	CHIP R 10K J 1/10W		W506			R92-2053-05	CHIP R 0 OHM J 1/8W	
R501			RK73GB2A682J	CHIP R 6.8K J 1/10W		W604,605			R92-1252-05	CHIP R 0 OHM J 1/16W	
R502,503			RK73GB2A222J	CHIP R 2.2K J 1/10W		W611			R92-1252-05	CHIP R 0 OHM J 1/16W	
R504			RK73GB2A4R7J	CHIP R 4.7 J 1/10W		W802			R92-1252-05	CHIP R 0 OHM J 1/16W	
R505			RK73GB2A102J	CHIP R 1.0K J 1/10W		W804-807			R92-1252-05	CHIP R 0 OHM J 1/16W	
R506			RK73GB2A105J	CHIP R 1.0M J 1/10W		W808			R92-2053-05	CHIP R 0 OHM J 1/8W	
R507			RK73GB2A102J	CHIP R 1.0K J 1/10W		W810			R92-1252-05	CHIP R 0 OHM J 1/16W	
R520			RK73GB2A221J	CHIP R 220 J 1/10W		W812			R92-2053-05	CHIP R 0 OHM J 1/8W	
R521			RK73GB2A152J	CHIP R 1.5K J 1/10W		W814			R92-2053-05	CHIP R 0 OHM J 1/8W	
R522			RK73GB2A223J	CHIP R 22K J 1/10W		W820			R92-2053-05	CHIP R 0 OHM J 1/8W	
R543			RK73GB2A562J	CHIP R 5.6K J 1/10W		W823			R92-1252-05	CHIP R 0 OHM J 1/16W	
R544			RD14BB2C222J	RD 2.2K J 1/6W		W826			R92-2053-05	CHIP R 0 OHM J 1/8W	
R545			RK73GB2A333J	CHIP R 33K J 1/10W		D3			IMSA-6801-E	SURGE ABSORBER	
R546			RK73GB2A432J	CHIP R 4.3K J 1/10W		D52			MAZ4068N-M	ZENER DIODE	
R561			RK73GB2A472J	CHIP R 4.7K J 1/10W		D53			UDZS6.8B	ZENER DIODE	
R562			RK73GB2A106J	CHIP R 10M J 1/10W		D53	*		02DZ6.8F-Y	ZENER DIODE	
R565			RK73GB2A394J	CHIP R 390K J 1/10W		D54			MAZ4068N-M	ZENER DIODE	
R566,567			RK73GB2A102J	CHIP R 1.0K J 1/10W		D55			1SS355	DIODE	
R589			RK73GB2A473J	CHIP R 47K J 1/10W		D57			S2V60*A	DIODE	
R590			RK73GB2A103J	CHIP R 10K J 1/10W		D71			MAZ4082N-L	ZENER DIODE	
R591			RK73GB2A513J	CHIP R 51K J 1/10W		D72			D1F60-5063	DIODE	
R592			RK73GB2A223J	CHIP R 22K J 1/10W		D72			1SR154-400	DIODE	
R594			RK73EB2E100J	CHIP R 10 J 1/4W		D73			AM01ZNF	DIODE	
R595-597			RD14BB2C100J	RD 10 J 1/6W		D73	*		10EDA20	DIODE	
R599			RK73GB2A220J	CHIP R 22 J 1/10W		D74,75			D1F60-5063	DIODE	
R600			RD14BB2C2R2J	RD 2.2 J 1/6W		D74,75			1SR154-400	DIODE	
R601			RD14BB2C1R0J	RD 1.0 J 1/6W		D76			DAN202U	DIODE	
R602			RK73GB2A122J	CHIP R 1.2K J 1/10W		D76	*		KDS121-P	DIODE	
R603			RK73GB2A560J	CHIP R 56 J 1/10W		D76	*		MC2848	DIODE	
R604,605			RK73GB2A100J	CHIP R 10 J 1/10W		D77			AM01ZNF	DIODE	
W51			R92-1252-05	CHIP R 0 OHM J 1/16W		D77	*		10EDA20	DIODE	
W52			R92-2053-05	CHIP R 0 OHM J 1/8W		D81			UDZS4.7B	ZENER DIODE	
W53			R92-1252-05	CHIP R 0 OHM J 1/16W		D81	*		02DZ4.7F-Y	ZENER DIODE	
W58-60			R92-1252-05	CHIP R 0 OHM J 1/16W		D81	*		1SS133	DIODE	
W61-63			R92-2053-05	CHIP R 0 OHM J 1/8W		D203					

PARTS LIST

ELECTRIC UNIT (X34-3412-7x)

Ref. No.	Add	New	Parts No.	Description	Destination
D259			1SS133	DIODE	
D261			1SS355	DIODE	
D402,403			DAN202U	DIODE	
D402,403		*	KDS121-P	DIODE	
D402,403		*	MC2848	DIODE	
D501			RN739F	DIODE	
D502,503		*	KP2311ETR-G	DIODE	
D504		*	KV1430STL-G	VARIABLE CAPACITANCE DIODE	
D506		*	HVC383B-E	VARIABLE CAPACITANCE DIODE	
IC1		*	784225GC258A	MICROCONTROLLER IC	
IC3		*	BD4912-V4	ANALOGUE IC	
IC4		*	TB2904HQ	ANALOGUE IC	
IC6			TC7W02FU-F	MOS-IC	
IC8		*	S-80836CNNB-G	MOS-IC	
IC10		*	E-TDA7516	ANALOGUE IC	
IC11		*	BR24L04FV-W	ROM IC	
IC15		*	BA00CCWT	ANALOGUE IC	
Q51-53			2SC4081	TRANSISTOR	
Q71			UMC2N	TRANSISTOR	
Q72			2SB1565(E,F)	TRANSISTOR	
Q73			2SD1858	TRANSISTOR	
Q74			UMC2N	TRANSISTOR	
Q151			DTA114YUA	DIGITAL TRANSISTOR	
Q151		*	KRA307-P	DIGITAL TRANSISTOR	
Q151			RT1P144M	TRANSISTOR	
Q155			2SC4081	TRANSISTOR	
Q252		*	KTA2014P(Y,GR)	TRANSISTOR	
Q252			2SA1576A	TRANSISTOR	
Q252		*	2SA1603A	TRANSISTOR	
Q330			DTA124EUA	DIGITAL TRANSISTOR	
Q330		*	KRA303-P	DIGITAL TRANSISTOR	
Q330		*	RT1P241M	TRANSISTOR	
Q351,352			DTC143TUA	DIGITAL TRANSISTOR	
Q351,352		*	KRC410-P	DIGITAL TRANSISTOR	
Q351,352		*	RT1N430M	TRANSISTOR	
Q501		*	HN3G01J(BL)-F	TRANSISTOR	
TH1			PRF21BE471QB2	POSITIVE RESISTOR	
MECHANISM UNIT (X92-5090-00)					
2	1B		A10-4827-32	CHASSIS	
5	1B		D10-4576-83	ARM ASSY	
8	2A		D10-4579-23	LEVER ASSY	
10	2A		D10-4581-13	ARM	
11	2A		D10-4582-13	ARM	
12	3A		D10-4583-03	ARM	
13	3A		D10-4584-03	ARM	
14	3B		D10-4585-03	ARM	
15	2A		D10-4586-13	SLIDER	
16	3B		D10-4587-52	SLIDER	
17	2B		D10-4588-13	SLIDER	
18	2B		D10-4595-04	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	

Ref. No.	Add	New	Parts No.	Description	Destination
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		D13-2172-13	RACK (GEAR)	
33	2A		D14-0759-04	ROLLER	
35	2B		D21-2382-04	SHAFT	
36	1A		D23-0954-04	RETAINER	
37	1B		D39-0246-05	DAMPER	
38	2B		G01-3072-04	EXTENSION SPRING	
39	2A		G01-3073-04	TORSION COIL SPRING	
40	2A		G01-3074-04	EXTENSION SPRING	
41	1B		G01-3075-14	EXTENSION SPRING	
42	2A		G01-3076-04	EXTENSION SPRING	
43	1B		G01-3077-14	EXTENSION SPRING	
44	2B		G02-1399-04	FLAT SPRING	
45	2B		G02-1408-04	FLAT SPRING	
51	1A		J21-9676-32	MOUNTING HARDWARE	
52	3B		J21-9677-22	MOUNTING HARDWARE	
53	1B		J21-9678-13	MOUNTING HARDWARE	
55	1A		J90-1001-11	GUIDE	
56	1B		J90-1023-03	GUIDE	
DFPC1	3A		J84-0141-05	FLEXIBLE PRINTED WIRING BOARD	
A	2B		N09-4460-05	TAPTITE SCREW (OVAL P TAPTIT)	
B	1B		N09-4472-15	MACHINE SCREW (M1.7X8.0)	
C	2B		N09-6004-05	MACHINE SCREW (M1.7X2.5 IB-L)	
E	2B		N09-6007-05	MACHINE SCREW (PAN M2X2)	
F	1A		N09-6051-05	TAPTITE SCREW (BIND P 2X5)	
G	2A		N19-2163-04	FLAT WASHER	
H	1B		N39-2020-46	PAN HEAD MACHINE SCREW	
J	1B		N09-6108-05	MACHINE SCREW (M2*3.5)	
K	3B		N09-6155-05	SEMS (TAPTITE SCREW) (PT2X6)	
DM1	3B		T42-1066-04	DC MOTOR (SPINDLE)	
DM2	2B		T42-1067-04	DC MOTOR (LOADING)	
DPU1	2B		X93-2010-00	OPTICAL PICKUP ASSY	

E4 : KDC-2031SA E5 : KDC-2031SG E6 : KDC-2031SGY E7 : KDC-2031SAY
(E : Europe K : North America M : Other Areas W : Without Europe)

△ Indicates safety critical components.

SPECIFICATIONS

FM

Frequency Range (Frequency Step)
..... 87.5MHz~108.0MHz (50kHz)
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 3.0dB) 30Hz~15kHz
S/N 65dB (MONO)
Selectivity (DIN) \geq 80dB (\pm 400kHz)
Stereo Separation 35dB (1kHz)

MW (AM)

Frequency Range (Frequency Step)
..... 531kHz~1611kHz (9kHz)
Usable Sensitivity (S/N : 20dB) 25 μ V

LW

Frequency Range 153kHz~281kHz
Usable Sensitivity (S/N : 20dB) 45 μ V

CD

Laser Diode GaAlAs
Digital Filter (D/A) 8 Times Over Sampling
D/A Converter 1 Bit
Spindle Speed 500rpm~200rpm (CLV)
Wow & Flutter Below Mesurable Limit
Frequency Response 10Hz~20kHz (\pm 1dB)
Total Harmonic Distortion 0.01% (1kHz)
S/N Ratio 93dB (1kHz)
Dynamic Range 93dB
Channel Separation 85dB

Preout Level / Load 2000mV/10k Ω (CD)
Preout Impedance \leq 600 Ω

AMPLIFIER

Maximum Power 45W x 4
Power (DIN45324, +B=14.4V) 28W x 4

STONE

Bass 100Hz \pm 10dB
Middle 1kHz \pm 10dB
Treble 10kHz \pm 10dB

GENERAL

Operating Voltage (11V~16V allowable) 14.4V
Current Consumption 10A
Installation Size (Width) 182mm
(Height) 53mm
(Depth) 155mm
Weight 1.40kg (3.1 lbs)

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

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