CD RECEIVER

KDC-MP5032

SERVICE MANUAL

KENWOOD

Kenwood Corporation

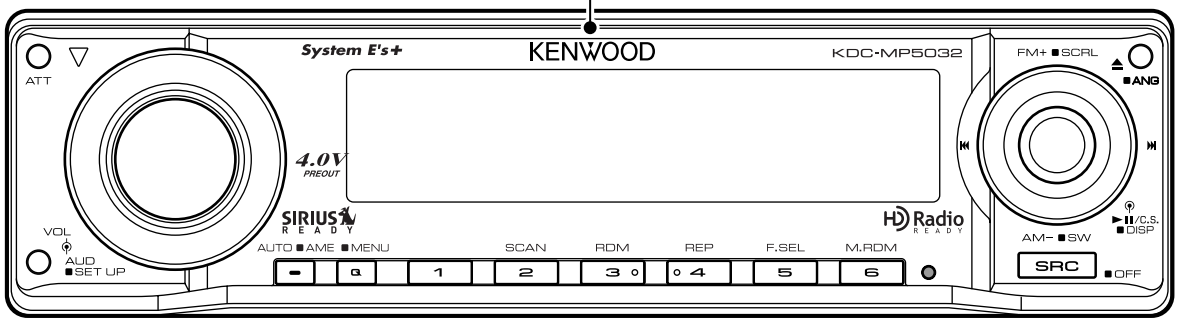
B53-0364-00 (N) 589

CD MECHANISM EXTENSIONCORD (24P) : **W05-0934-00**

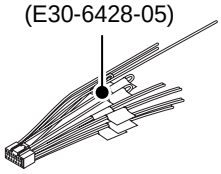
TDF PANEL INFORMATION

MODEL	TDF PANEL No.	TDF NAME
KDC-MP5032	Y33-2430-62	TDF-MP65DB

Panel assy
(A64-3733-02)



DC cord
(E30-6428-05)

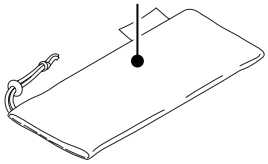


Remote controller assy
(A70-2067-15)

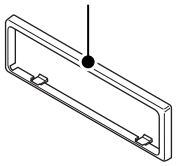
RC-527

SIZE AA BATTERY
(Not supplied)

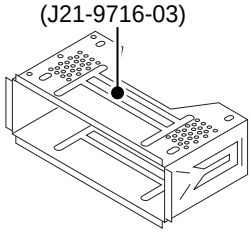
Carrying case
(W01-1661-05)



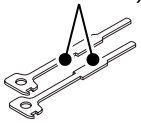
Escutcheon
(B07-3125-01)



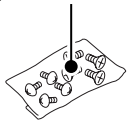
Mounting hardware assy
(J21-9716-03)



Lever
(D10-4589-04) x2



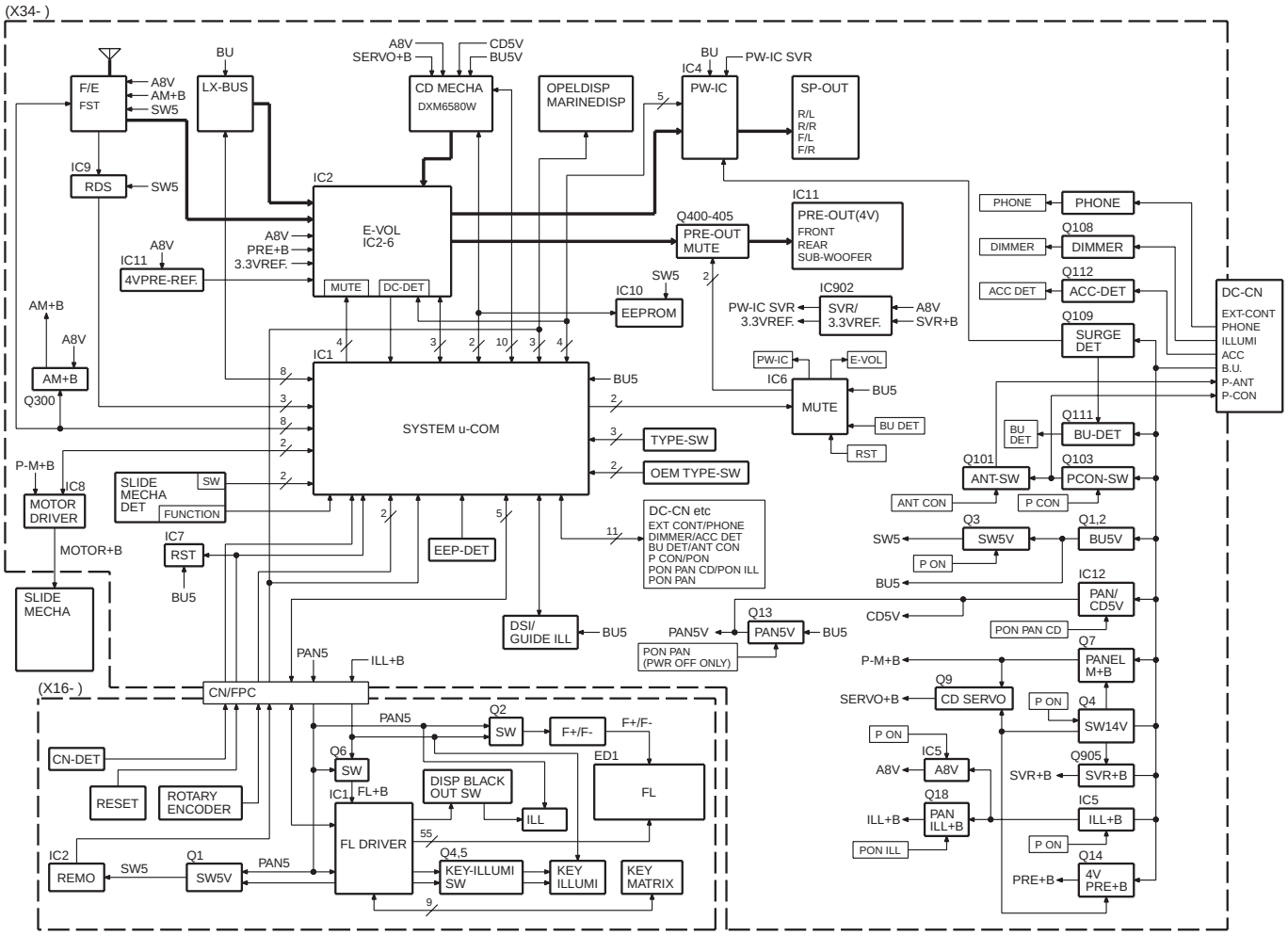
Screw set
(N99-1758-05)

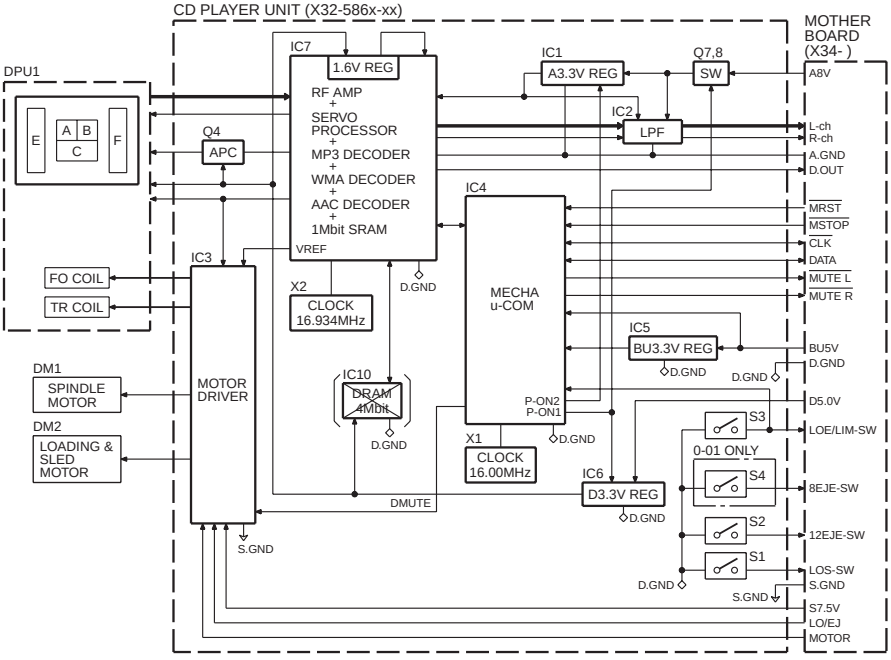


Tapping screw
(N09-6280-05)

This product uses Lead Free solder.

BLOCK DIAGRAM





COMPONENTS DESCRIPTION

● ELECTRIC UNIT (X34-3420-15)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC1	System μ-com	
IC2	E-vol IC	
IC3	Regulator IC for A8V	
IC4	Power IC	
IC5	Regulator IC for ILL+B (10.65V)	
IC6	Logic IC for muting	
IC7	Reset IC	
IC8	Motor Driver IC for Slide panel mecha	
IC10	Rom IC for Installer-Memory and Rom-Correction	
IC11	AMP for 4V Pre-Out Ref.	
IC12	Swiching regulator IC for CD mecha D5V and FL filament	
IC902	AMP for Power IC SVR and E-vol IC 3.3V Ref.	
Q1,2	B.U.5V AVR	While BU is applied, BU5V AVR outputs 5V.
Q3,11	SW5V	When Q11' base goes Hi, SW5V outputs 5V.
Q4,906	SW14V	When Q4' base goes Hi, SW14V outputs 14V.
Q5,6	AUDIO8V AVR	When Q6' base goes Hi, A8V AVR outputs 8.3V.
Q7,8	MOTOR+B AVR	When Q8' base goes Hi, M+B AVR outputs 8.3V.
Q9,10	SERVO+B AVR	When Q10' base goes Hi, S+B AVR outputs 7.7V.
Q12	SW for IC12	When Q12' base gose Lo, IC12 is turned on.
Q13	PAN5V	When Q13' base goes Lo, PAN5V outputs 5V.
Q14	4V PRE+B Short Protection	If Q15' Emitter short to GND, between Q14' Base to Emitter more than 0.6V, Q14 ON and Q15 is turned off.
Q15,16	4V PRE+B	When Q15' base goes Hi, 4V PRE+B outputs 12V.
Q17,18	ILL+B SW	When Q17' base goes Hi, ILL+B SW outputs 10.65V.
Q101,102	P-ANT SW	When Q102' base goes Hi, P-ANT SW outputs 14V.
Q103,106	P-CON SW	When Q106' base goes Hi, P-CON SW outputs 14V.
Q104,105	P-CON Protection	Protect Q104 by turning on when P-CON output is grounded.
Q108	Small lamp det SW	When Q108' base goes Hi, Q108 is turned on.
Q109	Surge det	When Q109' base goes Hi, Q109, Q110 are turned on.
Q111	BU det	When Q111' base gose Hi, Q111 is turned on.
Q112	ACC det	When Q112' base gose Hi, Q112 is turned on.
Q113	Mute driver	When Q113' base goses Lo, mute driver is turned on.
Q114	Mute driver	When Q114' base goses Lo, mute driver is turned on.
Q115,116	Mute driver	When a base gose Lo, mute driver is turned on.
Q300,301	AM+B SW	When Q301' base gose Hi, AM+B is out.
Q304	DSI (Disabled System Indicator)	DSI blinks when Q304' base goes "H/L"
Q400~405	Pre-out mute SW	When a base gose Hi, Pre-out is muted.
Q905	SVR+B AVR	When Q905'base goes Hi, SVR+B AVR outputs 14V.

COMPONENTS DESCRIPTION

● SWITCH UNIT (X16-2920-13)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC1	VFD Driver	
IC2	Remote Control IC	
Q1	SW5	The power supply of IC2 is turned on when Q1's base level goes "L".
Q2,Q3	FL+ SW	The power supply of filament is turned on when Q3's base level goes "H".
Q4	GREEN LED SW	GREEN LED is turned on when Q4's base level goes "H".
Q5	RED LED SW	RED LED is turned on when Q5's base level goes "H".
Q6,Q7	VFL SW	The power supply of IC1's VFL is turned on when Q7's base level goes "H".
Q8	GREEN LED SW (TRIANGLE LED)	GREEN LED (TRIANGLE LED) is turned on when Q8's base level goes "H".

● CD PLAYER UNIT (X32-5860-00)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC1	A3.3V regulator	Power supply for audio 3.3V
IC2	Ope amp for low-pass filter	
IC3	4ch BTL driver	Driving spindle motor and loading/ejection operation
IC4	Mechanism μ-com	
IC5	BU 3.3V regulator	Power supply for backup 3.3V
IC6	D3.3V regulator	Digital 3.3V power supply
IC7	Audio DAC built-in servo DSP	MP3, WMA, and AAC compatible
IC11	Buffer IC	Level shift
Q1	A3.3V discharge circuit	
Q4	Current amp	Adjusts current to be sent to laser
Q5,6	SW 5V	
Q7,8	SW 8V	
D1	For current amp	

MICROCOMPUTER'S TERMINAL DESCRIPTION

● SYSTEM MICROCOMPUTER : 30624MPGA77GP (X34 : IC1)

Pin No.	Pin Name	Module (functional)	I/O	Application	Truth Value Table	Processing Operation Description
1	REMO	EXTRA	I	Remote controller signal input		Pulse width is detected.
2	LX_MUTE	LX_M	I	Mute request from slave unit		H : Mute ON, L : Mute OFF
3	AUD_SDA	AUDIO	I/O	E-VOL data output terminal		
4	AUD_SEL	AUDIO	O	E-VOL control terminal		
5	AUD_SCL	AUDIO	O	E-VOL clock output terminal		
6	BYTE	µCOM	-			
7	CNVSS	µCOM	-			
8	XCIN	µCOM	I			
9	XCOUT	µCOM	I			
10	RESET	µCOM	-			
11	XOUT	µCOM	-			
12	VSS	µCOM	-			
13	XIN	µCOM	-	12.0MHz		
14	VCC1	µCOM	-			
15	NMI	µCOM	I	Not used.		
16	CN_DET	EXTRA	I	Panel communication detection		H : No PANEL, L : With PANEL
17	NC		O	Not used. (Other than RDS Model)		Output L-fixed
18	LX_REQ_S	LX_M	I	Communication request from slave unit		
19	PON_AM	Power supply	I/O	AM power supply control		AM in operation : H, AM not in operation : Hi-z
20	LX_REQ_M	LX_M	O	Communication request to slave unit		
21	TUN_IFC_OUT	TUNER	I	F/E IFC OUT input terminal		H : With station, L : No station
22,23	NC		O	Not used		
24,25	NC		O	Not used. (Other than RDS Model)		Output L-fixed
26	PWIC_BEEP	PWIC	O	Beep output		
27	TUN_SCL	TUNER	I/O	F/E I2C clock input/output terminal		
28	TUN_SDA	TUNER	I/O	F/E I2C data input/output terminal		
29	VFD_SYS_DATA	toPANEL	O	VFD data output terminal		Data output
30	VFD_PAN_DATA	toPANEL	I	VFD data input terminal		Data input
31	VFD_CL	toPANEL	O	VFD clock output terminal		125kHz
32	VFD_INH	toPANEL	O	VFD data blanking output		H : Light ON, L : Light OFF
33	SDA/ROMCOR_SDA	EXTRA	I/O	ROM correction E2PROM I2C data input/output terminal		
34	SCL/CD_SCL	CD	I/O	CD mechanism I2C clock output terminal		
34	SCL/ROMCOR_SCL	EXTRA	I/O	ROM correction E2PROM I2C clock output terminal		
35	PON_PANEL	Power supply	I/O	Panel 5V control terminal		POWER ON : Hi-Z, POWER OFF : L, 50Ms before PON_PANEL/CD turns H : L
36	DSI	EXTRA	I/O	DSI control terminal		OFF : Hi-z No PANEL : Pulse driven ILL_ON, OPEN (When Power_ON) : H
37	PM_MOT1	P-MECHA	O	Panel motor control 1	②	Refer to truth value table.
38	PM_MOT2	P-MECHA	O	Panel motor control 2	②	Refer to truth value table.
39	EPM	µCOM	I	FLASH EPM input terminal		
40	PM_OPEN	P-MECHA	I	Panel full open detection	③	Refer to truth value table.

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	Module (functional)	I/O	Application	Truth Value Table	Processing Operation Description
41	PM_CLOSE	P-MECHA	I	Panel mechanism close detection	③	Refer to truth value table.
42	ROMCOR_DET	EXTRA	I	E2PROM write request		H : Writing
43	PM_DET	P-MECHA	I	Panel mechanism detection		H : Function check in progress
44	VFD_CE	toPANEL	O	VFD_control request		
45	ROTARY_CW	toPANEL	I	VOL key input		Pulse width is detected.
46	ROTARY_CCW	toPANEL	I	VOL key input		Pulse width is detected.
47	CD_DISC12_SW	CD	I	CD disc detection terminal (12cm)		
48	CD_LOS_SW	CD	I	CD loading detection terminal		
49	CD_MUTE_R	CD	I	CD MUTE (Rch) request terminal		H : Normal, L : Rch mute request Effective only for CD
50	CD_MUTE_L	CD	I	CD MUTE (Lch) request terminal		H : Normal, L : Lch mute request Effective only for CD
51	CD_MRST	CD	O	CD mechanism μ-com RST terminal		H : Normal, L : Reset
52	CD_MSTOP	CD	O	CD mechanism μ-com stop terminal		H : CD mechanism μ-com in operation L : CD mechanism μ-com stop
53	NC	CD	O	Not used.		Output L-fixed
54	CD_LOE_LIM_SW	CD	I	CD detection terminal (Chucking SW)		H : Loading complete L : No disc
55	CD_LOEJ	CD	I/O	CD motor control terminal	①	Refer to truth value table.
56	CD_MOTOR	CD	O	CD motor control terminal	①	Refer to truth value table.
57	PON_ILLUMI	Power supply	I/O	Key Illumi power supply control		ON : H OFF : Hi-Z
58	PON_PANEL_CD	Power supply	O	Panel 5V/CD WMA Power supply control terminal		POWER ON : L POWER OFF : H, when RESET, L before M-STOP.
59	PON	Power supply	O	Power supply control		POWER ON : H, POWER OFF : L
60	VCC2	μCOM	-			
61	NC		O	Not used		
62	VSS	μCOM	-			
63~65	NC		-	Not used		
66	TUN_TYPE1	TYPE	I	Destination setting 1	④	Refer to truth value table.
67	TUN_TYPE2	TYPE	I	Destination setting 2	④	Refer to truth value table.
68~70	NC		O	Not used		Output L-fixed
71	NC	EXTRA	O	Not used		Output L-fixed
72	P_CON	Power supply	O	External AMP control terminal		POWER ON : H, POWER OFF : L, STANDBY source : L
73	KEY_REQ	toPANEL	I	Communication request from VFD driver		Connect to VFD_PAN_DATA
74	ANT_CON	EXTRA	O	Power antenna control		TUNER ON : H
75	ILLUMI_DET	EXTRA	I	Dimmer Illumi control		L : ON, H : OFF
76	BU_DET	EXTRA	I	Momentary power down detection		With BU : L, No BU, Momentary power down : H
77	ACC_DET	EXTRA	I	ACC Power supply detection		With ACC : L, No ACC : H
78	(PWIC_SVR)	PWIC	O	SVR discharge circuit		When POWER OFF and momentary power down, for 5 sec. : H, Then : L
79	PWIC_MUTE	PWIC	O	Power IC MUTE terminal		When STANDBY source and momentary power down : L, When TEL MUTE : L
80	PWIC_STBY	PWIC	O	Power IC standby control		POWER ON : H, POWER OFF : L
81	LX_CON	LX_M	O	Boot up request to slave unit		H : Slave unit ON, L : Slave unit OFF

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	Module (functional)	I/O	Application	Truth Value Table	Processing Operation Description
82	MUTE_PRE_R	AUDIO	O	PRE_OUT MUTE Rch		When CD MUTE R is L : H (When CD) At momentary power down : H Only with 2-zone and NAVI interruption : L-fixed
83	MUTE_PRE_L	AUDIO	O	PRE_OUT MUTE Lch		When CD MUTE L is L : H (When CD) At momentary power down : H Only with 2-zone and NAVI interruption : L-fixed
84	MUTE_0	AUDIO	I/O	E-VOL FRONT MUTE terminal		L : MUTE ON, Hi-Z : MUTE OFF
85	MUTE_1	AUDIO	I/O	E-VOL REAR MUTE terminal		L : MUTE ON, Hi-Z : MUTE OFF
86	MUTE_2	AUDIO	I/O	E-VOL OTHER MUTE terminal		L : MUTE ON, Hi-Z : MUTE OFF
87	LINE_MUTE	EXTRA	I	Line mute detection		TEL MUTE : 1V or less NAVI MUTE : 2.5V or more
88	NC		O	Not used.		Output L-fixed
89	PWIC_DC_DET	PWIC	I	DC Offset detection terminal		
90	LX_RST	LX_M	O	Hard resetting to slave unit		H : Reset, L : Normal
91,92	NC		O	Not used		Output L-fixed
93	RDS_NOISE	TUNER	I	FM noise detection terminal		
94	AVSS	µCOM	-			
95	TUN_SMETER	TUNER	I	S-meter output		
96	VREF	µCOM	-			Connect to P_ON
97	AVCC	µCOM	-			Connect to VCC
98	LX_DATA_S	LX_M	I	Data from slave unit		
99	LX_DATA_M	LX_M	I/O	Data to slave unit		
100	LX_CLK	LX_M	I/O	LX BUS clock		

Truth Value Table

① CD_MOTOR, CD_LOEJ

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

④ TUNER TYPE

	TUN_TYPE1 (66PIN)	TUN_TYPE2 (67PIN)
Third party model	L	L
OEM Model 1	L	H
OEM Model 2	H	L
OEM Model 3	H	H

② PANEL MOTOR CONTROL

	OPEN	CLOSE	STOP	WAIT
PM_MOT1	L	H	H	L
PM_MOT2	H	L	H	L

③ PANEL MECHANISM CONTROL

	FULL_OPEN	FULL_CLOSE	OTHER
PM_OPEN	H	L	L
PM_CLOSE	H	L	H

MICROCOMPUTER'S TERMINAL DESCRIPTION

● MECHANISM MICROCOMPUTER : 703030BYGCJ21A (X32 : IC4)

Pin No.	Pin Name	I/O	Application	Processing Operation Description	Remarks
1	NC	-	Not used.	Low-fixed	
2	E2P SCL	I/O	Rom correction E2P I2C clock		
3~5	NC	-	Not used.	Low-fixed	
6	VDD	-	5V electric potential		
7	GND	-	GND electric potential		
8,9	NC	-	Not used.	Low-fixed	
10,11	PON1,PON2	O	Power ON/OFF control	H : ON, L : OFF	
12	LOE/LIM SW	I	Down-limit SW detection	L : Lim detection	
13	DAC MUTE	O	DAC MUTE control	H : MUTE ON, L : MUTE OFF	Used with DXM-6680W (X32-586). With DXM-6580W (X32-574), open and L-fixed.
14	DAC RST	O	DAC RESET	H : NORMAL, L : RESET	Used with DXM-6680W (X32-586). With DXM-6580W (X32-574), open and L-fixed.
15	EMPH	O	External DAC Emphasis control	H : Emphasis ON, L : Emphasis OFF	Used with DXM-6680W (X32-586). With DXM-6580W (X32-574), open and L-fixed.
16,17	NC	-	Not used.	Low-fixed	
18	IC/Vpp	-	Write voltage (FLASH)	L : Normal operation, H : In writing.	
19	MUTE L	O	Lch audio MUTE control	L : MUTE ON, H : MUTE OFF	
20	MUTE R	O	Rch audio MUTE control	L : MUTE ON, H : MUTE OFF	
21	TYPE	I	DAC switching	H : DSP built-in DAC used, L : DSP built-in DAC Not used.	H : DXM-6580W (X32-574), L : DXM-6680W (X32-586)
22	TEST O 1	O	TEST MODE O 1	(Not used.)	
23	TEST O 2	O	TEST MODE O 2	(Not used.)	
24	TEST O 3	O	TEST MODE O 3	(Not used.)	
25	TEST O 4	O	TEST MODE O 4	(Not used.)	
26	NC	-	Not used.	Low-fixed	
27	WAIT	I	Wait control signal detection		
28~30	NC	-	Not used.	Low-fixed	
31	RESET	I	Reset detection	H : NORMAL, L : RESET	
32	XT1	I	Not used.		
33	XT2	-	Not used.		
34	REGC	-			
35	X2	-			
36	X1	I			
37	Vss	-	GND electric potential		
38	VDD	-	5V electric potential		
39	NC	-	NC	Output stopped in standby	3.3V driven
40	WRL	I	Multiplex WRITE signal		3.3V driven

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Processing Operation Description	Remarks
41,42	NC	-	Not used.	Low-fixed	3.3V driven
43	RD	O	Multiplex RD signal		3.3V driven
44	ASTB	O	Multiplex ASTB signal		3.3V driven
45	NC	-	Not used.	Low-fixed	3.3V driven
46	NC	-	Not used.	Low-fixed	3.3V driven
47~54	AD0~AD7	I/O	Multiplex address/data		3.3V driven
55	BVdd	-	BUS interface power supply		
56	BVss	-	BUS interface GND		
57~61	AB8~AB12	I/O	Multiplex data/address		3.3V driven
62~65	NC	-	Not used.	Low-fixed	3.3V driven
66	CS	O	Chip select control	H : OFF, L : ON	3.3V driven
67	DSP RESET	O	DSP reset control	H : NORMAL, L : RESET	3.3V driven
68~70	NC	-	Not used.	Low-fixed	3.3V driven
71	Avdd	-			
72	Avss	-			
73	Avref	I	A/D port reference voltage input		
74	NC	-	Not used.	Low-fixed	
75	RAMSEL	I	With DRAM/No DRAM switching for different models	H : With DRAM, L : No DRAM	
76	RZM	I	0bit MUTE detection	H : ≥1.7V, L : <1.7V	
77	LZM	I	0bit MUTE detection	H : ≥1.7V, L : <1.7V	
78	AAC	I	AAC compatibility switching	H : AAC non-compatible, L : AAC compatible	AAC non-compatible mode has priority for both hardware and software.
79	ASEL	I	Audio output polarity switching	H : Reverse output, L : Non-reverse output	
80	E2P WR	I	E2PROM write switching	H : E2PROM WRITE, L : NORMAL	
81	TEST I 0	I	TEST MODE I 0	(Not used.)	
82	TEST I 1	I	TEST MODE I 1	(Not used.)	
83	TEST I 2	I	TEST MODE I 2	(Not used.)	
84	TEST I 3	I	TEST MODE I 3	(Not used.)	
85,86	NC	-	Not used.	Low-fixed	
87	MSTOP	I	Standby restart interruption	H : STOP release, L : STOP	
88	INTSV	I	Interruption from servo IC	H : Interruption	
89~92	NC	-	Not used.	Low-fixed	
93	D-MUTE	O	Driver MUTE	H : OFF, L : ON	
94	SYS SDA	I/O	System μ-com I2C data		Flash write port (SI0)
95	NC	-	Not used.	Low-fixed	Flash write port (SO0)
96	SYS SCL	I/O	System μ-com I2C clock		Flash write port (SCK0)
97~99	NC	-	Not used.	Low-fixed	
100	E2P SDA	I/O	ROM correction E2P I2C data		

TEST MODE

● How to enter the test mode

In order to enter the test mode, reset the unit while simultaneously pressing down [1] and [3] keys.
(While "----" is being displayed, power can be ON for 30 minutes.)

● How to clear the test mode

The test mode is cleared in case of any of the following events: resetting, momentary power down, Acc OFF, Power OFF and removal of the panel.

● Initial conditions of the test mode

- Source is STANDBY.
- Displays lights are all turned on.
- The volume is at –10dB (The display is 30).
- Loudness (LOUD) is OFF.
- CRSC is OFF, regardless of whether there are switching functions or not.
- SYSTEM Q is NATURAL (=FLAT).
- BEEP will sound anytime with a less than 1 second push.

● Special display when set to TUNER

When in TUNER mode, if any of the following displays appear, there is an abnormality with the front end.

- "TNE2P_NG" : Front-end E2PROM values are still default (not determined).
- "TNCON_NG" : In this condition, the communication with the front-end is not possible.

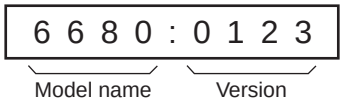
● Forced switching of K3I

In TUNER FM mode, each time [6] key is pressed, the functions move in the following cycle :
AUTO → forced WIDE → forced MIDDLE → force NARROW → AUTO
The initial condition is AUTO and the displays below will appear.

- AUTO : FM1_98.1A
- Forced MIDDLE : FM1_98.1M
- Forced WIDE : FM1_98.1W
- Forced NARROW : FM1_98.1N

● CD receiver test mode specifications

- Display mode default setting shall be P-TIME
- Jumps to the next tracks by pressing the [▶▶I] key.
  No. 9 → No. 15 → No. 10 → No. 11 → No. 12 → No. 13 → No. 22 → No. 14 → No. 9 (Recursive)
  It must be noted, however, that when paying MP3 / WMA / AAC disk, which contain 8 files or less, the first track and the following tracks are played in order.
- When [I◀◀] key is pressed, it goes down by 1 track.
- When playing an MP3 / WMA / AAC disc, display the file format before starting to play each file.
  ("MP3", "WMA", "AAC")
- When a CD is used as a source, by pressing [1] key for less than 1 second, a jump to the Track No. 28 is made.
- When a CD is used as a source, by pressing [2] key for less than 1 second, a jump to the Track No. 14 is made.
- When a CD is used as a source, by pressing [3] key for less than 1 second, a display of CD mechanism model name and its version is made. When the pressing of [3] key for less than 1 second is made for the second time, the normal display is resumed. (Time code display)



- When a CD is used as a source, by pressing [6] key for less than 1 second, a jump to the Track No. 15 is made. At the same time, the volume value is set to 27 (4V PRE).

● Audio adjust mode

Model with no DSP

- By pressing [AUD] key for less than 1 second, the audio adjustment mode can be entered.
- Using the remote controller [*] key and [AUD] key, the audio adjustment mode can be entered.
- Adjustment items of both the AUDIO FUNCTION MODE and SETUP MODE are included.
- By pressing [AUD] or [FM] key briefly, switch the item to be adjusted in the following order. (only in forward rotation)
  The initial item will be Fader, which is followed by : Balance → Bass Level → Middle Level → Treble Level → HPF Front → HPF Rear → LPF Sub Woofer (After this, it will be arbitrary)
- With the remote controller, continuous forwarding is prohibited.
- Using the VOL knob and [I◀◀] / [▶▶I] key, the Fader can be adjusted in 3 steps : R15 ↔ 0 ↔ F15 (The initial value is 0)
- Using the VOL knob and [I◀◀] / [▶▶I] key, the Balance can be adjusted in 3 steps : L15 ↔ 0 ↔ R15 (The initial value is 0)
- Using the VOL knob and [I◀◀] / [▶▶I] key, the Bass / Middle / Treble Level can be adjusted in 3 steps : –8 ↔ 0 ↔ +8

TEST MODE

(The initial value is 0)

- Using the VOL knob and [|◀◀] / [▶▶|] key, the HPF Front / Rear can be adjusted in 2 steps : Through ↔ 220Hz (The initial value is Through)
- Using the VOL knob and [|◀◀] / [▶▶|] key, the LPF Sub Woofer can be adjusted in 2 steps : 50Hz ↔ Through (The initial value is Through)
- Using the VOL knob and [|◀◀] / [▶▶|] key, the Sub Woofer Phase can be adjusted in 2 steps : Reverse ↔ Normal (The initial value is Normal)
- Using the VOL knob and [|◀◀] / [▶▶|] key, the Volume Offset can be adjusted in 2 steps : –8 ↔ 0 (The initial value is 0)
- Using the VOL knob and [|◀◀] / [▶▶|] key, the Loudness ON/OFF can be adjusted in 2 steps : OFF ↔ ON (The initial value is OFF)
- Using the VOL knob and [|◀◀] / [▶▶|] key, 2-Zone ON/OFF can be adjusted in 2 steps : OFF ↔ ON (The initial value is OFF)

● MENU items

- Press briefly the [Q] key to enter the MENU.
- The [DNPP/SBF] and [DIRECT] keys on the remote controller can also be used to enter the MENU.
- With the remote controller, continuous forwarding is prohibited.

● 2-ZONE (Dual Zone) items

- When using sources other than the STANDBY source, using a short-press on [AUTO] or key, 2-ZONE ON/OFF is achieved.

● Backup current measurement

When reset in Acc OFF (Back Up ON) condition, MUTE terminal goes off after 2 seconds, instead of 15 seconds. (During this time, the CD mechanism does not function.)

● Special display when all lights are on

When all lights are on with the STANDBY source, the following displays are made when the keys shown below are pressed.

[1] key	Version is displayed (forwarding) (Display) TYPE : x___ → 515K-1.02 → all lights on → (“x” is displayed in hexadecimals.) [“development ID”-“version”] ∗ TYPE indicates µ-com destination, and shows real-time condition of the destination terminal
[2]key	Serial No. is displayed (8 digits) (Display) xxxxxxxx
[3]key	Key pressed briefly: Power ON time is displayed. While Power ON time is displayed, press and hold for at least 2 seconds to clear the Power ON time. (Display) PON_0Hxx (00~50 is displayed for “xx”. When less than 1 hour, display by increment of 10 minutes.) xxxxx (00001-10922 is displayed for “xxxxx”.) MAX 10922 (hours)
[4]key	Key pressed briefly : CD operation time is displayed. While the CD operation time is displayed, press and hold for at least 2 seconds to clear CD operation time. (Display) CDT_0Hxx (00~50 is displayed for “xx”. When less than 1 hour, display by increment of 10 minutes.) xxxxx (00001-10922 is displayed for “xxxxx”.) MAX 10922 (hours)
[5]key	Key pressed briefly: Number of CD EJECT time is displayed. While the CD EJECT times is displayed, press and hold for at least 2 seconds to clear the number of CD EJECT times. (Display) EJCxxxxx MAX 65535 (times)
[6]key	Key pressed briefly : Number of times PANEL is opened/closed is displayed. (*1) While the PANEL open/close count is displayed, press and hold for at least 2 seconds to clear the PANEL open/close count. (Display) PC_xxxxx MAX 65535 (times)
[FM] key	ROM correction version is displayed (Display) ROM_R123 When E2PROM is not installed : ROM_ERR_ When not written in : ROM_R - - - When data not matching : ROM_R ∗ ∗ ∗

TEST MODE

[▶▶I] key	AUDIO data initialization (Display) AUD_INIT
[I◀◀] key	Key pressed briefly: Forced Power OFF data displayed. While the forced power OFF data is displayed, press and hold for at least 2 seconds to clear the data. (Display) POFF_ - - - (No Forced Power OFF) PNL (Forced Power OFF because of system μ-com and panel communication error)
[▶II] key	Key pressed briefly: CD information display mode ON/OFF While in CD information display mode, press and hold for at least 2 seconds to clear all CD information ∗ Please refer to the next table.

(*1) : 1 count is made when the panel opens to full or when a disc is loaded.

CD information display mode

	I2C communication condition display (Display) I2C_OK__ NG
	CD mechanism error log display [switched by [I◀◀] / [▶▶I] keys] (Display) MCERR1 : xx ↔ MCERR2 : xx ↔ MCERR3 : xx ↔ MCERR1 : xx ↔ ("--" or the error code is displayed for "xx".)
[AM] key ↓	Displays CD loading error data. [switched by [I◀◀] / [▶▶I] keys] (Display) LDERR1: xx ↔ LDERR2 : xx ↔ LDERR1: xx ↔ (number of times is displayed for "xx") MAX 99 (times) Disk detection switch ON/OFF is monitored, and when the loading operation is not completed within the specified time length, or when E-99 mechanism error occurred, record which SW signal had an error. ∗ Refer to the note at the end of [CD LOAD error detection].
	Displays CD ejection error data. [switched by [I◀◀] / [▶▶I] keys] (Display) EJERR1 : xx ↔ EJERR2 : xx ↔ EJERR3 : xx ↔ EJERR4 : xx ↔ EJERR1 : xx ↔ (number of times is displayed for "xx") MAX 99 (times) Disk detection SW ON/OFF is monitored, and when the ejection operation is not completed within the specified time length, or when E-99 mechanism error occurred, record which SW signal had an error. ∗ Refer to [CD EJECT error detection]' s note.
↑ [FM] key	Displays CD time code count error data (missing count). [switched by [I◀◀] / [▶▶I] keys] (Display) CNT_LOSE ↔ CDDA__ : xx ↔ CDROM_ : xx ↔ CNT_LOSE ↔ (number of times is displayed for "xx") MAX 99 (times) Monitor time code continuity. Record the number of times when discontinuity occurred as error data. Record the data of compressed audio and CD-DA played separately.
	Displays CD time code count error data (count not updated). [switched by [I◀◀] / [▶▶I] keys] (Display) CNT_STAY ↔ CDDA__ : xx ↔ CDROM_ : xx ↔ CNT_STAY ↔ (number of times is displayed for "xx") MAX 99 (times) When the time code is not renewed for 2 or more seconds, record the number of times occurred as error data (skipped sound).

● Initializing AUDIO-related value setting

During STANDBY sourcing, by pressing [▶▶I] key for less than 1 second, AUDIO setting values are returned to the default values.

TEST MODE

● Fluorescent tube (ED1) short-checking

During STANDBY sourcing, each time [ATT] key is short-pressed, the processing is switched in the following order.

1. All lights off.
2. Every 125msec, light the odd and even number of the grid with the largest numbers.
3. Light only odd number terminals.
4. Light only even number terminals.
5. All lights on.

∗ After the step 5 above, the process goes back to the step 1 and then repeats the steps.

● Other

- At Power ON, “CODE_OFF”, “CODE_ON” displays will not be made.
- When sourcing STANDBY, by pressing [AUTO] key for less than 1 second, GREEN/RED of the key illumination is switched.
- When staring up in the test mode, LINE MUTE prohibition time is set to 1 second instead of 10 seconds.
- While in the test mode, even when a DC offset error is detected, the detection information will not be written to the E2PROM.
- While in the test mode, even after an elapse of pre-set time, the backup memory items will not be written to the E2PROM.
- Information Clear mode for Test Mode, backup/installer memory, and CD mechanism error log.
  In the DC offset error detection information clear mode, DEMO mode operation will not be conducted.
  Also, in the above mode, the menu of the STANDBY source will not display DEMO ON/OFF switching items.
- While in the test mode, and at the same time, PM_DET of the 60th terminal (System μ-com) is H, the following will apply to the EJECT key, regardless of whether a disc is in the unit or not.
  Panel full OPEN/CLOSE is conducted with a push for less than 1 second. (Protection time : 3 seconds)
  As far as this item is concerned, eject will be achieved by for at least 1 second push on the EJECT key.

● Clearing backup/installer memory and CD mechanism information, and service information. Clearing E2PROM data.

Backup/installer memory X34-IC10 (E2PROM) “AU_”
CD mechanism information and service information: TUNER F/E (E2PROM) “CD_”

1. While pressing and holding the [Q] key and the [ATT] key, reset-start to start backup/installer, memory data, and CD mechanism and service information initialization.
   (While “----” is being displayed, power can be ON for 30 minutes.)
   [CD mechanism information]
   • Displays I2C communication condition
   • Displays CD mechanism error log
   • Displays CD loading error data.
   • Displays CD ejection error data.
   • Displays CD time code error count data (missing count).
   • Displays CD time code error count data (count not updated).
   [Service Information]
   • Displays power ON time is displayed.
   • Displays CD operation time.
   • Displays number of CD EJECT times.
   • Displays number of times panel was opened/closed.
   • Displays forced Power OFF data.
2. After the initialization process is completed, the following is displayed.
   When the initialization is completed normally, the following is displayed. : “CD_O : AU_O_”
   When there was an error (or errors) and the initialization is not completed normally, the following is displayed.
   When backup/installer memory initialization is NG. : “CD_O : AU_X_”
   When CD mechanism information / service information initialization NG. : “CD_X : AU_O_”
   When all initialization NG. : “CD_X : AU_X_”
   Restore the NGs and initialize again.
3. While in this mode, even after an elapse of a pre-set time, no backup memory items will be written to the E2PROM.
4. This mode is released by resetting. (What was on the last screen will not be retained.)

● Clearing DC offset error detection information (E2PROM (F/E) data clear)

1. While simultaneously pressing down on [3] and [6] keys, reset the unit to enter the DC offset error display mode.
   (While “----” is being displayed, power can be ON for 30 minutes.)
2. During STANDBY sourcing, the current DC offset error conditions will be displayed.
   When error detected : “DC_ERR”
   When error not detected : “DC_OK”

TEST MODE

3. While the error conditions are being displayed, press [AUTO] key for less than 1 second to clear the detection information. (E2PROM clear)
4. DC offset error display mode is released by resetting. (What was on the last screen will not be retained.)

● FM/AM channel space switching

From the Power OFF condition, while pressing [1] and [5] keys down simultaneously, press the [SRC] key and turn power ON.

● Security

• Forced Power ON mode

While "– – – –" is being displayed, by resetting while pressing [Q] key and [4] key simultaneously, it is possible to turn the power ON for 30 minutes only.

● Method of clearing the programmable security code

1. While "– – – –" is being displayed, press [▶▶I] key for at least 3 seconds while pressing [AUTO] key.
   This makes "– – – –" display disappear.
2. Using the remote controller, input "KCAR".
   Press the remote control [5] key 2 times, display "K", and press the [▶▶I] key.
   Press the remote control [2] key 3 times, display "C", and press the [▶▶I] key.
   Press the remote control [2] key once, display "A", and press the [▶▶I] key.
   Press the remote control [7] key 2 times, display "R", and press the [▶▶I] key.
3. The security is released and the unit enters the STANDBY mode.
4. If a wrong code is input, the unit goes into the Code Request mode.

DC OFFSET ERROR

● Purpose

Prevent customers' 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

1. 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).

2. 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).

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

3. Key specification
- No specific limitation (Normal operation).

4. 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

DC OFFSET ERROR

● Cancel Condition

- Press the Reset terminal on the main body. or set Backup to OFF (Unplug and plug back in the DC connector).
  The history is maintained (E2PROM data is saved).

● Note while in test mode

- While in 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.)

CD LOAD ERROR DETECTION

● Overview

Record the number of times when mechanism error (SW error) occurred at CD LOAD.

LOAD error recording shall be done in 2 patterns, by the SW status illustrated below.

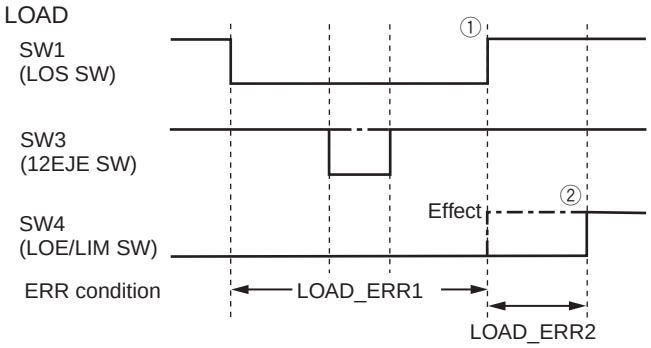
LOAD error is established when LOAD operation is not completed after LOAD operation is started before the protect timer count is completed.

Clearing of record is done in the following situations:

1) After reset is cancelled, when reading EEPROM, the code is NG.
2) While in test mode, the specified key (Play/Pause key pressed for 2 seconds) input.
3) When in EEPROM all-clear initialization mode (refer to the test mode specification document)

- Display is shown on the test mode specification document.
- Number of times with error(s) is 99 at MAX.
- Not recorded in test mode [1+3 keys].

● Operation



∗ Trigger for starting the sequence: detecting the inserted disc with SW 1 and 3 LOW edge.
(As an exception, protect LOAD when EJECT error)

① If the protect timer was counted up before the LOS (SW1) up edge detection, it is recorded as LOAD_ERR1.

② If the protect timer was counted up after the LOS (SW1) up edge detection, before the LOE/LIM (SW4) up edge detection, it is recorded as LOAD_ERR2

∗ When DISC was inserted briefly but pulled out immediately (DISC is detected but not inserted), it is considered as an error.

Special case: Even if LOS (SW1) up edge is not detected, if LOE/LIM (SW4) up edge is detected, it is still recorded as LOAD_ERR1. Also, if SW4 up edge is detected, the motor is stopped.

CD EJECT ERROR DETECTION

● Overview

Record the number of times when mechanism error (SW error) occurred at CD EJECT.

EJECT error recording shall be done in 4 patterns, by the SW status illustrated below (3 patterns in models other than TYPE-J).

EJECT error is established when EJECT operation is not completed after EJECT operation is started before the protect timer count is completed (False EJECT, or ejection with no CD, is considered as exception and is not recorded).

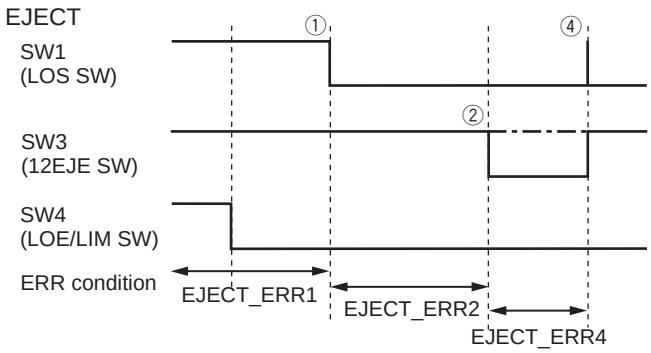
(False EJECT is determined when: while chucking is not done, and when SW status is determined as NO DISC.)

Clearing of record is done in the following situations :

1) After reset is cancelled, when reading EEPROM, the code is NG.
2) While in test mode, the specified key (Play/Pause key pressed for 2 seconds) is input.
3) When in EEPROM all-clear initialization mode (refer to the test mode specification document).

- Indication is shown on the test mode specification document.
- Number of times with error(s) is 99 times at MAX.
- Not recorded in test mode [1+3 keys].
- When EJECT was error, re-try 3 times, and count each error while re-try as 1 error.

● Operation



＊ Trigger for starting the sequence: detecting DISC ejection by EJECT key. (As an exception, protect EJECT when LOAD error)

① If the protect timer was counted up before the LOS (SW1) down edge detection, it is recorded as EJECT_ERR1.

② If the protect timer was counted up after LOS (SW1) down edge before the 8EJE (SW2) down edge detection, it is recorded as EJECT_ERR2. [12EJE down edge detection in models other than TYPE-J]

③ If the protect timer was counted up after LOS (SW1) down edge before the 12EJE (SW3) down edge detection, it is recorded as EJECT_ERR3. (TYPE-J only)

④ If the protect timer was counted up after LOS (SW1)/8EJE (SW2)/12EJE (SW3) down edge before the down edge detection of any of these, it is recorded as EJECT_ERR4.

＊ When EJECT is started, if not chucking, it is not counted as EJECT error (considered as false EJECT). However, EJECT when SW change is detected.

INSTALLER MEMORY SPECIFICATIONS

At specialists (or specialty stores), when the installer sends the vehicle back to the user, they may make the store-recommended audio configuration.
When the user changes the setting values, when the backup power supply was taken out at times of battery change or when the reset button was pressed, to make it possible to recall the setting values, the store-recommended configuration values can be saved into E2PROM.
The specification detail defer in “with-DSP model” and in “without-DSP model”.

[Models without DSP]

- Calling and saving the configuration is done by the MENU.
- Items to be saved are Bass, Middle, Treble, X’ over, and Sub Woofer Level (Refer to the separate document for more detail). Only one setting can be saved for each item (Bass/Middle/Treble settings can be changed for each source, but only one setting can be saved as the installer memory specification, and the source in which the saving operation was carried out is saved as such).
- The contents read out by the call key shall be reflected only to the current source at the time → EQ curve is “USER” (Bass/Middle/Treble settings can be changed for each source, but not reflected to Bass/Middle/Treble settings of sources other than where the calling operation was carried out).
- When the backup power supply was taken out at times of battery change or when the reset button was pressed, as the initial setting values of Bass, Middle, Treble, X' over, and Sub Woofer Level, the saved memory is reflected.
  (Bass/Middle/Treble setting initial setting value memory is reflected in all sources.)
  [**NOTE**] By such, EQ curve initial setting shall always be “USER” (NOT “NATURAL” or “FLAT”).

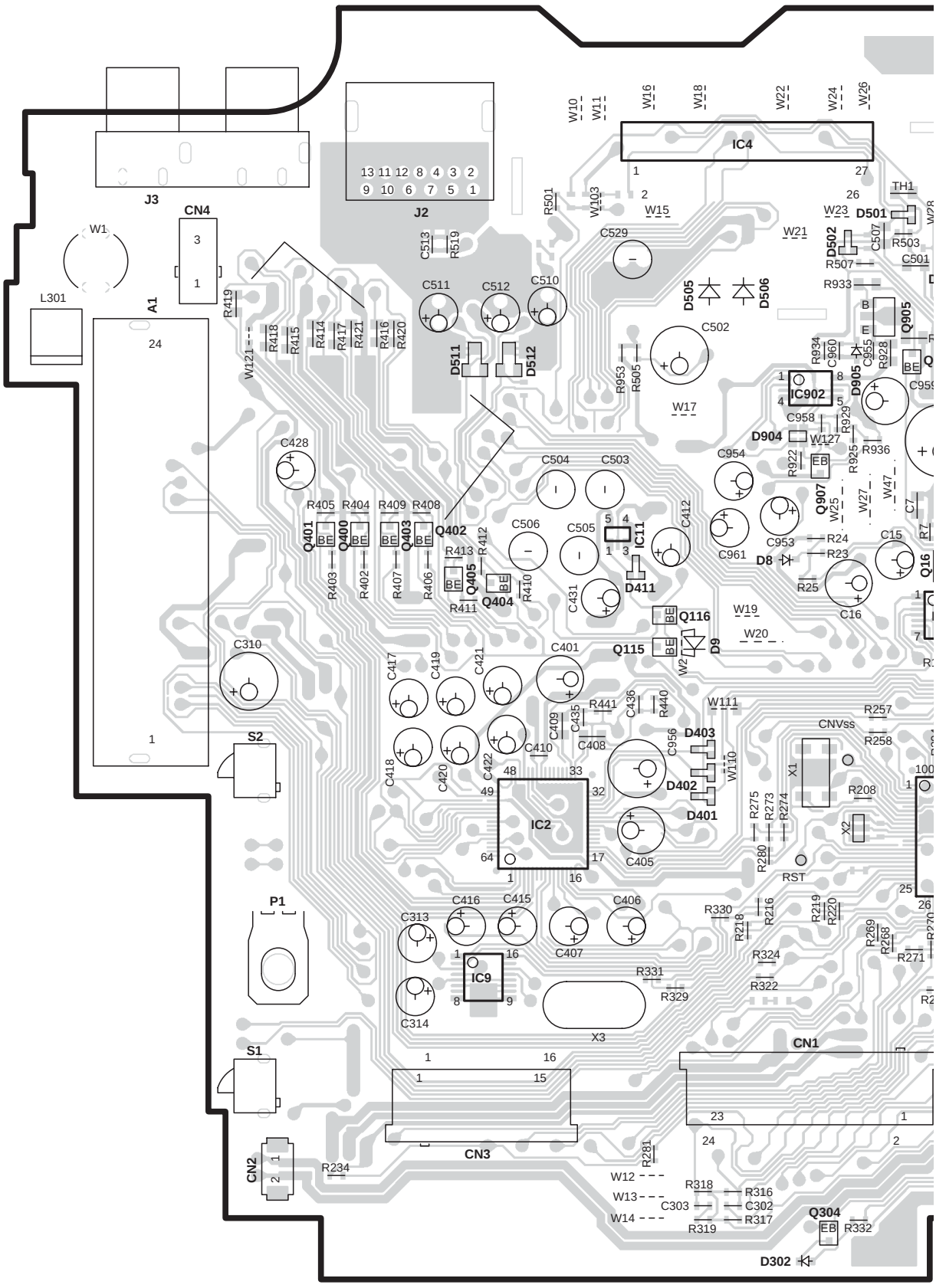
BACKUP MEMORY SPECIFICATIONS

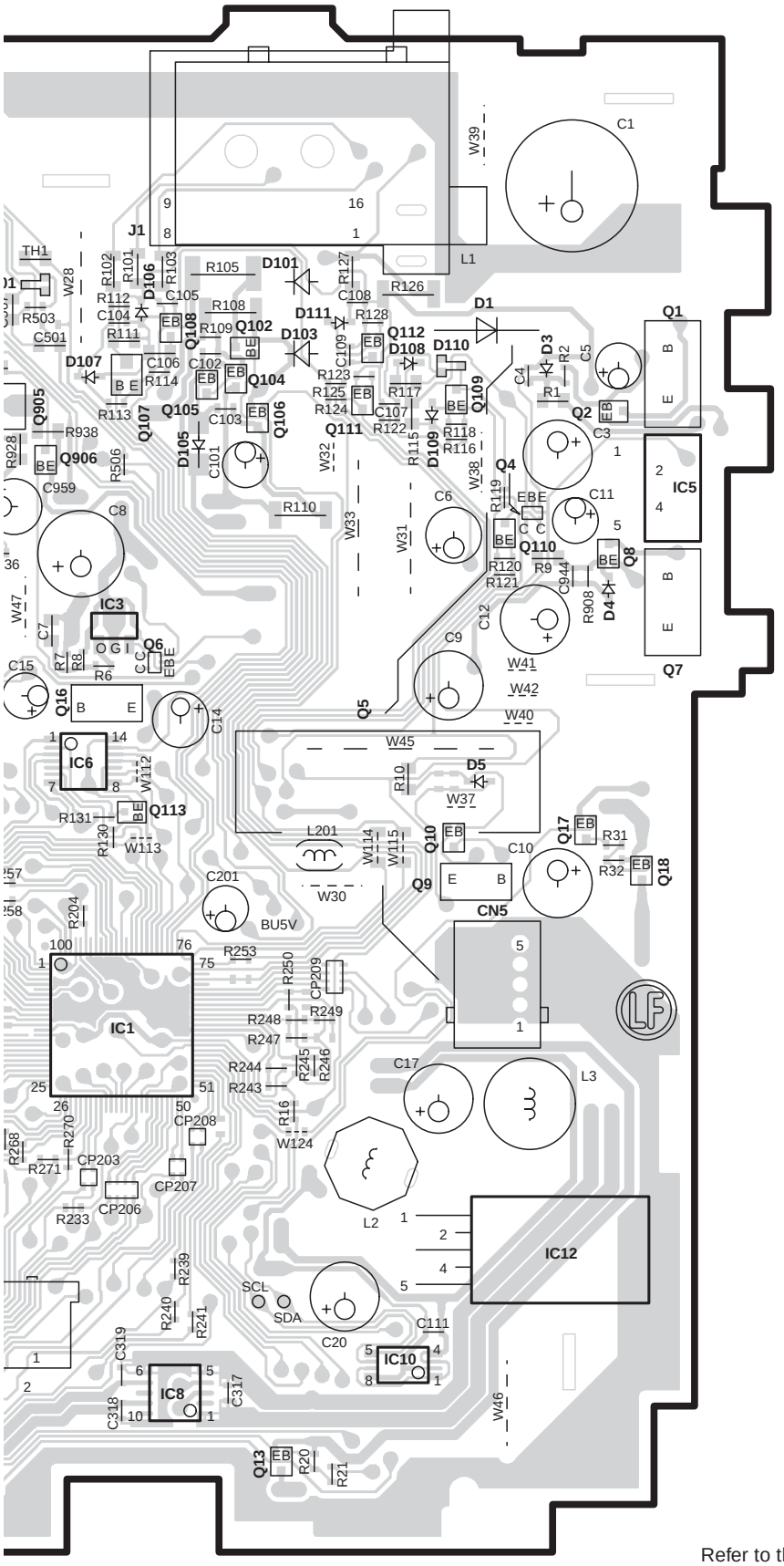
Settings by the user other than the installer memory items are saved into the E2PROM, and when the backup power supply was taken out at times of battery change or when the reset button was pressed, it is made possible to recall the setting values saved.

- While Power ON, the memory is saved and accumulated at a certain interval (temporary).
- Items to be saved into the memory are: Volume Offset (for all sources) and preset frequencies (FM/AM all bands x 6 channels).
- When the backup power supply was taken out at times of battery change or when the reset button was pressed, as the initial setting values of Volume Offset (for all sources) and preset frequencies (FM/AM all bands x 6 channels), the saved memory is reflected.
- In models which includes span-switching, when span is switched, TUNER-preset frequencies are set back to the default values.

PC BOARD (COMPONENT SIDE VIEW)

ELECTRIC UNIT X34-3420-15 (J76-0049-22)





X34-3420-15

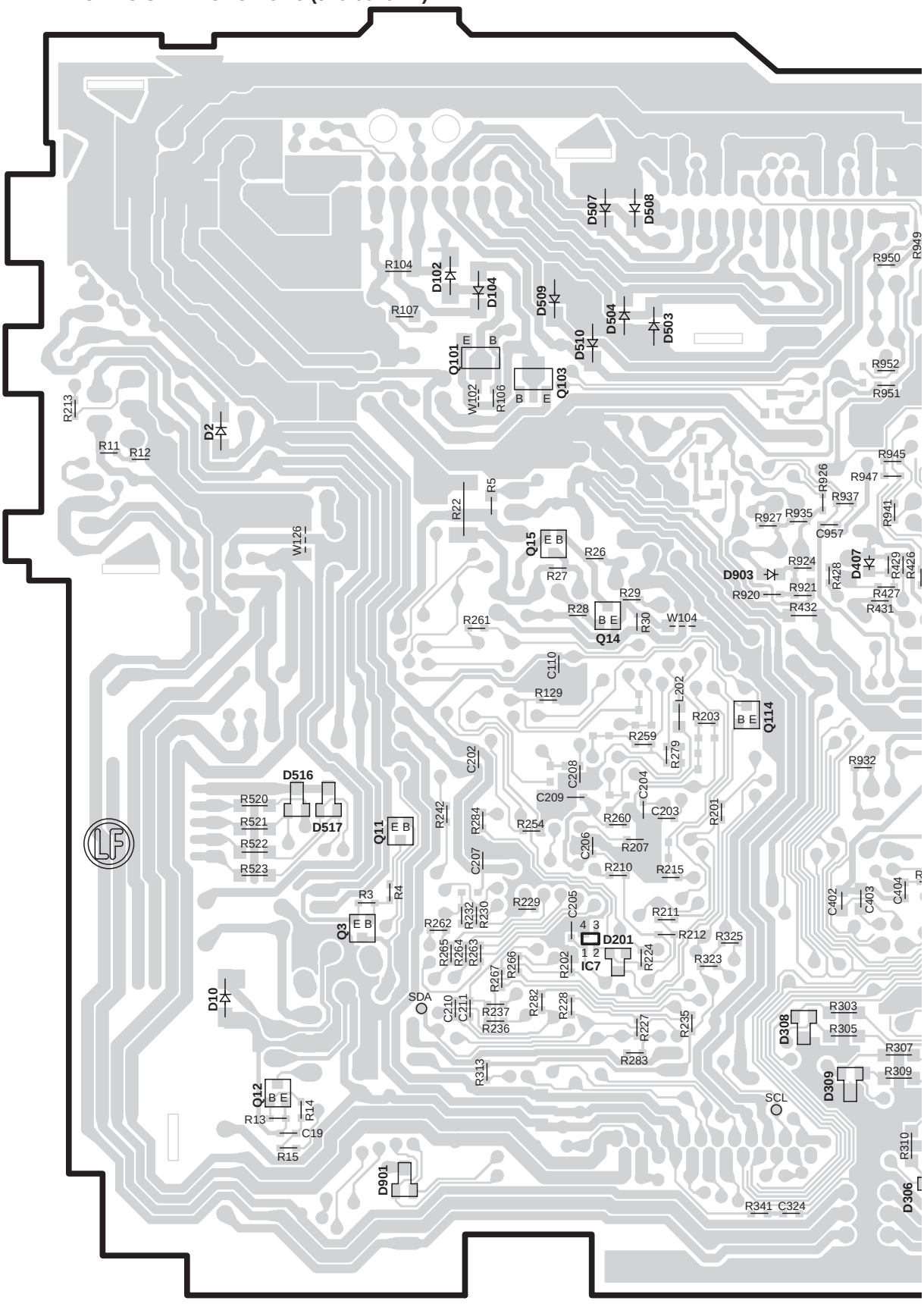
Ref. No.	Address	Ref. No.	Address
IC1	5F	Q18	5H
IC2	5D	Q102	3F
IC3	4F	Q104	3F
IC4	2E	Q105	3F
IC5	3H	Q106	3G
IC6	4F	Q108	3F
IC8	6F	Q109	3G
IC10	6G	Q111	3G
IC11	4D	Q112	3G
IC12	6H	Q113	4F
IC902	3E	Q115	4D
Q1	2H	Q116	4D
Q2	3H	Q304	7E
Q4	3G	Q400	4C
Q5	4G	Q401	4C
Q6	4F	Q402	4C
Q7	4H	Q403	4C
Q8	3H	Q404	4D
Q9	5G	Q405	4C
Q10	4G	Q905	3E
Q13	7F	Q906	3F
Q16	4F	Q907	4E
Q17	4H		

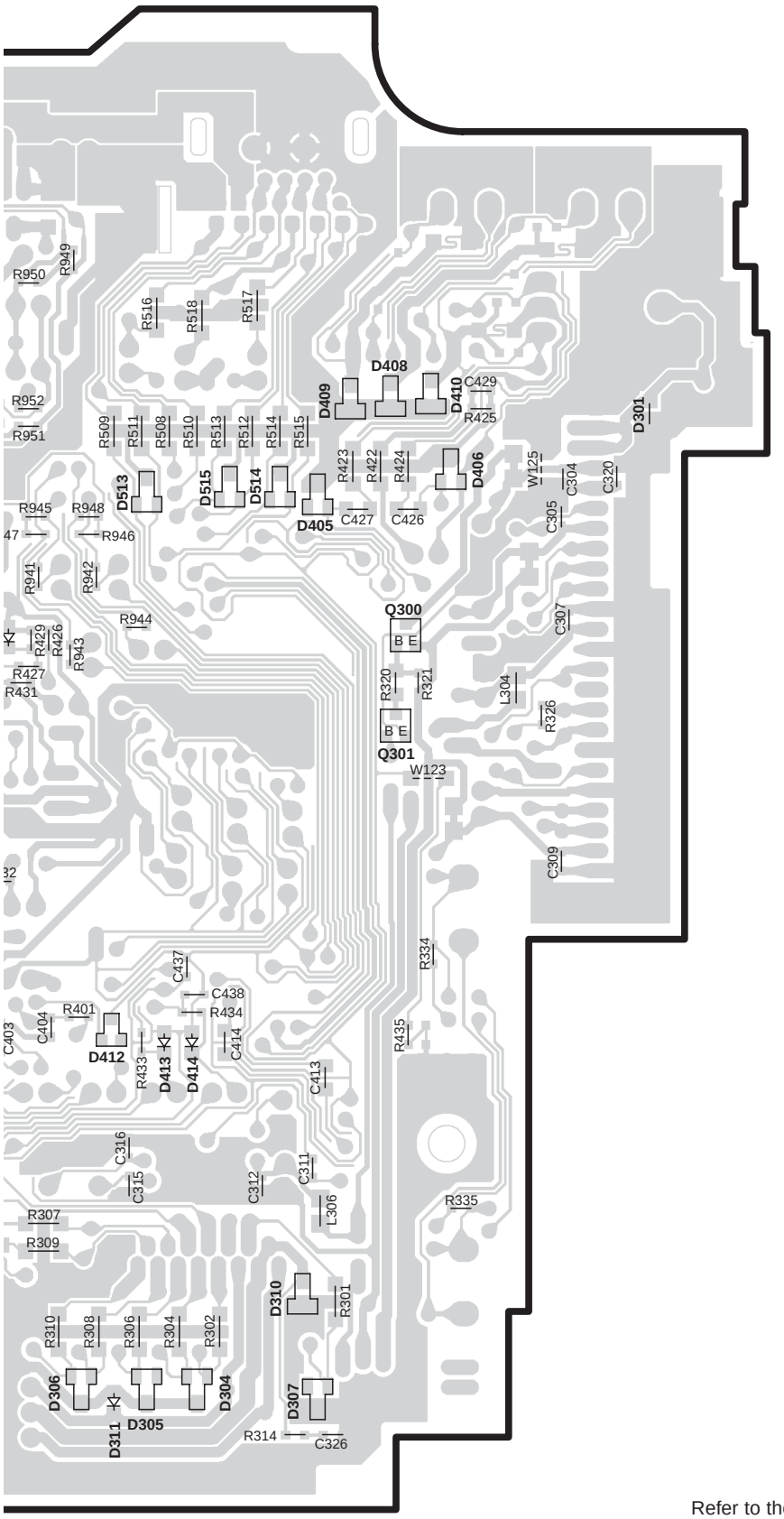
Refer to the schematic diagram for the values of resistors and capacitors.

KDC-MP5032

PC BOARD (FOIL SIDE VIEW)

ELECTRIC UNIT X34-3420-15 (J76-0049-22)





X34-3420-15

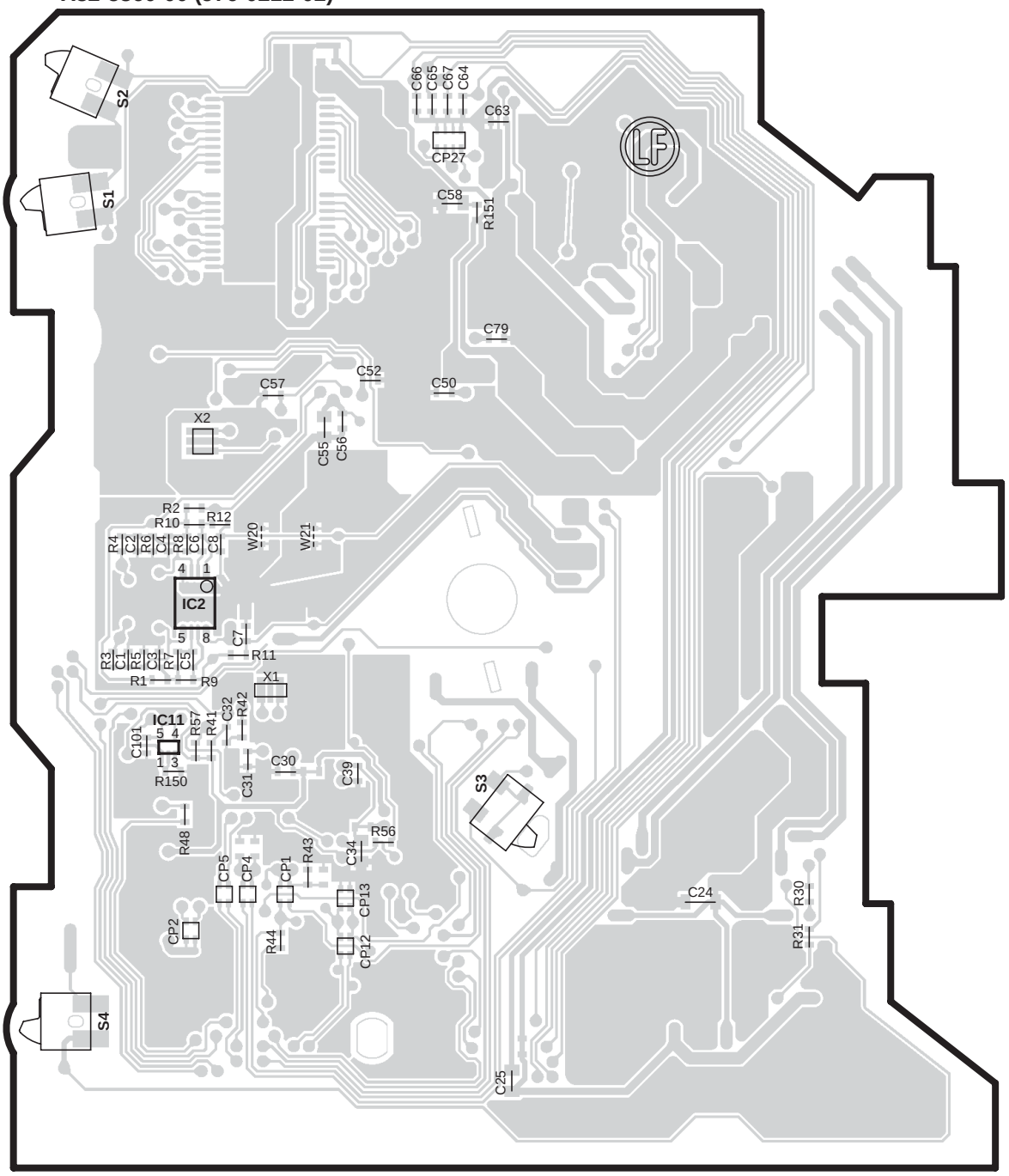
Ref. No.	Address
IC7	6N
Q3	5M
Q11	5M
Q12	6M
Q14	4N
Q15	4N
Q101	3M
Q103	3N
Q114	4O
Q300	4Q
Q301	4Q

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

KDC-MP5032

PC BOARD (COMPONENT SIDE VIEW)

CD PLAYER UNIT
X32-5860-00 (J76-0212-02)



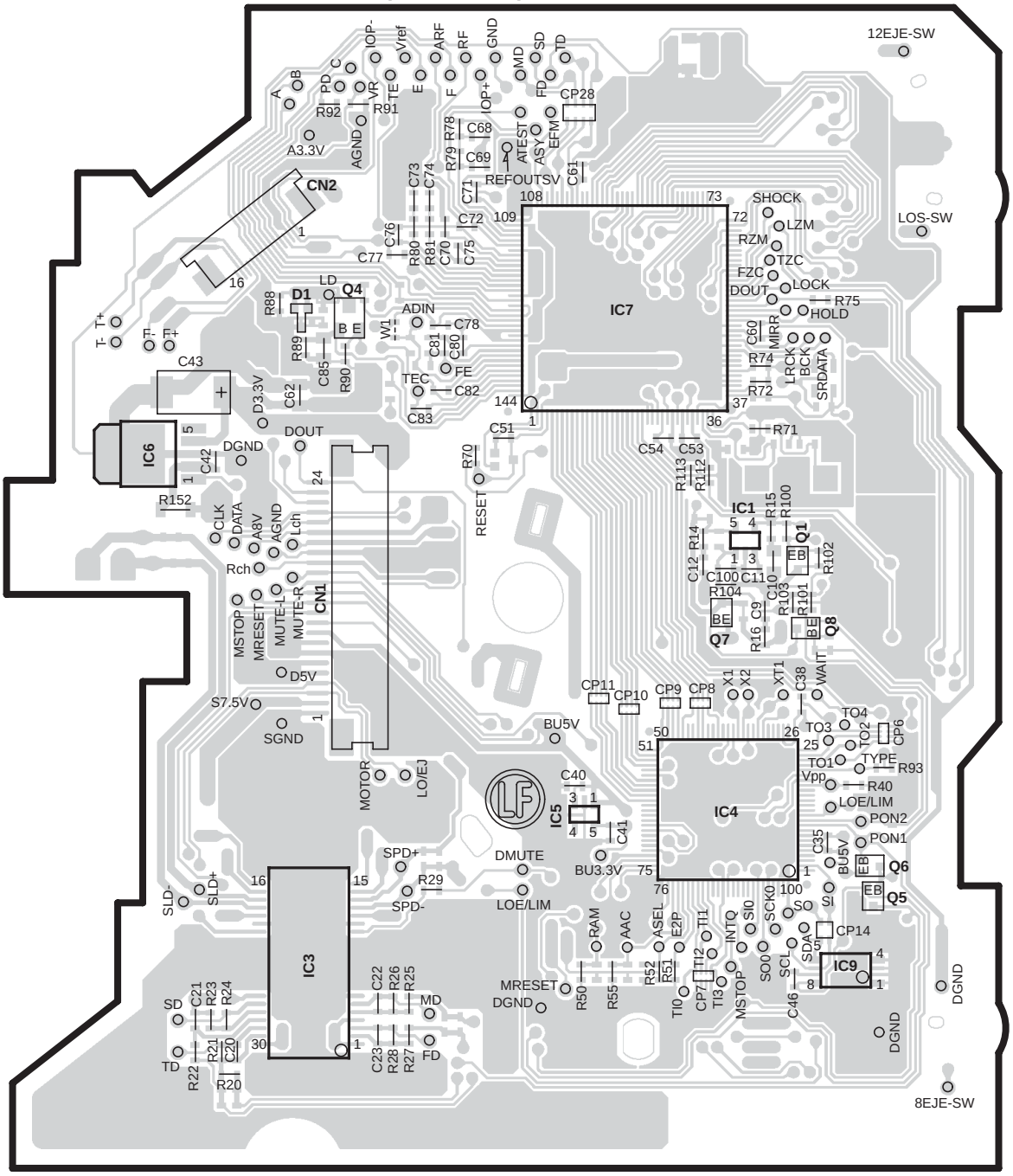
X32-5860-00

Ref. No.	Address
IC2	4V
IC11	4V

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

PC BOARD (FOIL SIDE VIEW)

CD PLAYER UNIT
X32-5860-00 (J76-0212-02)



X32-5860-00

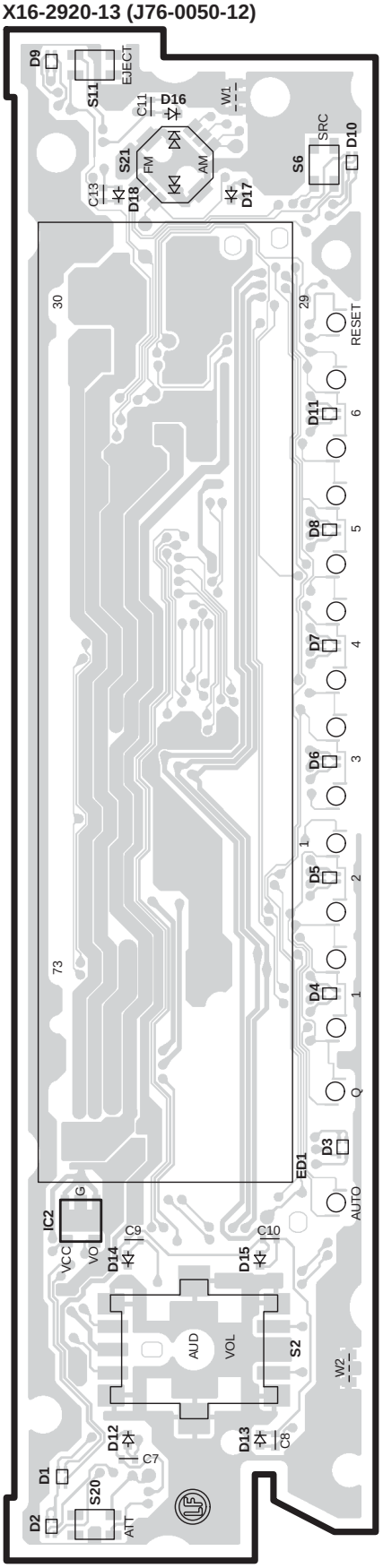
Ref. No.	Address	Ref. No.	Address
IC1	3AC	Q1	4AC
IC3	5AA	Q4	3AA
IC4	5AC	Q5	5AC
IC5	5AB	Q6	5AC
IC6	3Z	Q7	4AC
IC7	3AB	Q8	4AC
IC9	5AC		

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

KDC-MP5032

PC BOARD (COMPONENT SIDE VIEW)

SWITCH UNIT
X16-2920-13 (J76-0050-12)



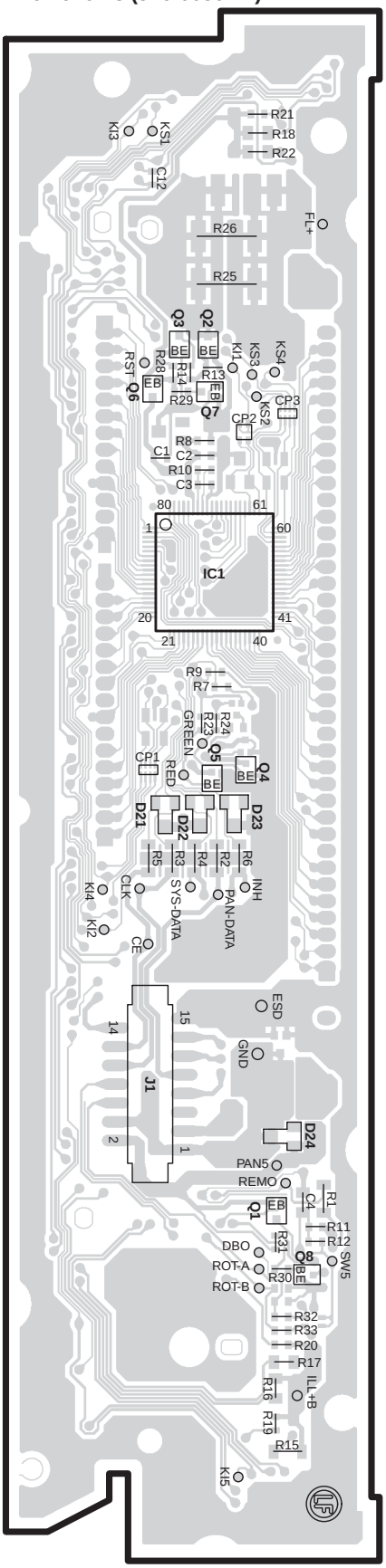
X16-2920-13

Ref. No.	Address
IC2	6AE

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

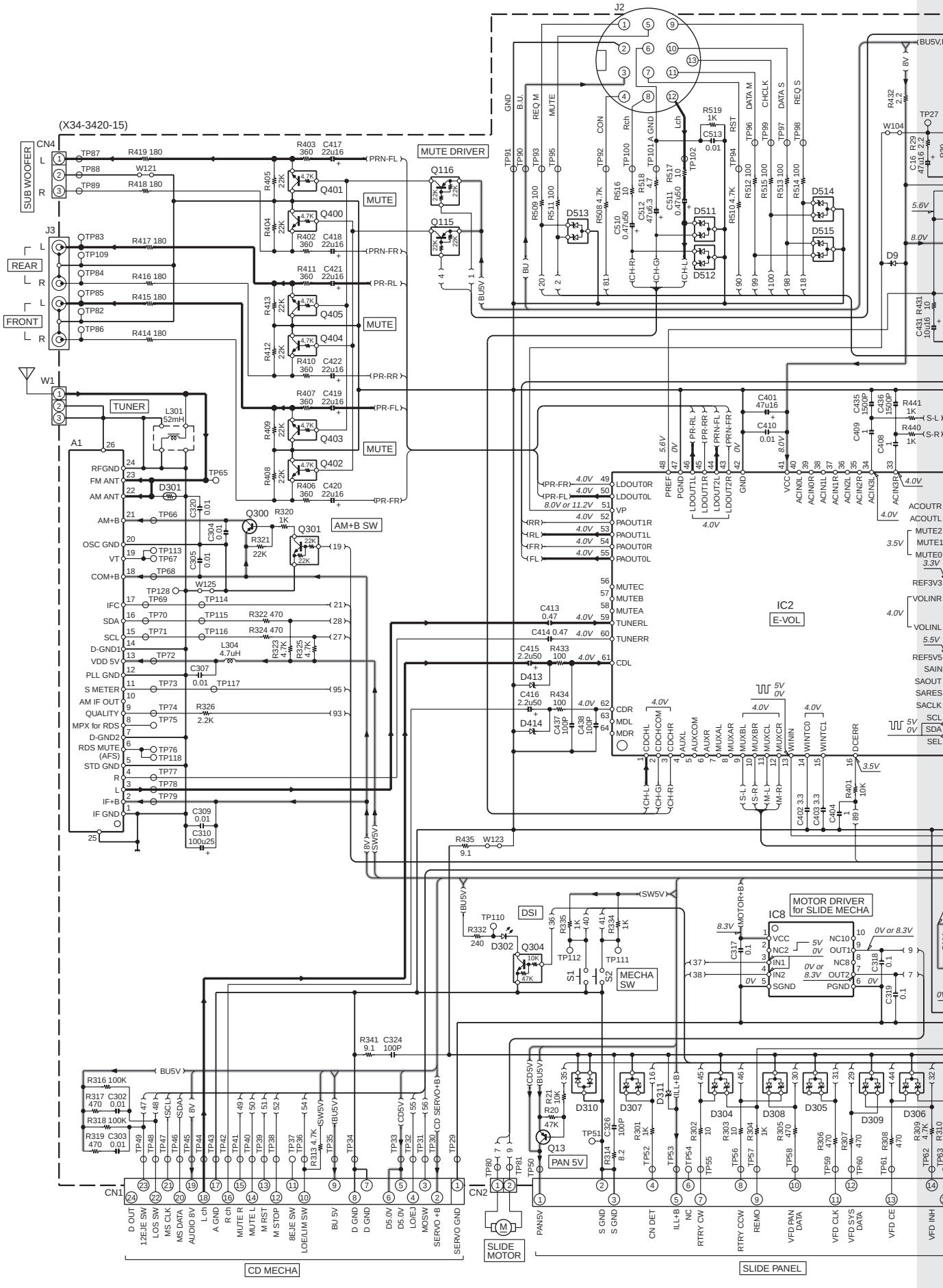
(FOIL SIDE VIEW)

SWITCH UNIT
X16-2920-13 (J76-0050-12)

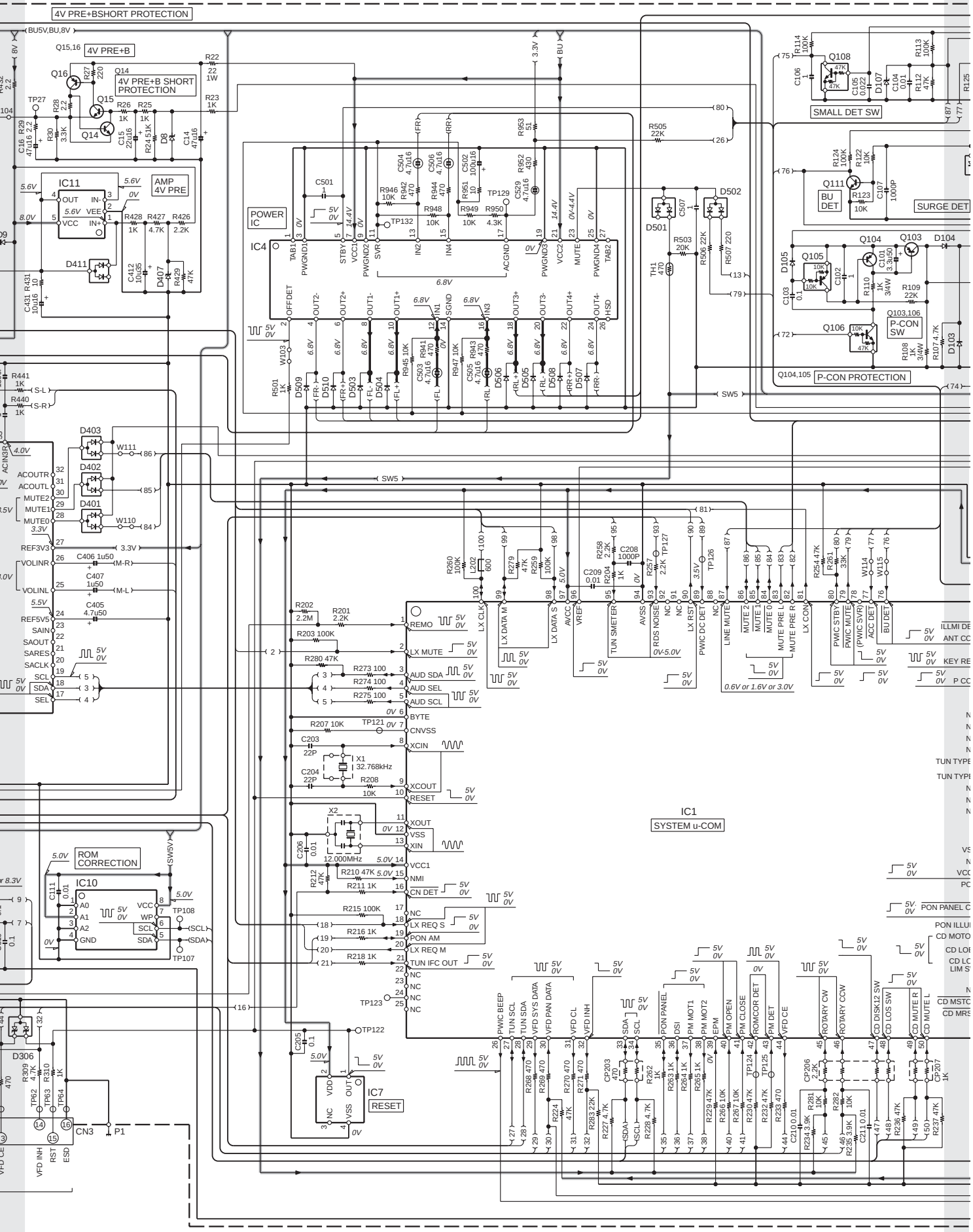


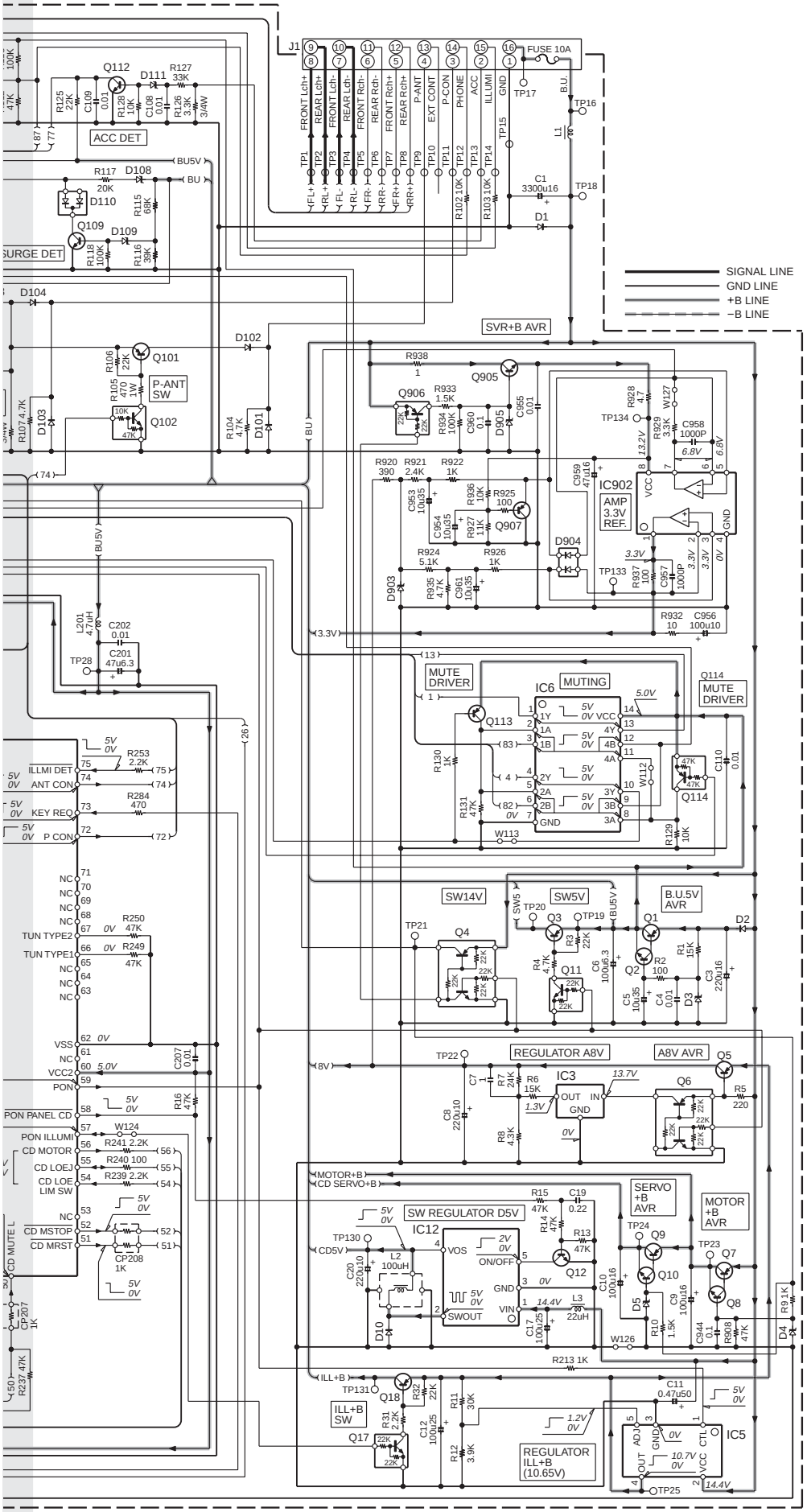
X16-2920-13

Ref. No.	Address
IC1	3AH
Q1	6AH
Q2	3AH
Q3	3AH
Q4	4AH
Q5	4AH
Q6	3AH
Q7	3AH


(X34-3420-15)
CN4
SUB WOOFER
REAR
FRONT
J3
W1
TUNER
L301 52mH
A1
D301
MUTE DRIVER
Q116
Q115
Q401
Q400
Q405
Q404
Q403
Q402
MUTE
PRN-FL
PRN-FR
PR-RL
PR-RR
PR-FL
PR-FR
Q300
Q301
AM+B SW
J2
D513
D511
D512
D514
D515
D9
IC2
E-VOL
LDOUT0R
LDOUT0L
LDOUT1R
LDOUT1L
LDOUT2R
LDOUT2L
VP
PAOUT1R
PAOUT1L
PAOUT0R
PAOUT0L
MUTEC
MUTEB
MUTEA
TUNERL
TUNERR
CDL
CDR
MDL
MDR
ACOUTR
ACOUTL
MUTE2
MUTE1
MUTE0
REF3V3
VOLINR
VOLINL
REF5V5
SAIN
SAOUT
SARES
SACLK
SCL
SDA
SEL
DSI
D302
Q304
S1
S2
MECHA SW
IC8
MOTOR DRIVER for SLIDE MECHA
D310
D307
D311
D304
D308
D305
D309
D306
Q13
PAN 5V
CN1
CN2
CD MECHA
SLIDE MOTOR
SLIDE PANEL

KDC-MP5032


4V PRE+BSHORT PROTECTION
4V PRE+B
4V PRE+B SHORT PROTECTION
AMP 4V PRE
POWER IC
IC4
IC11
IC1
SYSTEM u-COM
IC10
ROM CORRECTION
IC7
RESET
SMALL DET SW
SURGE DET
BU DET
P-CON SW
Q104,105 P-CON PROTECTION
D501
D502
D401
D402
D403
D411
W110
W111
CN3
P1
X1 32.768kHz
X2 12.000MHz



IC1 : 30624MGPA77GP
IC2 : E-TDA7415
IC3 : M5237ML-CF0J
IC4 : E-TDA7560A
IC5 : BA00CCWT-V5
IC6 : SN74HC02APWR
IC7 : S-80836CNNB-J
IC8 : LB1930M-E
IC10 : BR24L04FV-W
IC11 : TA75S558F-F
IC12 : SI-8050JF3NF
IC902 : NJM4565V-ZB

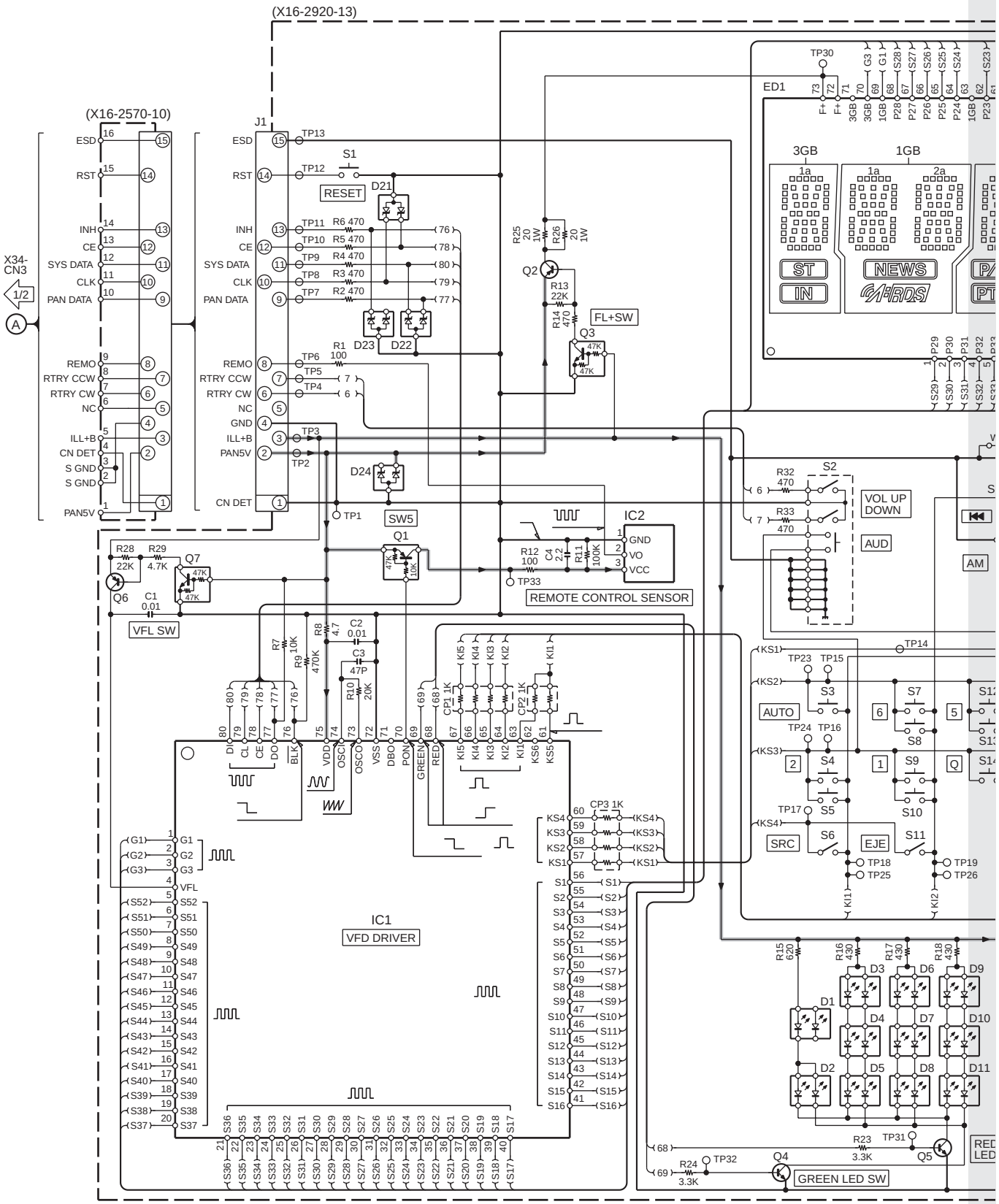
Q1,5,7 : 2SB1565
Q2,8,10,12,14,15,109,111,112 : 2SC4081
Q3,13,104,907 : 2SA1576A
Q4,6 : UMC2N
Q9,16 : 2SB1443
Q11,17,301 : KRC403-P
Q18 : 2SA1577
Q101,103 : 2SB1188(Q,R)
Q102,106,304 : KRC407-P
Q105 : KRA302-P
Q108 : KRC404-P
Q113 : KTA2014EP(Y,GR
Q114 : KRA304-P
Q115,116,906 : KRA303-P
Q300 : 2SB1689
Q400-405 : KRC410-P
Q905 : 2SC2873-F

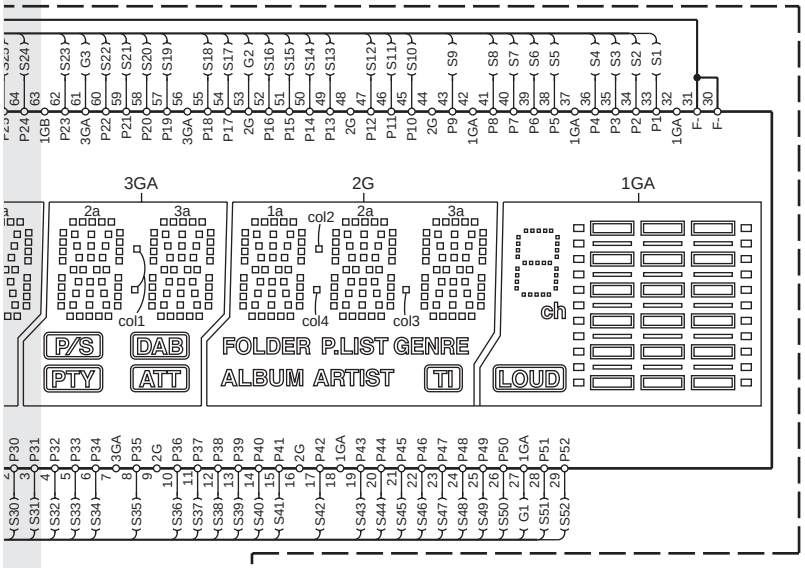
D1 : S2V60※A
D2 : RB160L-40
D3,407 : 02DZ5.6F-Y
D4 : 02DZ9.1F-X
D5 : 02DZ8.2F-Y
D8 : 02DZ12F-X
D9,101,103,505,506 : 10EDA20
D10 : SFPB-54VNF
D102,104,105,503,504,507-510 : 1SR154-400
D107 : 02DZ4.7F-Y
D108,109,903 : 02DZ6.8F-Y
D110 : KDS121-P
D111 : 02DZ6.2F-Y
D301 : IMSA-6801-E
D302 : B30-1567-05
D304-309,513-515 : STZ6.2N
D310 : DA204K
D311,905 : 02DZ16F-Y
D401-403,411,501,502 : KDS120-P
D413,414 : UDZS5.6B
D511,512 : STZ6.8N
D904 : DA227

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-MP5032 (1/2)

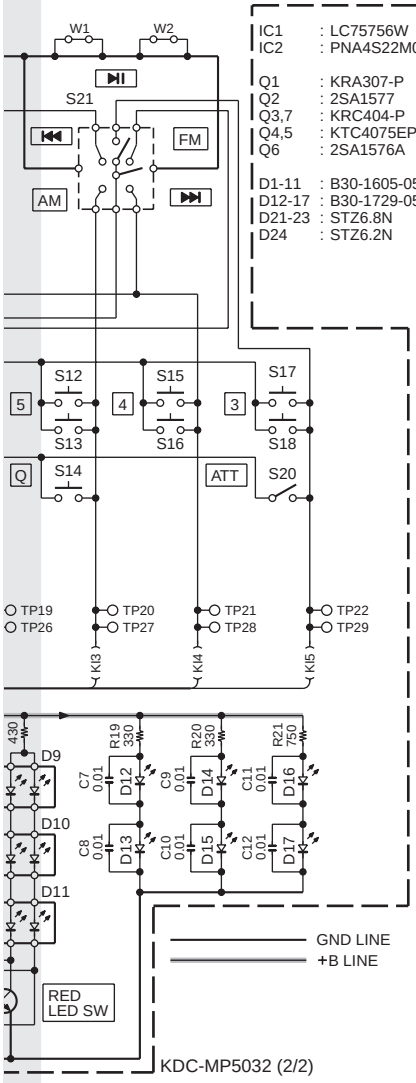

(X16-2920-13)
(X16-2570-10)
J1
X34-CN3
1/2
A
ESD
RST
INH
CE
SYS DATA
CLK
PAN DATA
REMO
RTRY CCW
RTRY CW
NC
GND
ILL+B
PAN5V
CN DET
S GND
RESET
S1
D21
D22
D23
D24
R1 100
R2 470
R3 470
R4 470
R5 470
R6 470
TP1
TP2
TP3
TP4
TP5
TP6
TP7
TP8
TP9
TP10
TP11
TP12
TP13
SW5
FL+SW
Q1
Q2
Q3
R13 22K
R14 470
R25 20 1W
R26 20 1W
ED1
TP30
3GB
1GB
1a
2a
ST
IN
NEWS
RDS
VOL UP DOWN
AUD
AM
S2
R32 470
R33 470
IC2
GND
VO
VCC
R12 100
C4 22
R11 100K
TP33
REMOTE CONTROL SENSOR
R28 22K
R29 4.7K
Q6
Q7
C1 0.01
VFL SW
R7 10K
R8 4.7
R9 470K
C2 0.01
C3 47P
R10 20K
CP1 1K
CP2 1K
CP3 1K
DI
CL
CE
DO
BLK
VDD
OSCI
OSCO
VSS
DBO
PON
GREEN
RED
KS1
KS2
KS3
KS4
KS5
KS6
KI1
KI2
KI3
KI4
KI5
TP14
TP15
TP16
TP17
TP18
TP19
TP23
TP24
TP25
TP26
S3
S4
S5
S6
S7
S8
S9
S10
S11
AUTO
SRC
EJE
IC1
VFD DRIVER
VFL
S1
S2
S3
S4
S5
S6
S7
S8
S9
S10
S11
S12
S13
S14
S15
S16
S17
S18
S19
S20
S21
S22
S23
S24
S25
S26
S27
S28
S29
S30
S31
S32
S33
S34
S35
S36
S37
S38
S39
S40
S41
S42
S43
S44
S45
S46
S47
S48
S49
S50
S51
S52
G1
G2
G3
R15 620
R16 430
R17 430
R18 430
D1
D2
D3
D4
D5
D6
D7
D8
D9
D10
D11
R23 3.3K
TP31
Q5
RED LED
R24 3.3K
TP32
Q4
GREEN LED SW

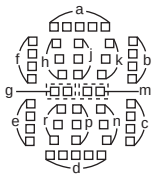


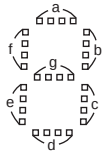
IC1 : LC75756W
IC2 : PNA4S22M02KW

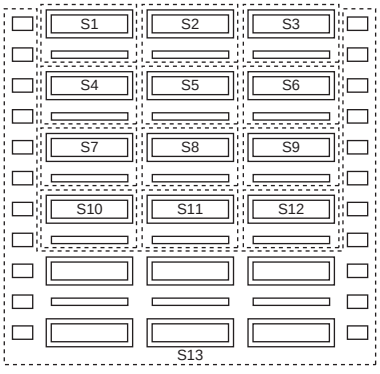
Q1 : KRA307-P
Q2 : 2SA1577
Q3,7 : KRC404-P
Q4,5 : KTC4075EP(Y,GR)
Q6 : 2SA1576A

D1-11 : B30-1605-05
D12-17 : B30-1729-05
D21-23 : STZ6.8N
D24 : STZ6.2N





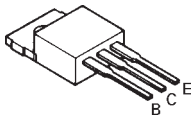




ANODE CONNECTION

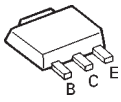
	3GA,3GB	2G	1GA,1GB
P1	—	col2	S7
P2	1d	3d	S6
P3	1n	3n	S5
P4	1p	3p	S4
P5	1r	3r	S3
P6	1e	3e	S2
P7	1c	3c	S1
P8	1g	3g	ch
P9	1m	3m	d
P10	1f	3f	e
P11	1b	3b	c
P12	1k	3k	g
P13	1j	3j	f
P14	1h	3h	b
P15	1a	3a	a
P16	2a	1a	1a
P17	3a	2a	2a
P18	2h	1h	1h
P19	3h	2h	2h
P20	2j	1j	1j
P21	3j	2j	2j
P22	2k	1k	1k
P23	3k	2k	2k
P24	2b	1b	1b
P25	3b	2b	2b
P26	2f	1f	1f
P27	3f	2f	2f
P28	2m	1m	1m
P29	3m	2m	2m
P30	2p	1p	1p
P31	3p	2p	2p
P32	2n	1n	1n
P33	3n	2n	2n
P34	2d	1d	1d
P35	3d	2d	2d
P36	ST	P.LIST	NEWS
P37	IN	FOLDER	RDS
P38	3r	2r	2r
P39	2r	1r	1r
P40	3e	2e	2e
P41	2e	1e	1e
P42	3c	2c	2c
P43	2c	1c	1c
P44	3g	2g	2g
P45	2g	1g	1g
P46	—	—	LOUD
P47	ATT	TI	S13
P48	PTY	ARTIST	S12
P49	DAB	ALBUM	S11
P50	P/S	GENRE	S10
P51	col1	col4	S9
P52	—	col3	S8

2SB1565

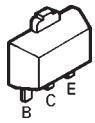


2SA1576A

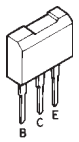
2SB1188



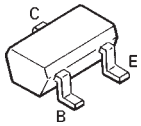
2SC2873-F



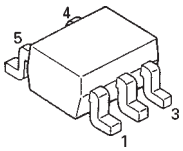
2SB1443



2SC4081

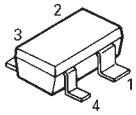


UMC2N

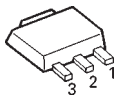


DAP202U
DA204K

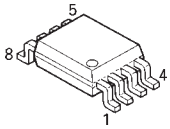
DA227



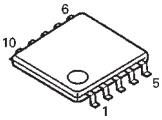
M5237ML-CF0J



NJM4580V-ZB



LB1930M-E



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-MP5032

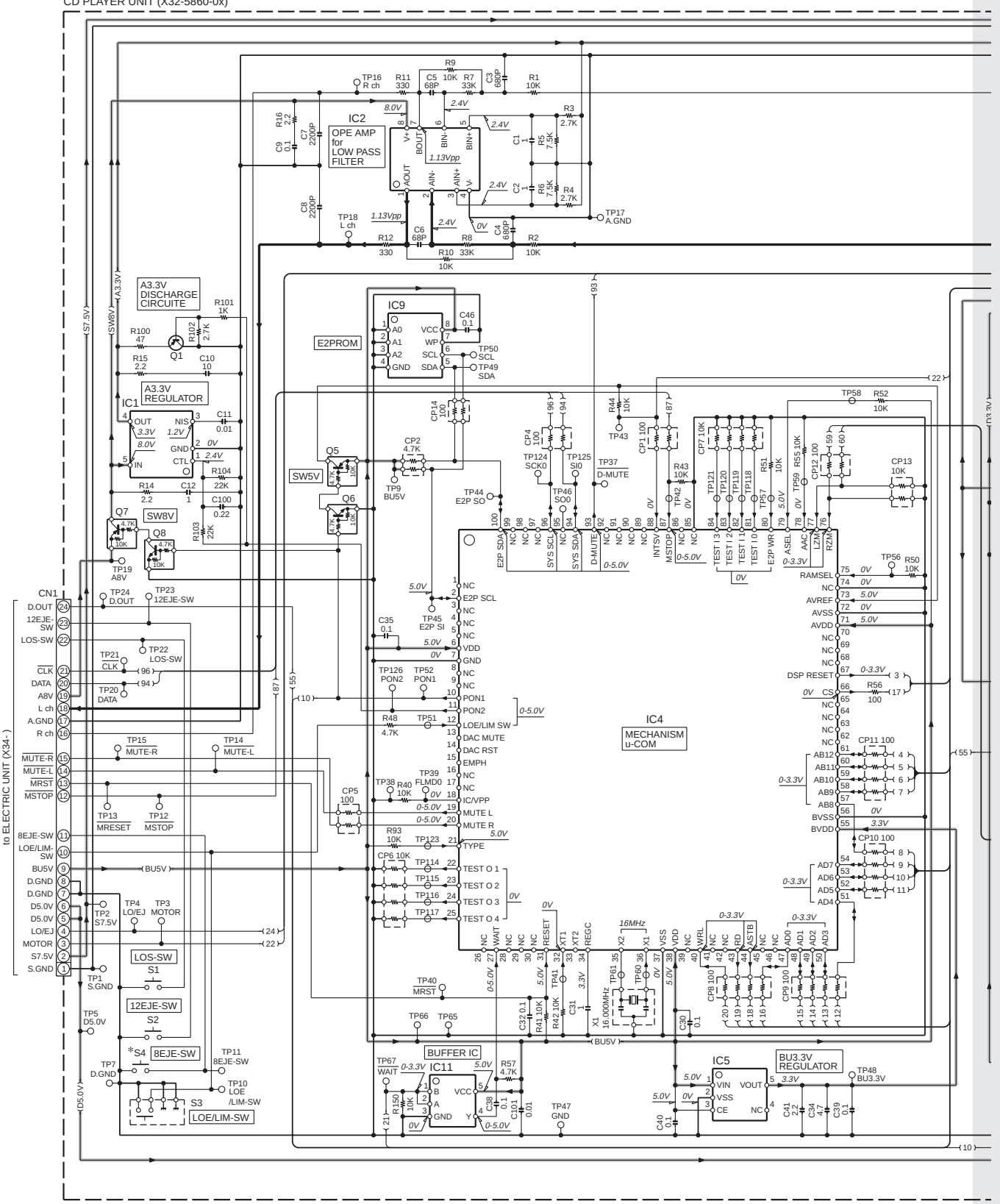
IC1 : TAR5S33-F
IC2 : NJM4580V-ZB
IC3 : BA5824FP
IC4 : 703030BYGCJ21A
IC5 : XC6219B332MR
IC6 : BA33BC0WFP
IC7 : UPD63763CGJ
IC9 : BR24L02FV-W
IC11 : TC7SET32FU-F

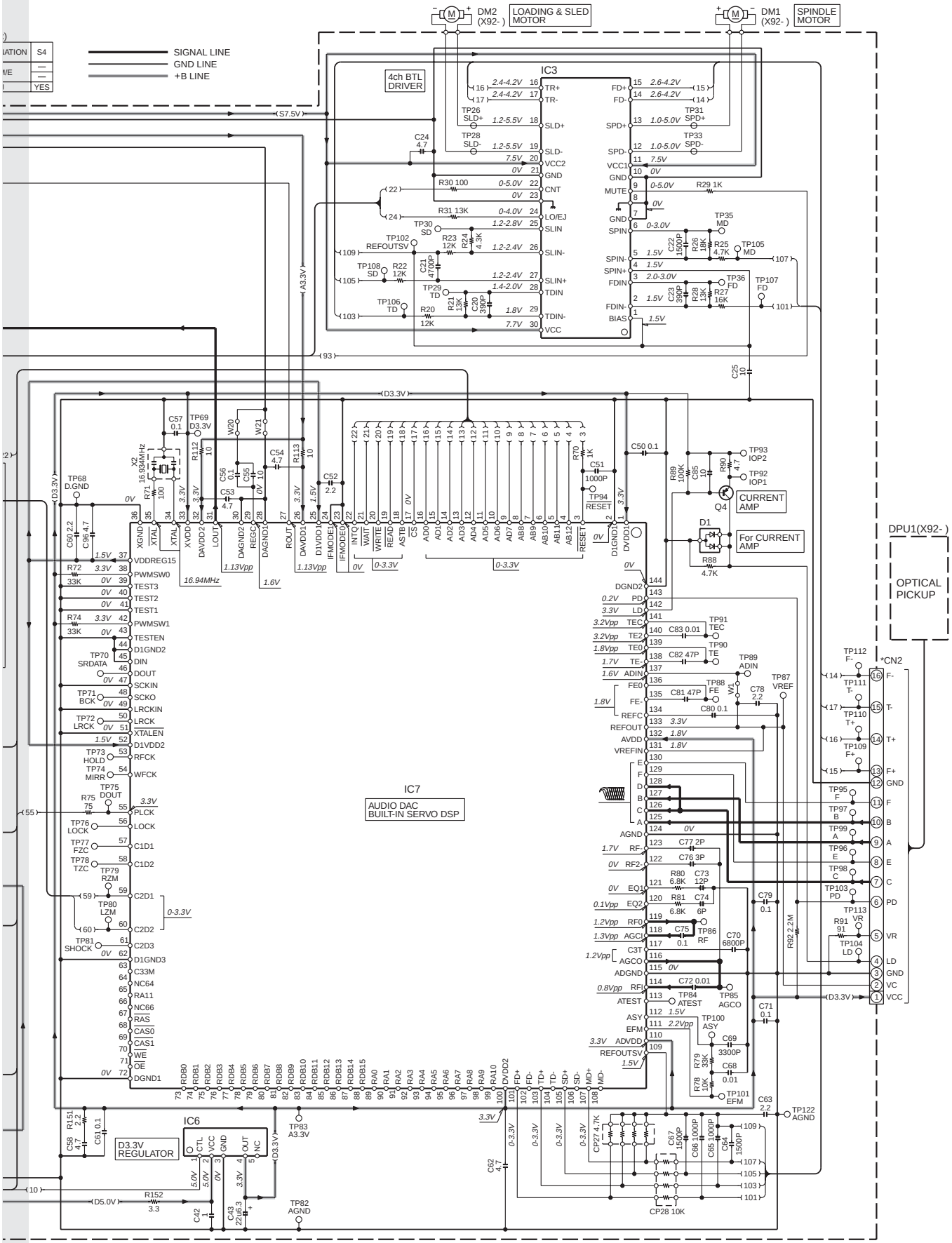
D1 : DAP202U
Q1 : 2SA1576A
Q4 : 2SB0970
Q5,7 : DTA143XUA
Q6,8 : DTC143XUA

(X32-586x-xx)

UNIT No.	DESTINATION	S4
0-00	K/M/E	—
0-02		—
0-01	J	YES

CD PLAYER UNIT (X32-5860-0x)

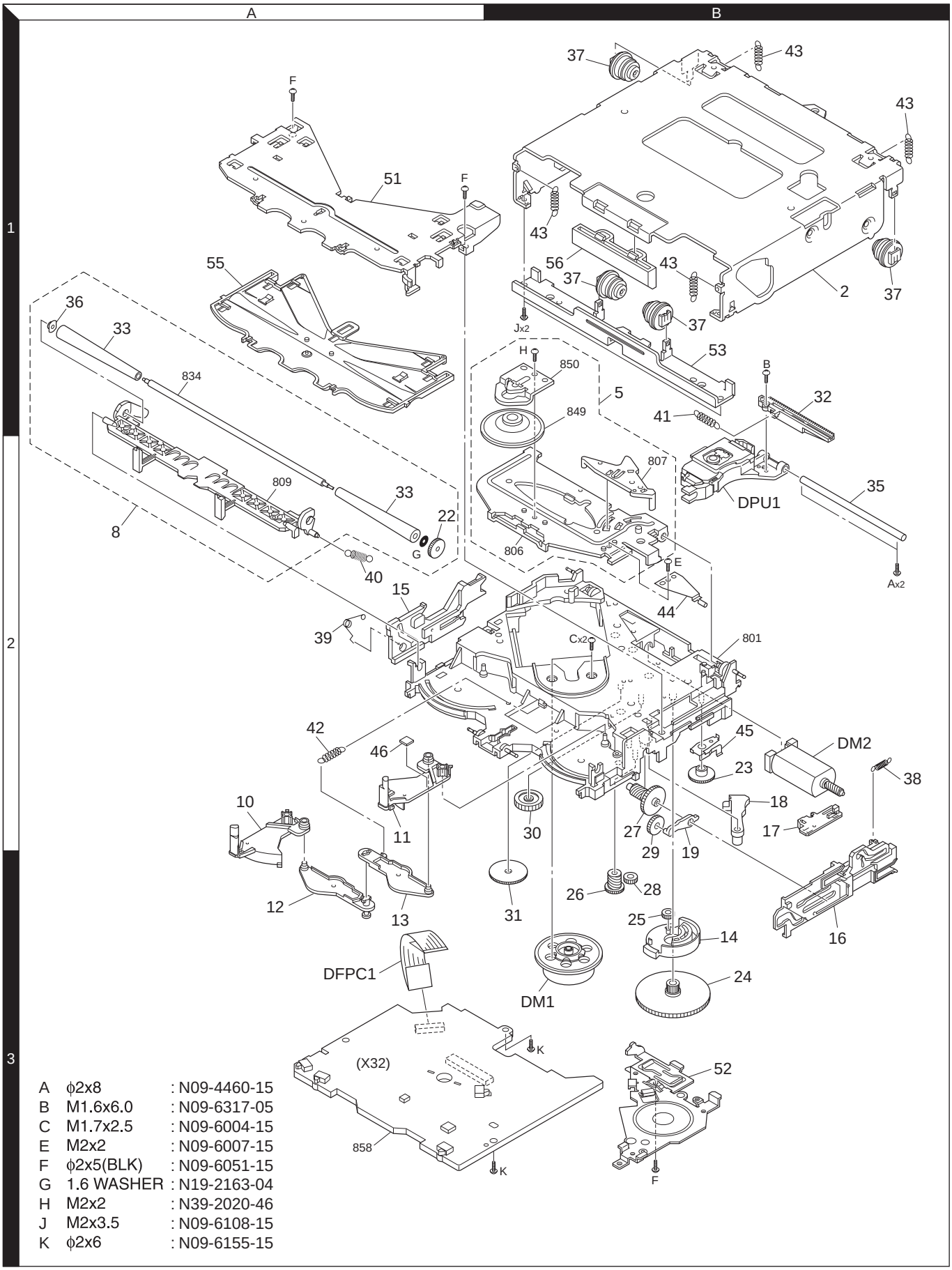




CAUTION : For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably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

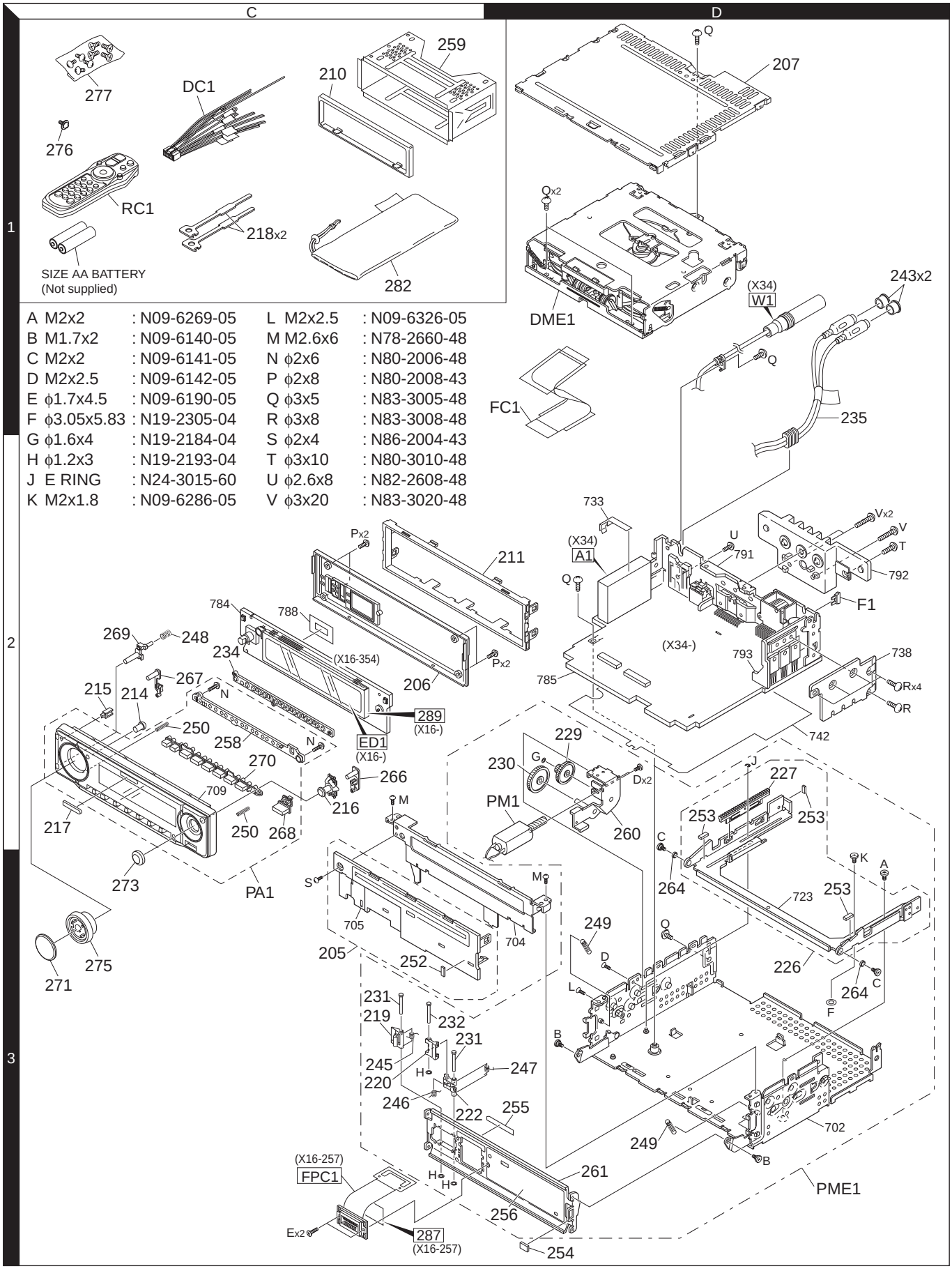
EXPLODED VIEW (CD MECHANISM)



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	:	N39-2020-46
J	M2x3.5	:	N09-6108-15
K	ϕ2x6	:	N09-6155-15

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

EXPLODED VIEW (UNIT)



A	M2x2	: N09-6269-05	L	M2x2.5	: N09-6326-05
B	M1.7x2	: N09-6140-05	M	M2.6x6	: N78-2660-48
C	M2x2	: N09-6141-05	N	ϕ2x6	: N80-2006-48
D	M2x2.5	: N09-6142-05	P	ϕ2x8	: N80-2008-43
E	ϕ1.7x4.5	: N09-6190-05	Q	ϕ3x5	: N83-3005-48
F	ϕ3.05x5.83	: N19-2305-04	R	ϕ3x8	: N83-3008-48
G	ϕ1.6x4	: N19-2184-04	S	ϕ2x4	: N86-2004-43
H	ϕ1.2x3	: N19-2193-04	T	ϕ3x10	: N80-3010-48
J	E RING	: N24-3015-60	U	ϕ2.6x8	: N82-2608-48
K	M2x1.8	: N09-6286-05	V	ϕ3x20	: N83-3020-48

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

KDC-MP5032

PARTS LIST

✻ New parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

Ref. No.	Add	New	Parts No.	Description	Destination
KDC-MP5032					
205	3C		A22-3023-22	SUB PANEL ASSY	
206	2C		A46-1817-01	REAR COVER	
207	1D		A52-0845-12	TOP PLATE	
PA1	3C	✻	A64-3733-02	PANEL ASSY	
PME1	3D		A10-5205-22	CHASSIS ASSY	
RC1	1C		A70-2067-15	REMOTE CONTROLLER ASSY (RC-527)	
-			B46-0681-04	ID CARD	
-			B46-0682-00	WARRANTY CARD	
-			B58-1426-04	CAUTION CARD	
-		✻	B64-3311-00	INSTRUCTION MANUAL (ENGLISH)	
-		✻	B64-3312-00	INSTRUCTION MANUAL (FRE.SPA.)	
210	1C		B07-3125-01	ESCUTCHEON	
211	2C		B07-3095-02	ESCUTCHEON	
214	2C	✻	B10-4837-04	FRONT GLASS (RC-SENSOR)	
215	2C	✻	B19-2359-04	LIGHTING BOARD	
216	2C	✻	B19-2360-03	LIGHTING BOARD (JOG-BASE)	
217	2C		B43-1518-04	BADGE	
218	1C		D10-4589-04	LEVER	
219	3C		D10-4805-03	LEVER	
220	3C		D10-4806-03	LEVER	
222	3C		D10-4807-13	LEVER	
226	3D		D10-4875-13	SLIDER ASSY	
227	2D		D13-2318-13	RACK (GEAR)	
229	2D		D13-2320-04	GEAR	
230	2D		D13-2321-04	GEAR	
231	3C		D21-2442-04	SHAFT	
232	3C		D21-2443-04	SHAFT	
234	2C		E29-2026-03	CONDUCTIVE RUBBER	
235	1D		E30-6426-05	CORD WITH PINPLUG	
⚠ DC1	1C		E30-6428-05	DC CORD	
FC1	1D		E39-0736-05	FLAT CABLE (24P)	
243	1D		F29-0626-04	INSULATING COVER	
⚠ F1	2D		F52-0023-05	FUSE (MINI BLADE TYPE) 10A	
245	3C		G01-3210-04	TORSION COIL SPRING	
246	3C		G01-3211-04	TORSION COIL SPRING	
247	3D		G01-3212-04	TORSION COIL SPRING	
248	2C		G01-3213-04	COMPRESSION SPRING	
249	3D		G01-3215-04	EXTENSION SPRING	
250	2C	✻	G01-3291-04	COMPRESSION SPRING	
252	3C		G11-3594-04	CUSHION	
253	2D		G11-3646-04	CUSHION	
254	3D	✻	G16-1606-04	SHEET	
255	3D		G16-1482-14	SHEET	
256	3D		G16-1483-04	SHEET	
-			H10-4925-02	POLYSTYRENE FOAMED FIXTURE	
-			H25-0329-04	PROTECTION BAG (280X450X0.03)	
-			H25-0337-04	PROTECTION BAG (180X300X0.03)	
-		✻	H54-3654-03	ITEM CARTON CASE	
258	2C		J19-7053-02	HOLDER	
259	1C		J21-9716-03	MOUNTING HARDWARE ASSY	
260	2D		J22-0114-03	MOUNTING HARDWARE ASSY	
261	3D		J22-0263-02	MOUNTING HARDWARE	
264	3D		J31-1062-04	COLLAR	
266	2C	✻	K24-4428-03	PUSH KNOB (EJECT)	
267	2C	✻	K24-4431-03	PUSH KNOB (ATT)	
268	2C		K24-4292-03	PUSH KNOB (SRC)	
269	2C	✻	K24-4434-03	PUSH KNOB (RELEASE)	
270	2C	✻	K25-1781-02	PUSH KNOB (PRESET)	
271	3C		K28-0103-03	KEY TOP (VOL)	
273	3C		K28-0106-03	KEY TOP (CONTROL)	
275	3C	✻	K29-7194-03	KNOB (VOL)	
276	1C		N09-6280-05	TAPPING SCREW	
277	1C		N99-1758-05	SCREW SET	
A	3D		N09-6269-05	STEPPED SCREW (M2X2)	
B	3D		N09-6140-05	STEPPED SCREW (M1.7X2)	
C	3D		N09-6141-05	STEPPED SCREW (M2X2)	
D	3D		N09-6142-05	MACHINE SCREW (M2X2.5)	
E	3C		N09-6190-05	TAPPING SCREW (1.7X4.5)	
F	3D		N19-2305-04	FLAT WASHER (3.05X5.83)	
G	2D		N19-2184-04	FLAT WASHER (1.6X4.0)	
H	3C		N19-2193-04	FLAT WASHER (1.2X3)	
J	2D		N24-3015-60	E TYPE RETAINING RING	
K	2D		N09-6286-05	STEPPED SCREW (M2X1.8)	
L	3D		N09-6326-05	MACHINE SCREW (M2X2.5)	
M	2C		N78-2660-48	PAN HEAD TAPTITE SCREW	
N	2C		N80-2006-48	PAN HEAD TAPTITE SCREW	
P	2C		N80-2008-43	PAN HEAD TAPTITE SCREW	
Q	1D		N83-3005-48	PAN HEAD TAPTITE SCREW	
R	2D		N83-3008-48	PAN HEAD TAPTITE SCREW	
S	3C		N86-2004-43	BINDING HEAD TAPTITE SCREW	
PM1	2D		T42-1086-14	MOTOR ASSY	
282	1C		W01-1661-05	CARRYING CASE	
DME1	1D		X92-5470-00	CD MECHANISM ASSY (DXM-6680W)	
SUB-CIRCUIT UNIT (X16-2570-10)					
J1		✻	E58-1038-05	RECTANGULAR RECEPTACLE	
287	3C		F20-2284-14	INSULATING SHEET	
FPC1	3C		J86-0003-05	FPC (LEAD FREE)	
SWITCH UNIT (X16-2920-13)					
D1-11			B30-1605-05	LED (2COLOR PG/RED)	
D12-17			B30-1729-05	LED (1608,BLUE)	
C1,2			CK73GB1H103K	CHIP C 0.010UF K	
C3			CC73GCH1H470J	CHIP C 47PF J	
C4			CK73FB1A225K	CHIP C 2.2UF K	
C7-12			CK73GB1H103K	CHIP C 0.010UF K	
J1			E59-0846-05	RECTANGULAR PLUG	
289	2C		J19-7055-03	HOLDER	
CP1			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
CP2			RK74GA1J102J	CHIP-COM 1.0K J 1/16W	

(North America)

⚠ Indicates safety critical components.

PARTS LIST

SWITCH UNIT (X16-2920-13)

Ref. No.	Add	New	Parts No.	Description	Destination
CP3			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
R1			RK73EB2E101J	CHIP R 100 J 1/4W	
R2-6			RK73EB2E471J	CHIP R 470 J 1/4W	
R7			RK73GB2A103J	CHIP R 10K J 1/10W	
R8			RK73GB2A4R7J	CHIP R 4.7 J 1/10W	
R9			RK73GB2A474J	CHIP R 470K J 1/10W	
R10			RK73GB2A203J	CHIP R 20K J 1/10W	
R11			RK73GB2A104J	CHIP R 100K J 1/10W	
R12			RK73GB2A101J	CHIP R 100 J 1/10W	
R13			RK73GB2A223J	CHIP R 22K J 1/10W	
R14			RK73GB2A471J	CHIP R 470 J 1/10W	
R15			RK73EB2E621J	CHIP R 620 J 1/4W	
R16-18			RK73FB2B431J	CHIP R 430 J 1/8W	
R19,20			RK73GB2A331J	CHIP R 330 J 1/10W	
R21			RK73GB2A751J	CHIP R 750 J 1/10W	
R23,24			RK73GB2A332J	CHIP R 3.3K J 1/10W	
R25,26			RK73SB3A200J	CHIP R 20 J 1W	
R28			RK73GB2A223J	CHIP R 22K J 1/10W	
R29			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R32,33			RK73GB2A471J	CHIP R 470 J 1/10W	
W1,2			R92-2053-05	CHIP R 0 OHM J 1/8W	
S6			S70-0901-05	TACT SWITCH	
S11			S70-0901-05	TACT SWITCH	
S20			S70-0901-05	TACT SWITCH	
S21		✻	S70-0941-05	TACT SWITCH	
S2			T99-0456-15	ROTARY ENCODER	
D21-23			STZ6.8N	ZENER DIODE	
D24			STZ6.2N	ZENER DIODE	
ED1			3-BT-226N	FLUORESCENT INDICATOR TUBE	
IC1			LC75756W	MOS-IC	
IC2			PNA4S22M02KW	ANALOGUE IC	
Q1			KRA307-P	DIGITAL TRANSISTOR	
Q2			2SA1577	TRANSISTOR	
Q3			KRC404-P	DIGITAL TRANSISTOR	
Q4,5			KTC4075EP(Y,GR	TRANSISTOR	
Q6			2SA1576A	TRANSISTOR	
Q7			KRC404-P	DIGITAL TRANSISTOR	

CD PLAYER UNIT (X32-5860-00)

Ref. No.	Add	New	Parts No.	Description	Destination
C1,2			CK73GB1A105K	CHIP C 1.0UF K	
C3,4			CC73GCH1H681J	CHIP C 680PF J	
C5,6			CC73GCH1H680J	CHIP C 68PF J	
C7,8			CK73GB1H222K	CHIP C 2200PF K	
C9			CK73GB1H104K	CHIP C 0.10UF K	
C10			CK73FB0J106K	CHIP C 10UF K	
C11			CK73GB1H103K	CHIP C 0.010UF K	
C12			CK73GB1A105K	CHIP C 1.0UF K	
C20			CC73GCH1H391J	CHIP C 390PF J	
C21			CK73GB1H472K	CHIP C 4700PF K	
C22			CK73GB1H152K	CHIP C 1500PF K	
C23			CC73GCH1H391J	CHIP C 390PF J	
C24			CK73EB1A475K	CHIP C 4.7UF K	
C25			CK73FB0J106K	CHIP C 10UF K	
C30			CK73GB1H104K	CHIP C 0.10UF K	
C31			CK73GB1A105K	CHIP C 1.0UF K	
C32			CK73GB1H104K	CHIP C 0.10UF K	
C34			CK73FB0J475K	CHIP C 4.7UF K	
C35			CK73GB1H104K	CHIP C 0.10UF K	
C38-40			CK73GB1H104K	CHIP C 0.10UF K	
C41			CK73GB0J225K	CHIP C 2.2UF K	
C42			CK73GB1A105K	CHIP C 1.0UF K	
C43			C92-1792-05	ELECTRO 22UF 6.3WV	
C46			CK73GB1H104K	CHIP C 0.10UF K	
C50			CK73GB1H104K	CHIP C 0.10UF K	
C51			CK73GB1H102K	CHIP C 1000PF K	
C52			CK73GB0J225K	CHIP C 2.2UF K	
C53,54			CK73GB0J475K	CHIP C 4.7UF K	
C55			CK73FB0J106K	CHIP C 10UF K	
C56,57			CK73GB1H104K	CHIP C 0.10UF K	
C58			CK73FB0J475K	CHIP C 4.7UF K	
C60			CK73GB0J225K	CHIP C 2.2UF K	
C61			CK73GB1H104K	CHIP C 0.10UF K	
C62			CK73FB0J475K	CHIP C 4.7UF K	
C63			CK73GB0J225K	CHIP C 2.2UF K	
C64			CK73GB1H152K	CHIP C 1500PF K	
C65,66			CK73GB1H102K	CHIP C 1000PF K	
C67			CK73GB1H152K	CHIP C 1500PF K	
C68			CK73GB1H103K	CHIP C 0.010UF K	
C69			CK73GB1H332K	CHIP C 3300PF K	
C70			CK73GB1H682K	CHIP C 6800PF K	
C71			CK73GB1H104K	CHIP C 0.10UF K	
C72			CK73GB1H103K	CHIP C 0.010UF K	
C73			CC73GCH1H120J	CHIP C 12PF J	
C74			CC73GCH1H060D	CHIP C 6.0PF D	
C75			CK73GB1H104K	CHIP C 0.10UF K	
C76			CC73GCH1H030C	CHIP C 3.0PF C	
C77			CC73GCH1H020C	CHIP C 2.0PF C	
C78			CK73GB0J225K	CHIP C 2.2UF K	
C79,80			CK73GB1H104K	CHIP C 0.10UF K	
C81,82			CC73GCH1H470J	CHIP C 47PF J	
C83			CK73GB1H103K	CHIP C 0.010UF K	
C85			CK73FB0J106K	CHIP C 10UF K	
C96			CK73GB0J475K	CHIP C 4.7UF K	
C100			CK73GB1C224K	CHIP C 0.22UF K	
C101			CK73GB1H103K	CHIP C 0.010UF K	
CN1			E41-2083-15	FLAT CABLE CONNECTOR	
CN2			E41-2297-05	FLAT CABLE CONNECTOR	
X1			L78-0862-05	RESONATOR (16.00MHZ)	
X2			L78-0851-05	RESONATOR (16.93MHZ)	
CP1			RK74GA1J101J	CHIP-COM 100 J 1/16W	
CP2			RK74GA1J472J	CHIP-COM 4.7K J 1/16W	
CP4,5			RK74GA1J101J	CHIP-COM 100 J 1/16W	
CP6,7			RK74HB1J103J	CHIP-COM 10K J 1/16W	
CP8-11			RK74HB1J101J	CHIP-COM 100 J 1/16W	
CP12			RK74GA1J101J	CHIP-COM 100 J 1/16W	
CP13			RK74GA1J103J	CHIP-COM 10K J 1/16W	
CP14			RK74GA1J101J	CHIP-COM 100 J 1/16W	

(North America)

⚠ Indicates safety critical components.

PARTS LIST

CD PLAYER UNIT (X32-5860-00)

Ref. No.	Add	New	Parts No.	Description			Destination
CP27			RK74GB1J472J	CHIP-COM 4.7K	J	1/16W	
CP28			RK74GB1J103J	CHIP-COM 10K	J	1/16W	
R1,2			RK73GH2A103D	CHIP R 10K	D	1/10W	
R3,4			RK73GB2A272J	CHIP R 2.7K	J	1/10W	
R5,6			RK73GB2A752J	CHIP R 7.5K	J	1/10W	
R7,8			RK73GB2A333J	CHIP R 33K	J	1/10W	
R9,10			RK73GH2A103D	CHIP R 10K	D	1/10W	
R11,12			RK73GB2A331J	CHIP R 330	J	1/10W	
R14-16			RK73GB2A2R2J	CHIP R 2.2	J	1/10W	
R20			RK73GB2A123J	CHIP R 12K	J	1/10W	
R21			RK73GB2A133J	CHIP R 13K	J	1/10W	
R22,23			RK73GB2A123J	CHIP R 12K	J	1/10W	
R24			RK73GB2A432J	CHIP R 4.3K	J	1/10W	
R25			RK73GB2A472J	CHIP R 4.7K	J	1/10W	
R26			RK73GB2A183J	CHIP R 18K	J	1/10W	
R27			RK73GB2A163J	CHIP R 16K	J	1/10W	
R28			RK73GB2A133J	CHIP R 13K	J	1/10W	
R29			RK73GB2A102J	CHIP R 1.0K	J	1/10W	
R30			RK73GB2A101J	CHIP R 100	J	1/10W	
R31			RK73GB2A133J	CHIP R 13K	J	1/10W	
R40-44			RK73GB2A103J	CHIP R 10K	J	1/10W	
R48			RK73GB2A472J	CHIP R 4.7K	J	1/10W	
R50-52			RK73GB2A103J	CHIP R 10K	J	1/10W	
R55			RK73GB2A103J	CHIP R 10K	J	1/10W	
R56			RK73GB2A101J	CHIP R 100	J	1/10W	
R57			RK73GB2A472J	CHIP R 4.7K	J	1/10W	
R70			RK73GB2A102J	CHIP R 1.0K	J	1/10W	
R71			RK73GB2A101J	CHIP R 100	J	1/10W	
R72			RK73GB2A333J	CHIP R 33K	J	1/10W	
R74			RK73GB2A333J	CHIP R 33K	J	1/10W	
R75			RK73GB2A750J	CHIP R 75	J	1/10W	
R78			RK73GB2A103J	CHIP R 10K	J	1/10W	
R79			RK73GB2A333J	CHIP R 33K	J	1/10W	
R80,81			RK73GB2A682J	CHIP R 6.8K	J	1/10W	
R88			RK73GB2A472J	CHIP R 4.7K	J	1/10W	
R89			RK73GB2A104J	CHIP R 100K	J	1/10W	
R90			RK73GB2A4R7J	CHIP R 4.7	J	1/10W	
R91			RK73GB2A910J	CHIP R 91	J	1/10W	
R92			RK73GB2A225J	CHIP R 2.2M	J	1/10W	
R93			RK73GB2A103J	CHIP R 10K	J	1/10W	
R100			RK73GB2A470J	CHIP R 47	J	1/10W	
R101			RK73GB2A102J	CHIP R 1.0K	J	1/10W	
R102			RK73GB2A272J	CHIP R 2.7K	J	1/10W	
R103,104			RK73GB2A223J	CHIP R 22K	J	1/10W	
R112,113			RK73GB2A100J	CHIP R 10	J	1/10W	
R150			RK73GB2A103J	CHIP R 10K	J	1/10W	
R151			RK73GB2A2R2J	CHIP R 2.2	J	1/10W	
R152			RK73EB2E3R3J	CHIP R 3.3	J	1/4W	
W1			R92-1252-05	CHIP R 0 OHM	J	1/16W	
W20,21			R92-1252-05	CHIP R 0 OHM	J	1/16W	
S1,2			S68-0863-05	PUSH SWITCH			
S3			S68-0862-05	PUSH SWITCH			
D1			DAP202U	DIODE			
IC1			TAR5S33-F	ANALOGUE IC			

Ref. No.	Add	New	Parts No.	Description			Destination
IC2			NJM4580V-ZB	ANALOGUE IC			
IC3			BA5824FP	ANALOGUE IC			
IC4			703030BYGCJ21A	MICROCONTROLLER IC			
IC5			XC6219B332MR	ANALOGUE IC			
IC6			BA33BC0WFP	ANALOGUE IC			
IC7			UPD63763CGJ	MOS-IC			
IC9			BR24L02FV-W	ROM IC			
IC11			TC7SET32FU-F	MOS-IC			
Q1			2SA1576A	TRANSISTOR			
Q4			2SB0970	TRANSISTOR			
Q5			DTA143XUA	DIGITAL TRANSISTOR			
Q6			DTC143XUA	DIGITAL TRANSISTOR			
Q7			DTA143XUA	DIGITAL TRANSISTOR			
Q8			DTC143XUA	DIGITAL TRANSISTOR			

ELECTRIC UNIT (X34-3420-15)

D302			B30-1567-05	LED (1608,RED)			
C1			C90-6746-05	ELECTRO	3300UF	16WV	
C3			C90-5692-05	ELECTRO	220UF	16WV	
C4			CK73GB1H103K	CHIP C	0.010UF	K	
C5			CD04AS1V100M	ELECTRO	10UF	35WV	
C6			CD04AS0J101M	ELECTRO	100UF	6.3WV	
C7			CK73FB1C105K	CHIP C	1.0UF	K	
C8			CD04AT1A221M	ELECTRO	220UF	10WV	
C9,10			CD04AS1C101M	ELECTRO	100UF	16WV	
C11			CD04AS1HR47M	ELECTRO	0.47UF	50WV	
C12			CD04BK1E101M	ELECTRO	100UF	25WV	
C14			CD04AS1C470M	ELECTRO	47UF	16WV	
C15			CD04AS1C220M	ELECTRO	22UF	16WV	
C16			CD04AS1C470M	ELECTRO	47UF	16WV	
C17			CD04BK1E101M	ELECTRO	100UF	25WV	
C19			CK73GB1C224K	CHIP C	0.22UF	K	
C20			CD04BK1A221M	ELECTRO	220UF	10WV	
C101			CD04AS1H3R3M	ELECTRO	3.3UF	50WV	
C102			CK73GB1A105K	CHIP C	1.0UF	K	
C103			CK73GB1H104K	CHIP C	0.10UF	K	
C104			CK73GB1H103K	CHIP C	0.010UF	K	
C105			CK73GB1H223K	CHIP C	0.022UF	K	
C106			CK73FB1C105K	CHIP C	1.0UF	K	
C107			CK73GB1H102K	CHIP C	1000PF	K	
C108-111			CK73GB1H103K	CHIP C	0.010UF	K	
C201			CD04AS0J470M	ELECTRO	47UF	6.3WV	
C202			CK73GB1H103K	CHIP C	0.010UF	K	
C203,204			CC73GCH1H220J	CHIP C	22PF	J	
C205			CK73GB1H104K	CHIP C	0.10UF	K	
C206,207			CK73GB1H103K	CHIP C	0.010UF	K	
C208			CK73GB1H102K	CHIP C	1000PF	K	
C209-211			CK73GB1H103K	CHIP C	0.010UF	K	
C302-305			CK73GB1H103K	CHIP C	0.010UF	K	
C307			CK73GB1H103K	CHIP C	0.010UF	K	
C309			CK73GB1H103K	CHIP C	0.010UF	K	
C310			CD04BK1E101M	ELECTRO	100UF	25WV	
C317-319			CK73GB1H104K	CHIP C	0.10UF	K	
C320			CK73GB1H103K	CHIP C	0.010UF	K	
C324			CC73GCH1H101J	CHIP C	100PF	J	

(North America)

⚠ Indicates safety critical components.

PARTS LIST

ELECTRIC UNIT (X34-3420-15)

Ref. No.	Add	New	Parts No.	Description	Destination
C326			CC73GCH1H101J	CHIP C 100PF J	
C401			CD04AS1C470M	ELECTRO 47UF 16WV	
C402,403			CK73FB1A335K	CHIP C 3.3UF K	
C404			CK73GB1A105K	CHIP C 1.0UF K	
C405			CD04AT1H4R7M	ELECTRO 4.7UF 50WV	
C406,407			CD04AS1H010M	ELECTRO 1UF 50WV	
C408,409			CK73FB1C105K	CHIP C 1.0UF K	
C410			CK73GB1H103K	CHIP C 0.010UF K	
C412			CD04AS1V100M	ELECTRO 10UF 35WV	
C413,414			CK73FB1E474K	CHIP C 0.47UF K	
C415,416			CD04AS1H2R2M	ELECTRO 2.2UF 50WV	
C417-422			CD04AS1C220M	ELECTRO 22UF 16WV	
C431			CD04AS1V100M	ELECTRO 10UF 35WV	
C435,436			CK73GB1H152K	CHIP C 1500PF K	
C437,438			CC73GCH1H101J	CHIP C 100PF J	
C501			CK73FB1C105K	CHIP C 1.0UF K	
C502			CD04AS1C101M	ELECTRO 100UF 16WV	
C503-506			C90-5700-05	NP-ELEC 4.7UF 16WV	
C507			CK73FB1C105K	CHIP C 1.0UF K	
C510,511			CD04AS1HR47M	ELECTRO 0.47UF 50WV	
C512			CD04AS0J470M	ELECTRO 47UF 6.3WV	
C513			CK73GB1H103K	CHIP C 0.010UF K	
C529			C90-6742-05	NP-ELECT 4.7UF 16WV	
C944			CK73GB1H104K	CHIP C 0.10UF K	
C953,954			CD04AS1V100M	ELECTRO 10UF 35WV	
C955			CK73GB1H103K	CHIP C 0.010UF K	
C956			CD04AT1A101M	ELECTRO 100UF 10WV	
C957,958			CK73GB1H102K	CHIP C 1000PF K	
C959			CD04AS1C470M	ELECTRO 47UF 16WV	
C960			CK73GB1H104K	CHIP C 0.10UF K	
C961			CD04AS1V100M	ELECTRO 10UF 35WV	
CN1			E41-2244-05	FLAT CABLE CONNECTOR	
CN2			E41-2259-05	PIN ASSY	
CN3			E41-2245-05	FLAT CABLE CONNECTOR	
CN4			E41-2446-05	PIN ASSY	
⚠ J1			E58-0991-05	RECTANGULAR RECEPTACLE	
J2			E56-0855-05	CYLINDRICAL RECEPTACLE	
J3			E63-0896-05	PIN JACK	
W1	1D		E30-6218-15	CORD WITH PLUG	
L1			L33-1988-05	CHOKE COIL ASSY	
L2			L33-2262-05	CHOKE COIL	
L3			L33-1978-05	CHOKE COIL	
L201			L40-4795-91	SMALL FIXED INDUCTOR (4.7UH,J)	
L202			L92-0075-05	CHIP FERRITE	
L301			L33-2260-05	CHOKE COIL	
L304			L41-4795-33	SMALL FIXED INDUCTOR (4.7U)	
X1			L77-2880-05	CRYSTAL RESONATOR	
X2			L78-0872-05	RESONATOR (12MHZ)	
Q	2D		N83-3005-48	PAN HEAD TAPTITE SCREW	
T	2D		N80-3010-48	PAN HEAD TAPTITE SCREW	
U	2D		N82-2608-48	BINDING HEAD TAPTITE SCREW	
V	2D		N83-3020-48	PAN HEAD TAPTITE SCREW	
CP203			RK74GA1J471J	CHIP-COM 470 J 1/16W	

Ref. No.	Add	New	Parts No.	Description	Destination
CP206			RK74GB1J222J	CHIP-COM 2.2K J 1/16W	
CP207,208			RK74GA1J102J	CHIP-COM 1.0K J 1/16W	
R1			RK73FB2B153J	CHIP R 15K J 1/8W	
R2			RK73GB2A101J	CHIP R 100 J 1/10W	
R3			RK73GB2A223J	CHIP R 22K J 1/10W	
R4			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R5			RK73FB2B221J	CHIP R 220 J 1/8W	
R6			RK73GB2A153J	CHIP R 15K J 1/10W	
R7			RK73GH2A243D	CHIP R 24K D 1/10W	
R8			RK73GH2A432D	CHIP R 4.3K D 1/10W	
R9			RK73FB2B102J	CHIP R 1.0K J 1/8W	
R10			RK73FB2B152J	CHIP R 1.5K J 1/8W	
R11			RK73GH2A303D	CHIP R 30K D 1/10W	
R12			RK73GH2A392D	CHIP R 3.9K D 1/10W	
R13-16			RK73GB2A473J	CHIP R 47K J 1/10W	
R20			RK73GB2A473J	CHIP R 47K J 1/10W	
R21			RK73GB2A103J	CHIP R 10K J 1/10W	
R22			RK73SB3A220J	CHIP R 22 J 1W	
R23			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R24			RK73GB2A513J	CHIP R 51K J 1/10W	
R25,26			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R27			RK73GB2A221J	CHIP R 220 J 1/10W	
R28,29			RK73GB2A2R2J	CHIP R 2.2 J 1/10W	
R30			RK73GB2A332J	CHIP R 3.3K J 1/10W	
R31			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R32			RK73GB2A223J	CHIP R 22K J 1/10W	
R102,103			RK73EB2E103J	CHIP R 10K J 1/4W	
R104			RK73EB2E472J	CHIP R 4.7K J 1/4W	
R105			RK73SB3A471J	CHIP R 470 J 1W	
R106			RK73GB2A223J	CHIP R 22K J 1/10W	
R107			RK73FB2B472J	CHIP R 4.7K J 1/8W	
R108			R92-5024-05	CHIP R 1K J 1/2W	
R109			RK73GB2A223J	CHIP R 22K J 1/10W	
R110			R92-5024-05	CHIP R 1K J 1/2W	
R112			RK73GB2A473J	CHIP R 47K J 1/10W	
R113,114			RK73GB2A104J	CHIP R 100K J 1/10W	
R115			RK73FB2B683J	CHIP R 68K J 1/8W	
R116			RK73GB2A393J	CHIP R 39K J 1/10W	
R117			RK73FB2B203J	CHIP R 20K J 1/8W	
R118			RK73GB2A104J	CHIP R 100K J 1/10W	
R122,123			RK73GB2A103J	CHIP R 10K J 1/10W	
R124			RK73GB2A104J	CHIP R 100K J 1/10W	
R125			RK73GB2A223J	CHIP R 22K J 1/10W	
R126			R92-5088-05	CHIP R 3.3K J 3/4W	
R127			RK73EB2E333J	CHIP R 33K J 1/4W	
R128,129			RK73GB2A103J	CHIP R 10K J 1/10W	
R130			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R131			RK73GB2A473J	CHIP R 47K J 1/10W	
R201			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R202			RK73GB2A225J	CHIP R 2.2M J 1/10W	
R203			RK73GB2A104J	CHIP R 100K J 1/10W	
R204			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R207,208			RK73GB2A103J	CHIP R 10K J 1/10W	
R210			RK73GB2A473J	CHIP R 47K J 1/10W	
R211			RK73GB2A102J	CHIP R 1.0K J 1/10W	

(North America)

⚠ Indicates safety critical components.

PARTS LIST

ELECTRIC UNIT (X34-3420-15)

Ref. No.	Add	New	Parts No.	Description				Destination
R212			RK73GB2A473J	CHIP R	47K	J	1/10W	
R213			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R215			RK73GB2A104J	CHIP R	100K	J	1/10W	
R216			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R218			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R224			RK73GB2A473J	CHIP R	47K	J	1/10W	
R227,228			RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R229,230			RK73GB2A473J	CHIP R	47K	J	1/10W	
R232			RK73GB2A473J	CHIP R	47K	J	1/10W	
R233			RK73GB2A471J	CHIP R	470	J	1/10W	
R234,235			RK73GB2A392J	CHIP R	3.9K	J	1/10W	
R236,237			RK73GB2A473J	CHIP R	47K	J	1/10W	
R239			RK73GB2A222J	CHIP R	2.2K	J	1/10W	
R240			RK73GB2A101J	CHIP R	100	J	1/10W	
R241			RK73GB2A222J	CHIP R	2.2K	J	1/10W	
R249,250			RK73GB2A473J	CHIP R	47K	J	1/10W	
R253			RK73GB2A222J	CHIP R	2.2K	J	1/10W	
R254			RK73GB2A473J	CHIP R	47K	J	1/10W	
R257,258			RK73GB2A222J	CHIP R	2.2K	J	1/10W	
R259,260			RK73GB2A104J	CHIP R	100K	J	1/10W	
R261			RK73GB2A333J	CHIP R	33K	J	1/10W	
R262-265			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R266,267			RK73GB2A103J	CHIP R	10K	J	1/10W	
R268-271			RK73GB2A471J	CHIP R	470	J	1/10W	
R273-275			RK73GB2A101J	CHIP R	100	J	1/10W	
R279,280			RK73GB2A473J	CHIP R	47K	J	1/10W	
R281,282			RK73GB2A103J	CHIP R	10K	J	1/10W	
R283			RK73GB2A223J	CHIP R	22K	J	1/10W	
R284			RK73GB2A471J	CHIP R	470	J	1/10W	
R301			RK73EB2E102J	CHIP R	1.0K	J	1/4W	
R302,303			RK73EB2E100J	CHIP R	10	J	1/4W	
R304			RK73EB2E102J	CHIP R	1.0K	J	1/4W	
R305-308			RK73EB2E471J	CHIP R	470	J	1/4W	
R309			RK73EB2E472J	CHIP R	4.7K	J	1/4W	
R310			RK73EB2E102J	CHIP R	1.0K	J	1/4W	
R313			RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R314			RK73GB2A8R2J	CHIP R	8.2	J	1/10W	
R316			RK73GB2A104J	CHIP R	100K	J	1/10W	
R317			RK73GB2A471J	CHIP R	470	J	1/10W	
R318			RK73GB2A104J	CHIP R	100K	J	1/10W	
R319			RK73GB2A471J	CHIP R	470	J	1/10W	
R320			RK73FB2B102J	CHIP R	1.0K	J	1/8W	
R321			RK73GB2A223J	CHIP R	22K	J	1/10W	
R322			RK73GB2A471J	CHIP R	470	J	1/10W	
R323			RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R324			RK73GB2A471J	CHIP R	470	J	1/10W	
R325			RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R326			RK73GB2A222J	CHIP R	2.2K	J	1/10W	
R332			RK73GB2A241J	CHIP R	240	J	1/10W	
R334,335			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R341			RK73GB2A9R1J	CHIP R	9.1	J	1/10W	
R401			RK73GB2A103J	CHIP R	10K	J	1/10W	
R402,403			RK73GB2A361J	CHIP R	360	J	1/10W	
R404,405			RK73GB2A223J	CHIP R	22K	J	1/10W	
R406,407			RK73GB2A361J	CHIP R	360	J	1/10W	

Ref. No.	Add	New	Parts No.	Description				Destination
R408,409			RK73GB2A223J	CHIP R	22K	J	1/10W	
R410,411			RK73GB2A361J	CHIP R	360	J	1/10W	
R412,413			RK73GB2A223J	CHIP R	22K	J	1/10W	
R414-419			RK73FB2B181J	CHIP R	180	J	1/8W	
R426			RK73GB2A222J	CHIP R	2.2K	J	1/10W	
R427			RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R428			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R429			RK73GB2A473J	CHIP R	47K	J	1/10W	
R431			RK73GB2A100J	CHIP R	10	J	1/10W	
R432			RK73EB2E2R2J	CHIP R	2.2	J	1/4W	
R433,434			RK73GB2A101J	CHIP R	100	J	1/10W	
R435			RK73GB2A9R1J	CHIP R	9.1	J	1/10W	
R440,441			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R501			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R503			RK73GB2A203J	CHIP R	20K	J	1/10W	
R505,506			RK73GB2A223J	CHIP R	22K	J	1/10W	
R507			RK73GB2A221J	CHIP R	220	J	1/10W	
R508			RK73EB2E472J	CHIP R	4.7K	J	1/4W	
R509			RK73EB2E101J	CHIP R	100	J	1/4W	
R510			RK73EB2E472J	CHIP R	4.7K	J	1/4W	
R511-515			RK73EB2E101J	CHIP R	100	J	1/4W	
R516,517			RK73EB2E100J	CHIP R	10	J	1/4W	
R518			RK73EB2E4R7J	CHIP R	4.7	J	1/4W	
R519			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R908			RK73GB2A473J	CHIP R	47K	J	1/10W	
R920			RK73GB2A391J	CHIP R	390	J	1/10W	
R921			RK73GB2A242J	CHIP R	2.4K	J	1/10W	
R922			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R924			RK73GB2A512J	CHIP R	5.1K	J	1/10W	
R925			RK73GB2A101J	CHIP R	100	J	1/10W	
R926			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R927			RK73GB2A113J	CHIP R	11K	J	1/10W	
R928			RK73FB2B4R7J	CHIP R	4.7	J	1/8W	
R929			RK73GB2A332J	CHIP R	3.3K	J	1/10W	
R932			RK73GB2A100J	CHIP R	10	J	1/10W	
R933			RK73FB2B152J	CHIP R	1.5K	J	1/8W	
R934			RK73GB2A104J	CHIP R	100K	J	1/10W	
R935			RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R936			RK73GB2A103J	CHIP R	10K	J	1/10W	
R937			RK73GB2A101J	CHIP R	100	J	1/10W	
R938			RK73FB2B1R0J	CHIP R	1.0	J	1/8W	
R941-944			RK73GB2A471J	CHIP R	470	J	1/10W	
R945-949			RK73GB2A103J	CHIP R	10K	J	1/10W	
R950			RK73GB2A432J	CHIP R	4.3K	J	1/10W	
R951			RK73GB2A100J	CHIP R	10	J	1/10W	
R952			RK73GB2A431J	CHIP R	430	J	1/10W	
R953			RK73GB2A510J	CHIP R	51	J	1/10W	
W103			R92-1252-05	CHIP R	0 OHM	J	1/16W	
W104			R92-2053-05	CHIP R	0 OHM	J	1/8W	
W110			R92-1252-05	CHIP R	0 OHM	J	1/16W	
W111			R92-2053-05	CHIP R	0 OHM	J	1/8W	
W112,113			R92-1252-05	CHIP R	0 OHM	J	1/16W	
W114,115			R92-2053-05	CHIP R	0 OHM	J	1/8W	
W121			R92-1252-05	CHIP R	0 OHM	J	1/16W	
W123			R92-2053-05	CHIP R	0 OHM	J	1/8W	

(North America)

⚠ Indicates safety critical components.

PARTS LIST

ELECTRIC UNIT (X34-3420-15)

Ref. No.	Add	New	Parts No.	Description	Destination
W124			R92-1252-05	CHIP R 0 OHM J 1/16W	
W125,126			R92-2053-05	CHIP R 0 OHM J 1/8W	
W127			R92-1252-05	CHIP R 0 OHM J 1/16W	
S1,2			S68-0886-05	PUSH SWITCH	
D1			S2V60✻A	DIODE	
D2			RB160L-40	DIODE	
D3			02DZ5.6F-Y	ZENER DIODE	
D4			02DZ9.1F-X	ZENER DIODE	
D5			02DZ8.2F-Y	ZENER DIODE	
D8			02DZ12F-X	ZENER DIODE	
D9			10EDA20	DIODE	
D10			SFPB-54VNF	DIODE	
D101			10EDA20	DIODE	
D102			1SR154-400	DIODE	
D103			10EDA20	DIODE	
D104,105			1SR154-400	DIODE	
D107			02DZ4.7F-Y	ZENER DIODE	
D108,109			02DZ6.8F-Y	ZENER DIODE	
D110			KDS121-P	DIODE	
D111			02DZ6.2F-Y	ZENER DIODE	
D301			IMSA-6801-E	SURGE ABSORBER	
D304-309			STZ6.2N	ZENER DIODE	
D310			DA204K	DIODE	
D311			02DZ16F-Y	ZENER DIODE	
D401-403			KDS120-P	DIODE	
D407			02DZ5.6F-Y	ZENER DIODE	
D411			KDS120-P	DIODE	
D413,414			UDZS5.6B	ZENER DIODE	
D501,502			KDS120-P	DIODE	
D503,504			1SR154-400	DIODE	
D505,506			10EDA20	DIODE	
D507-510			1SR154-400	DIODE	
D511,512			STZ6.8N	ZENER DIODE	
D513-515			STZ6.2N	ZENER DIODE	
D903			02DZ6.8F-Y	ZENER DIODE	
D904			DA227	DIODE	
D905			02DZ16F-Y	ZENER DIODE	
IC1		✻	30624MGPA77GP	MICROCONTROLLER IC	
IC2			E-TDA7415	ANALOGUE IC	
IC3			M5237ML-CF0J	ANALOGUE IC	
IC4			E-TDA7560A	ANALOGUE IC	
IC5			BA00CCWT-V5	ANALOGUE IC	
IC6			SN74HC02APWR	MOS-IC	
IC7			S-80836CNNB-J	MOS-IC	
IC8			LB1930M-E	ANALOGUE IC	
IC10			BR24L04FV-W	ROM IC	
IC11			TA75S558F-F	ANALOGUE IC	
IC12			SI-8050JF3NF	ANALOGUE IC	
IC902			NJM4565V-ZB	ANALOGUE IC	
Q1			2SB1565	TRANSISTOR	
Q2			2SC4081	TRANSISTOR	
Q3			2SA1576A	TRANSISTOR	
Q4			UMC2N	TRANSISTOR	
Q5			2SB1565	TRANSISTOR	
Q6			UMC2N	TRANSISTOR	
Q7			2SB1565	TRANSISTOR	
Q8			2SC4081	TRANSISTOR	
Q9			2SB1443	TRANSISTOR	
Q10			2SC4081	TRANSISTOR	
Q11			KRC403-P	DIGITAL TRANSISTOR	
Q12			2SC4081	TRANSISTOR	
Q13			2SA1576A	TRANSISTOR	
Q14,15			2SC4081	TRANSISTOR	
Q16			2SB1443	TRANSISTOR	
Q17			KRC403-P	DIGITAL TRANSISTOR	
Q18			2SA1577	TRANSISTOR	
Q101			2SB1188 (Q,R)	TRANSISTOR	
Q102			KRC407-P	DIGITAL TRANSISTOR	
Q103			2SB1188 (Q,R)	TRANSISTOR	
Q104			2SA1576A	TRANSISTOR	
Q105			KRA302-P	DIGITAL TRANSISTOR	
Q106			KRC407-P	DIGITAL TRANSISTOR	
Q108			KRC404-P	DIGITAL TRANSISTOR	
Q109			2SC4081	TRANSISTOR	
Q111,112			2SC4081	TRANSISTOR	
Q113			KTA2014EP (Y,GR	TRANSISTOR	
Q114			KRA304-P	DIGITAL TRANSISTOR	
Q115,116			KRA303-P	DIGITAL TRANSISTOR	
Q300			2SB1689	TRANSISTOR	
Q301			KRC403-P	DIGITAL TRANSISTOR	
Q304			KRC407-P	DIGITAL TRANSISTOR	
Q400-405			KRC410-P	DIGITAL TRANSISTOR	
Q905			2SC2873-F	TRANSISTOR	
Q906			KRA303-P	DIGITAL TRANSISTOR	
Q907			2SA1576A	TRANSISTOR	
TH1			PRF21BE471QB2	POSITIVE RESISTOR	
A1	2D		X86-3840-11	FRONT-END UNIT	

CD MECHANISM (X92-5470-00) (DXM-6680W)

2	1B		A10-4827-32	CHASSIS	
5	1B		D10-4576-83	ARM ASSY	
8	2A		D10-4579-23	LEVER ASSY	
10	3A		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	3B		D10-4588-13	SLIDER	
18	3B		D10-4595-04	ARM	
19	3B		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	3B		D13-2156-14	GEAR	

(North America)

⚠ Indicates safety critical components.

PARTS LIST

CD MECHANISM (X92-5470-00) (DXM-6680W)

Ref. No.	Add	New	Parts No.	Description	Destination
28	3B		D13-2157-04	GEAR	
29	3B		D13-2158-04	GEAR	
30	3B		D13-2168-04	GEAR	
31	3B		D13-2171-04	GEAR	
32	1B		D13-2381-13	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		G01-3075-24	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	
46	2A		G13-1258-04	CUSHION	
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		N09-4460-15	TAPTITE SCREW (P 2X8)	
B	1B		N09-6317-05	TAPTITE SCREW	
C	2B		N09-6004-05	MACHINE SCREW (M1.7X2.5)	
E	2B		N09-6007-15	MACHINE SCREW (M2X2)	
F	1A		N09-6051-15	TAPTITE SCREW (P 2X5)	
G	2A		N19-2163-04	FLAT WASHER (1.6X6X0.25)	
H	1B		N39-2020-46	PAN HEAD MACHINE SCREW	
J	1B		N09-6108-15	TAPTITE SCREW (M2X3.5)	
K	3B		N09-6155-15	SEMS (TAPTITE SCREW) (P 2X6)	
DM1	3B		T42-1066-14	DC MOTOR ASSY (SP)	
DM2	2B		T42-1067-14	DC MOTOR ASSY (LO)	
DPU1	2B		X93-2130-00	OPTICAL PICKUP ASSY	

Ref. No.	Add	New	Parts No.	Description	Destination

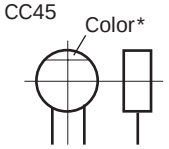
(North America)

⚠ Indicates safety critical components.

CAPACITORS

C C	4 5	T H	1 H	2 2 0	J
1	2	3	4	5	6

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



• Capacitor value

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

2 2 0 = 22pF
Multiplier
2nd number
1st number

• 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	+80	+100	More than 10µF : –10~+50
							–20	–20	–0	Less than 4.7µF : –10~+75

(Less than 10pF)

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

• Voltage rating

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

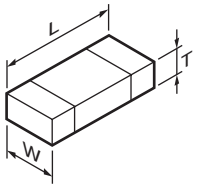
CHIP CAPACITORS

(EX) C C 7 3 F S L 1 H 0 0 0 J
1 2 3 4 5 6 7
(Chip) (CH, RH, UJ, SL)

(EX) C K 7 3 F F 1 H 0 0 0 Z
1 2 3 4 5 6 7
(Chip) (B, F)

Refer to the table above.
1 = Type
2 = Shape
3 = Dimension
4 = Temp. coefficient
5 = Voltage rating
6 = Value
7 = Tolerance

• Dimension



Chip capacitor

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

Chip resistor

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

RESISTORS

• Chip resistor (Carbon)

(EX) R D 7 3 E B 2 B 0 0 0 J
1 2 3 4 5 6 7
(Chip) (B, F)

• Carbon resistor (Normal type)

(EX) R D 1 4 B B 2 C 0 0 0 J
1 2 3 4 5 6 7
(Chip) (B, F)

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

• Rating wattage

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

KDC-MP5032

SPECIFICATIONS

FM tuner section

Frequency range (200kHz space)	87.9MHz~107.9MHz
Usable sensitivity (S/N : 30dB)	9.3dBf (0.8µV/75Ω)
Quieting Sensitivity (S/N : 50dB)	15.2dBf (1.6µV/75Ω)
Frequency response (±3dB)	30Hz~15kHz
Signal to Noise ratio (MONO)	70dB
Selectivity (±400kHz)	≧80dB
Stereo separation (1kHz)	40dB

AM tuner section

Frequency range (10kHz space)	530kHz~1700kHz
Usable sensitivity (S/N : 20dB)	28dBµ (25µV)

CD player section

Laser diode	GaAlAs
Digital filter (D/A)	8 Times Over Sampling
D/A Converter	1Bit
Spindle speed	1000~400rpm (CLV 2times)
Wow & Flutter	Below Measurable Limit
Frequency response (±1dB)	10Hz~20kHz
Total harmonic distortion (1kHz)	0.01%
Signal to Noise ratio (1kHz)	105dB
Dynamic range	93dB
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	50W x 4
Full Bandwidth Power (at less than 1% THD)	22W x 4
Speaker Impedance	4~8Ω

Tone action

Bass	100 Hz±8dB
Middle	1 kHz±8dB
Treble	10 kHz±8dB

Preout level/Load (during disc play)	4000mV/10kΩ
Preout impedance	≦600Ω

General

Operating voltage (11~16V allowable)	14.4V
Current consumption	10A
Installation Size (W x H x D)	182 x 53 x 155mm
	7-3/16 x 2-1/16 x 6-1/8inch
Weight	3.1lbs (1.40kg)

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