CD RECEIVER

KDC-135/135CR
KDC-136

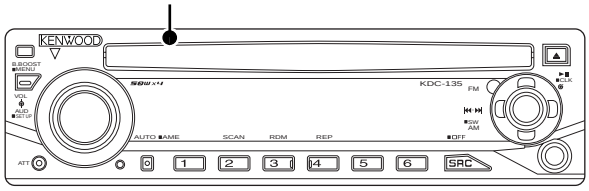
SERVICE MANUAL

KENWOOD

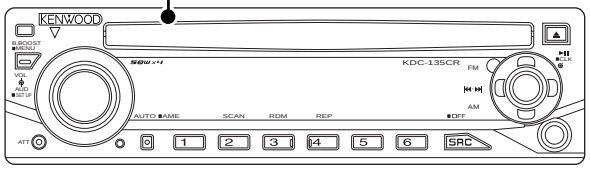
Kenwood Corporation

B53-0478-00 (N) 584

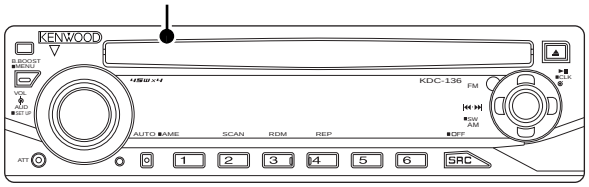
Panel assy
KDC-135 (A64-4040-12)



Panel assy
KDC-135CR (A64-4041-12)



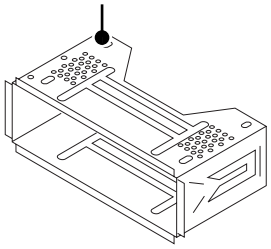
Panel assy
KDC-136 (A64-4039-02)



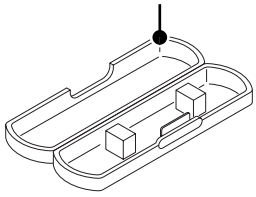
SPARE TDF PANEL

MAIN UNIT NAME	TDF PARTS No.	TDF NAME
KDC-135	Y33-2630-64	TDF-71D
KDC-135CR	Y33-2630-65	TDF-71DCR
KDC-136	Y33-2640-64	TDF-136

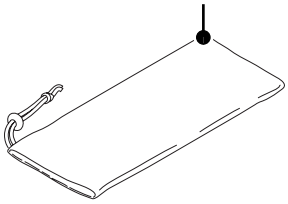
Mounting hardware assy
(J21-9716-03)



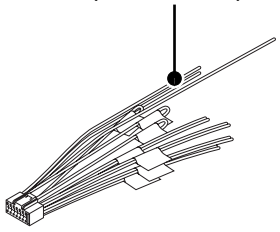
* Plastic cabinet assy
(A02-2736-03)



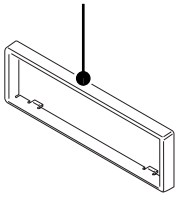
* Carrying case
(W01-1692-05)



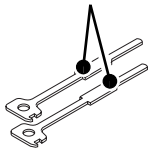
DC cord
(E30-6415-15)



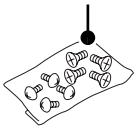
* Escutcheon
(B07-xxxx-xx)



Lever
(D10-4589-04) x2



Screw set
(N99-1757-05)

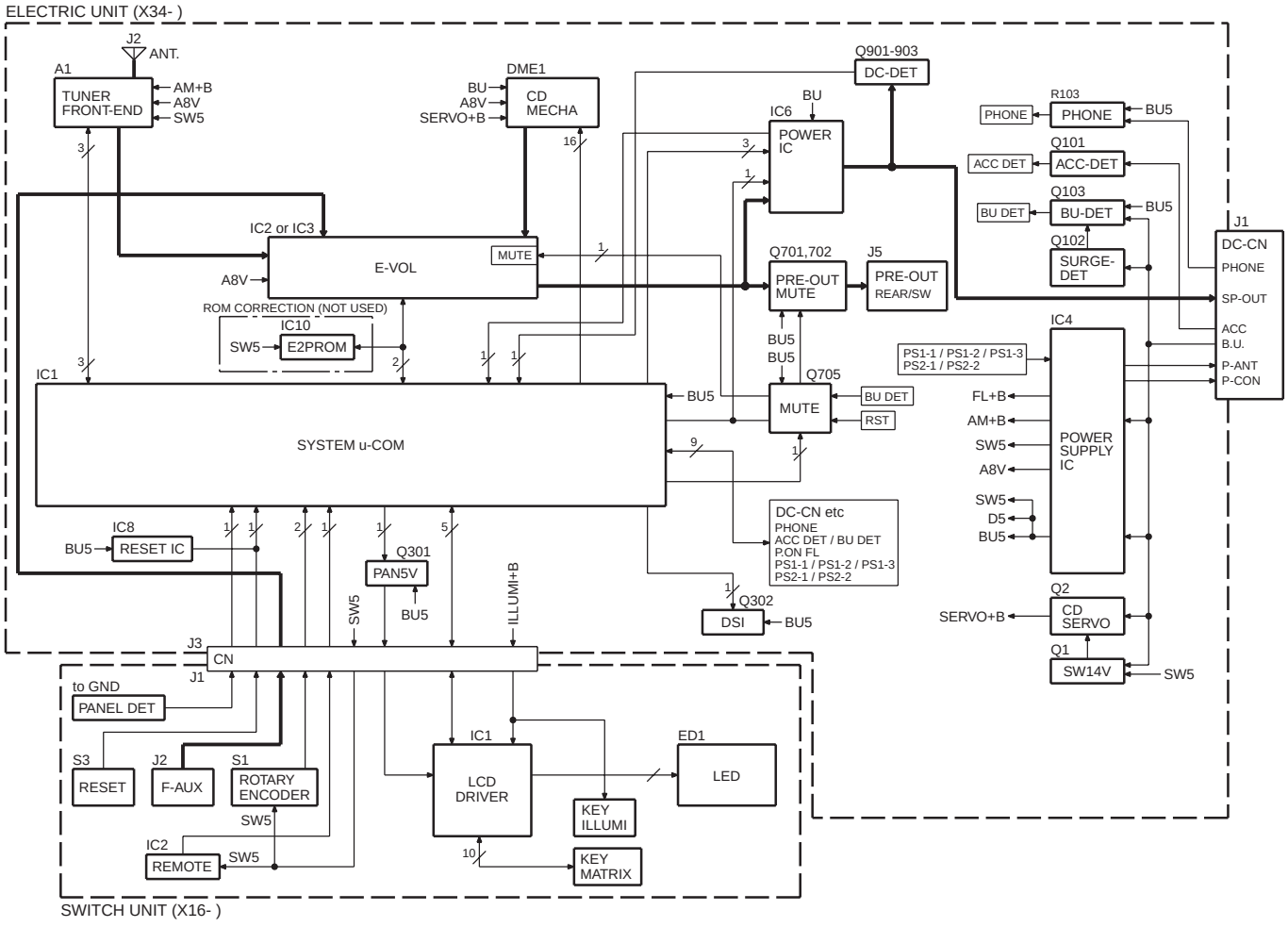


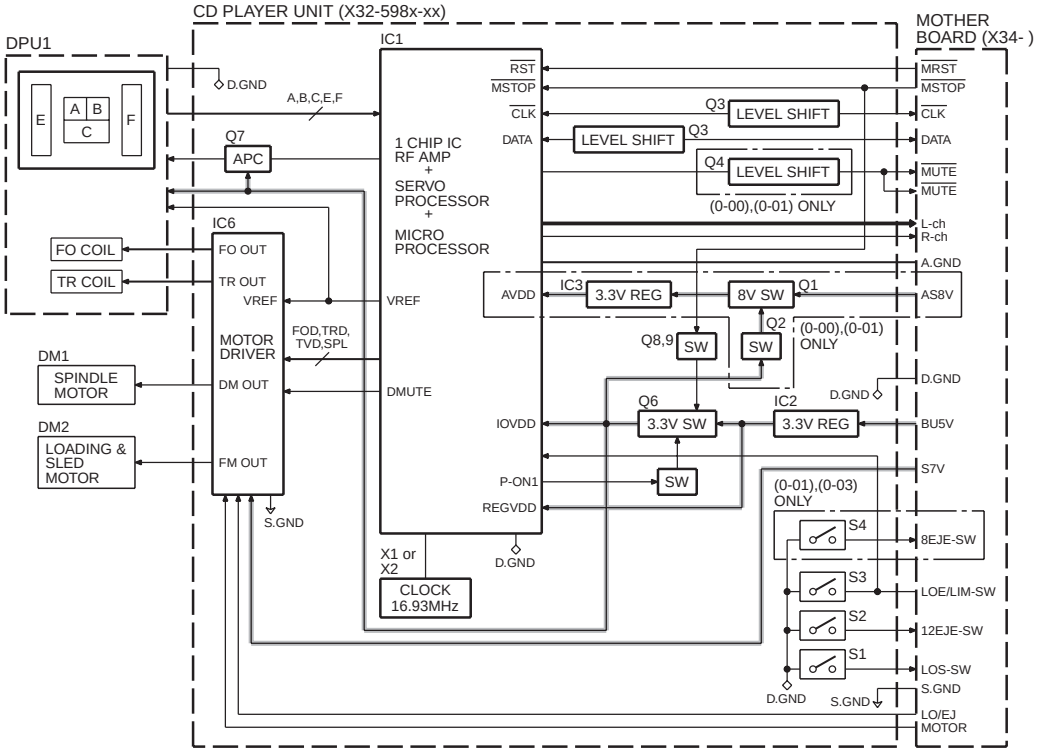
Screw (4x16)
(N84-4016-48)

* Depends on the model. Refer to the parts list.

This product uses Lead Free solder.

BLOCK DIAGRAM





COMPONENTS DESCRIPTION

● ELECTRIC UNIT (X34-469x-xx)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC1	System μ-COM	Controls FM/AM tuner, the changer, CD mechanism, panel, volume and tone.
IC2,3	E-VOL	Controls the source, volume and tone.
IC4	Power Supply IC	Outputs 5Vx2, 8.1Vx2, 10.2V, P-CON and P-ANT.
IC6	Power IC	Amplifies the front L/R and the rear L/R to 50W or 45W maximum.
IC8	Reset IC	Lo when detection voltage goes below 3.6V.
Q1	SW14V	ON when the base goes Hi.
Q2	Servo+B AVR	When Q3's base goes Hi, Servo+B AVR outputs 7.5V.
Q3	Control SW for Servo+B	ON when the base goes Hi.
Q4	Control SW for IC4	ON when the base goes Hi, 10.3V is output.
Q101	ACC DET	ON when the base goes Hi during ACC is applied.
Q102	Serge DET	When the base goes Hi, surge voltage is detected.
Q103	BU DET	ON when the base goes Hi during BU is applied.
Q104,105	Mute Control	ON when the base goes Hi.
Q301	Panel 5V SW	ON when the base goes Lo.
Q302	DSI ILLUMI SW	ON when the base goes Hi.
Q402	Quick Charge Voltage SW	Charges voltage quickly when the base goes Hi.
Q701,702	Pre-out Mute SW	When a base of the 4 transistors goes Hi, pre-out is muted.
Q705	Mute Driver for Pre-out	ON when the base goes Lo.
Q901	DC Offset DET	ON when the base goes Hi after Q902's and Q903's outputs are separated.
Q902,903	DC Offset DET SW	ON when the bases go Lo after IC6's SP-OUTs (DC) are separated.

● SWITCH UNIT (X16-388x-xx)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC1	LCD Driver	
IC2	Remote Control Sensor	
Q1	Key Scan Start SW	ON when the base goes Lo.

● CD PLAYER UNIT (X32-5980-00)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC1	CD Signal Processor & MECHA μ-COM RF Amplifier responding to CD-RW	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. Generation of RF signal based on the signals from the APC circuit and the laser pick-up, 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	3.3V REG	Supplies 3.3V to IC1 and the laser pick-up.
IC3	3.3V REG	Supplies 3.3V to IC1 and audio circuit.

COMPONENTS DESCRIPTION

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC6	4ch BTL Driver	Focusing and tracking coil, sled and spindle motor driver, disc loading and eject operation.
Q1	A8V SW	Q1 is ON when Q2 is ON.
Q2	Q1 SW	Q2 is ON when Q6 is ON.
Q3	5V-3.3V Level Shift	Shifts 5V to 3.3V, or 3.3V to 5V.
Q4	5V-3.3V Level Shift	Shifts 3.3V to 5V.
Q6	BU3.3V SW	Q6 is ON when Q8 or Q9 is ON.
Q7	APC (Auto Power Control)	Drives LD (Laser Diode).
Q8	Power Supply Control	Power Supply Control from MECHA μ-COM. Q6 is ON when pin 63 (P_ON1) of IC1 is Hi.
Q9	Power Supply Control	Power Supply Control from system μ-COM. Q6 is ON when pin 125 (MSTOP) of IC1 is Hi.
D1,2	5V Force Voltage Prevention	5V Force Voltage Prevention from MECHA μ-COM side.
D3	Laser Diode Protection	Prevents reverse bias which is applied to laser. Laser destruction prevention.
D4	Static Electricity Countermeasure	Prevents malfunction by static electricity.

MICROCOMPUTER'S TERMINAL DESCRIPTION

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

Pin No.	Pin Name	I/O	Application	Truth Value Table	Processing Operation Description
1	LX DATA M	I/O	Data to slave unit		Pull-down (GND)
2	LX CLK	I/O	LX-BUS clock		125k~65kHz
3~5	NC	-	Not used		Output Lo fixed
6	REMO	I	Remote control signal input		Detects pulse width
7	NC	-	Not used		Output L fixed
8	BYTE	I	Memory extended bus width setting		Connects to VSS
9	CNVSS	-			Connects to VSS
10	XCIN	-	32.768kHz		
11	XCOUT	-	32.768kHz		
12	$\overline{\text{RESET}}$	-			L: Reset
13	XOUT	-	10.0MHz		
14	VSS	-			
15	XIN	-	10.0MHz		
16	VCC1	-			
17	NMI	I			Connects to VSS
18	$\overline{\text{PANEL DET}}$	I	Panel communication detection		H: Panel detached, L: Panel attached

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Truth Value Table	Processing Operation Description
19,20	NC	-	Not used		Output L fixed
21	ROMCOR DET	I	E2PROM writing request		H: Writing
22,23	NC	-	Not used		Output L fixed
24	PON FL	O	Not used		
25	NC	-	Not used		
26	$\overline{\text{PON PANEL}}$	I/O	Panel 5V control		ON: L, Momentary power down/Panel detached : Hi-Z, 11 minutes after ACC OFF: Hi-Z
27	NC	-	Not used		Output L fixed
28	PWIC BEEP	O	Beep output		
29	AUD SCL	I/O	E-VOL clock output		
30	AUD SDA	I/O	E-VOL data input/output		
31	VFD SYS DATA	O	VFD data output		
32	VFD PAN DATA	I	VFD data input		
33	VFD CLK	O	VFD clock output		125kHz
34	VFD BLK	O	VFD data blanking output		H: Reset cancelled, L: Reset, Momentary power down /Panel detached: L, 11 minutes after ACC OFF: L
35	CD DATA	I/O	CD mechanism I2C data input/output		
36	CD CLK	I/O	CD mechanism I2C clock output		
37	NC	-	Not used		Output L fixed
38	CD LOS SW	I	CD loading detection		
39	PIO0	I	Communication request from mechanism DSP		H: Data request
40	CD MSTOP	O	CD mechanism μ-com stop		H: Mechanism μ-com operates, L: Mechanism μ-com stops
41	EPM	I	Flash EPM input		Connects to VSS
42	CD LOE LIM SW	I	CD detection (Chucking SW)		H: Loading completed, L: No disc
43	PON CD	O	CD mechanism power supply control		H: Power ON
44	CD LOEJ	I/O	CD motor control	①	Refer to the truth value table
45	CD MOTOR	I/O	CD motor control	①	Refer to the truth value table
46	LCD CE	O	LCD control request		
47	CD DRIVEMUTE	O	Motor driver mute output		
48	CD CCE	O	CD mechanism chip enable		
49	CD DISC8 SW	I	8cm disc detection		Pull-up (B.U.)
50	CD MRST	O	CD mechanism μ-com reset		H: Normal, L: Reset
51~53	NC	-	Not used		Output L fixed
54	CD MUTE	I	CD mute request		L: Mute request
55	CD DISC12 SW	I	12cm disc detection		Pull-up (B.U.)
56	ROTARY CCW	I	VOL key input		Detects pulse width
57	ROTARY CW	I	VOL key input		Detects pulse width
58	NC	-	Not used		Output L fixed

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Truth Value Table	Processing Operation Description
59	DSI	I/O	DSI control		OFF: Hi-z, Panel detached: Pulse drives, ON: H
60	RDS DATA	I	For European model terminal		
61	RDS QUAL	I	For European model terminal		
62	VCC2	-			
63	NC	-	Not used		Output L fixed
64	VSS	-			
65	RDS AFS M	I/O	For European model terminal		
66	TUN IFC OUT	I	Front-end IFC-OUT input		H: Station found, L: No station
67	PON EXT GND	I/O	IC2 external input quick charge control		L: OFF, Hi-Z: Quick charge, When IC2 is in source select: Hi-Z, Mute L: L, Momentary power down/Power OFF: L
68	MUTE	I/O	Mute		L: Mute OFF, Hi-Z: Mute ON
69	ANALOG CON	O	AUX/LX audio switching		AUX: H (Switches after 100ms after first-out mute begins to work), LX/Other source: L
70	LX RST	O	Forced reset to slave unit		H: Reset, L: Normal
71	LX CON	O	Start-up request to slave unit		H: Slave unit ON, L: Slave unit OFF
72	LX MUTE	I	Mute request from slave unit		H: Mute ON, L: Mute OFF
73	LX REQ M	O	Communication request to slave unit		
74	RDS CLK	I	For European model terminal		
75	LX REQ S	I	Communication request from slave unit		Pull-down (GND)
76	PWIC SVR	O	SVR discharging circuit		During 500ms after momentary power down: H, Since then: L
77	PWIC STBY	O	Power IC standby control		Power ON: H, Power OFF: L
78	PWIC MUTE	O	Power IC mute		STANDBY source/Momentary power down: L, TEL mute: L
79	$\overline{\text{ACC DET}}$	I	ACC power supply detection		ACC found: L, No ACC: H
80	$\overline{\text{BU DET}}$	I	Detection of momentary power down		BU found: L, No BU/Momentary power down: H (Operates after less than 4ms after momentary power down is detected)
81,82	NC	O	Not used		Output L fixed
83	RDS NOISE	I	For European model terminal		
84	TUN SMETER	I	S-meter input		
85	TYPE1	I	Destination switching	③	Refer to the truth value table
86	TYPE2	I	Destination switching	③	Refer to the truth value table
87	PWIC DC DET	I	DC offset detection		If DC offset is found 20 times in 100ms with condition of over 1.0V, it will be judged as DC offset detected.
88	LINE MUTE	I	Line mute selection		TEL mute: Below 1V, NAVI mue: Over 2.5V
89	OFFSET DET	I	Power IC offset detection		
90	PS2 2	O	Power supply IC control	④	Refer to the truth value table
91	PS2 1	O	Power supply IC control	④	Refer to the truth value table

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Truth Value Table	Processing Operation Description
92	PS1 1	O	Power supply IC control	④	Refer to the truth value table
93	PS1 2	O	Power supply IC control	④	Refer to the truth value table
94	PS1 3	O	Power supply IC control	④	Refer to the truth value table
95	PON	-	Not used		POWER ON: H, POWER OFF: L
96	AVSS	-			
97	REF CON	O	VREF control		Connects to VREF
98	VREF	-			
99	AVCC	-			
100	LX DATA S	I	Data from slave unit		Pull-down (GND)

• Truth value table

① CD motor control

	CD motor	CD loading/eject
Stop	L	L
Load	H	L
Eject	H	H
Brake	H	Hi-z

③ Destination switching

TYPE 2 (Pin 86)	TYPE 1 (Pin 85)	Model
0V	0V	KDC-135
0V	2.4V	KDC-135CR
1.2V	0V	KDC-136

④ Power supply IC (IC4) control

SEL1 (Pin 10)

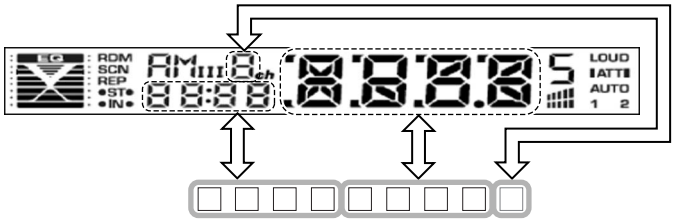
PS1-2	PS1-3	PS2-1	ILLUMI	P-CON	P-ANT
L	L	L	OFF	OFF	OFF
L	L	H	ON	OFF	OFF
H	L	H	ON	ON	OFF
H	H	H	ON	ON	ON

SEL2 (Pin 11)

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

TEST MODE

■ Example



Key	Description of display		Description
5	Disc EJECT times display	E J C X X X X X	Disc EJECT times display. MAX 65535 (times)
■5			While disc EJECT times is displayed, press and hold for 2 seconds or longer to clear disc EJECT times.

A symbol "■" in the key column indicates that the key should be pressed and held for 1 second or longer.

■ How to enter the test mode

Procedure	Note
Press and hold the [1] key and [3] key and reset.	

All lamps blink when it is detected that the sub-clock resonator is disconnected.

When having started up in the test mode, change the LINE MUTE inhibition time from 10 seconds to 1 second.

When operating in the test mode, even if a DC offset error occurs, detection information is not written in the E2PROM.

Forced disc ejection is prohibited in the test mode.

■ How to clear the test mode

Procedure	Note
Reset, momentary power down, ACC OFF, Power OFF, Panel detached.	Clearing the test mode

■ Test mode default condition

Description	Default values
Source	STANDBY
Display	Display lights are all turned on.
Volume	-10dB ("30" is displayed.)
Bass Boost	OFF
CRSC	OFF regardless of having/not having the switching function.
AUX	ON (Only model equipped with AUX)
System Q	NATURAL (FLAT)
Beep	Sound on with a key pressed regardless of any settings.
Preout	Sub Woofer

TEST MODE

■ Special displays when all lights are on in STANDBY source

Key	Description of display		Description
Common	All lights ON.	□ □ □ □ □ □ □ □ □	All lights ON.
1	Destination terminal condition indication	□ □ □ □ T P 1 1 □	"TYPE" indicates system μ-com (IC1) destination, and shows real-time condition of the destination terminal.
	Development ID condition indication	□ 3 : 0 0 6 2 2 K □	Development ID – Version (system μ-com: IC1)
2	Serial No. display	0 0 0 0 0 0 0 0 □	Serial No. is displayed (8 digits)
3	Power ON time display	P o n □ 0 H X X □	00~50 is displayed for "XX". When less than 1 hour, displayed by displayed by increments of 10 minutes.
		P o n X X X X X □	00001~10922 is displayed for "XXXXX". MAX 10922 (hours)
■3			When Power ON time is displayed, press and hold for 2 seconds or longer to clear Power ON time.
4	Disc operation time display	P L y □ 0 H X X □	00~50 is displayed for "XX". When less than 1 hour, displayed by increments of 10 minutes.
		P L y X X X X X □	00001~10922 is displayed for "XXXXX". MAX 10922 (hours)
■4			While the disc operation time is displayed, press and hold for 2 seconds or longer to clear the disc operation time. (Cleared only for displayed media.)
5	Disc EJECT times display	E J C X X X X X □	Disc EJECT times display. MAX 65535 (times)
■5			While disc EJECT times is displayed, press and hold for 2 seconds or longer to clear disc EJECT times.
6	Panel open/close times display	P C □ X X X X X □	PANEL open/close times display. MAX 65535 (times)
■6			Press the key for more than 2 seconds while the PANEL open/close count is displayed and PANEL open/close count is cleared.
FM	ROM correction version display	□ □ □ □ 0 1 2 3 □	The number is the ROM correction version number.
		□ □ □ □ E R □ □ □	When E2PROM is not installed.
		□ □ □ □ – – – – □	When not written in yet.
		□ □ □ □ o o o o □	When data not matched. (due to the difference in versions)
■AM	ROM data transfer	□ □ □ □ □ □ □ □ □	
▶▶I	Audio data initialization	□ □ □ □ I n I T □	AUDIO setting value is re-set to the test mode default value.
I◀◀	Forced Power OFF information display	P O F F □ – – – □	No forced power OFF
		P O F F □ P n L □	Forced power OFF by communication error between system μ-com and panel.
■I◀◀			While the forced power OFF data is displayed, press and hold for 2 seconds to clear the data.
▶II	CD information display mode ON/OFF	□ □ □ □ □ □ □ □ □	For the display contents, refer to "CD information display mode" in the next section.
■▶II			While in CD information display mode, press and hold for 2 seconds or longer to clear all CD information.

TEST MODE

• CD information display mode

Key		Description of display		Description
FM (forward rotation) AM (reverse rotation)		I2C communication status	□ □ □ □ I C O K □	I2C communication OK
			□ □ □ □ I C E R □	I2C communication NG
	⏮ / ⏭	CD mechanism error log display	□ 1 : X X M – E R □	Mechanism error log 1 (Latest) XX: Error number. "– –" is displayed in case there is no error.
			□ 2 : X X M – E R □	Mechanism error log 2 (Latest) XX: Error number. "– –" is displayed in case there is no error.
			□ 3 : X X M – E R □	Mechanism error log 3 (Latest) XX: Error number. "– –" is displayed in case there is no error.
	⏮ / ⏭	CD Load error information display	□ 1 : X X L D E R □	Load error switch 1 XX: Number of errors. "– –" is displayed in case there is no error.
			□ 2 : X X L D E R □	Load error switch 2 XX: Number of errors. "– –" is displayed in case there is no error.
	⏮ / ⏭	CD Ejection error information display	□ 1 : X X E J E R □	Ejection error switch 1 XX: Number of errors. "– –" is displayed in case there is no error.
			□ 2 : X X E J E R □	Ejection error switch 2 XX: Number of errors. "– –" is displayed in case there is no error.
			□ 3 : X X E J E R □	Ejection error switch 3 XX: Number of errors. "– –" is displayed in case there is no error.
			□ 4 : X X E J E R □	Ejection error switch 4 XX: Number of errors. "– –" is displayed in case there is no error.
	⏮ / ⏭	CD time code error count data display (Missing counts)	□ □ □ □ L O S E □	CD time code error count data (Missing counts) mode display.
			□ □ : X X C D D A □	Number of CD-DA count errors XX: Number of errors. "– –" is displayed in case there is no error.
	⏮ / ⏭	CD time code error count data display (count not updated)	□ □ □ □ S T A Y □	CD time code error count data (count not updated) mode display.
			□ □ : X X C D D A □	Number of CD-DA count errors XX: Number of errors. "– –" is displayed in case there is no error.

■ Test mode specifications in TUNER source

Error is found in front-end (A1), etc. if indications below is displayed while in tuner source.

Status	Display	Description
Front-end (A1) E2PROM data error	□ □ □ □ E 2 E R □	Front-end (A1) E2PROM is still the default (unspecified) value.
Front-end (A1) communication error	□ □ □ □ I C E R □	Communication with front-end (A1) is not possible.

TEST MODE

• TUNER preset operation

Key	Description of display		Description
4	Preset function	□ □ □ □ 9 8.3 □ □	Change to 98.3MHz with the preset key [4].

• K3I forced switching

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

Key	Description of display		Description
6	K3I Forced switching	□ □ □ A 9 8.1 □ □	AUTO (1)
		□ □ □ 3 9 8.1 □ □	Forced WIDE (2)
		□ □ □ 2 9 8.1 □ □	Forced MIDDLE (3)
		□ □ □ 1 9 8.1 □ □	Forced NARROW (4)

• FST adjustment mode

Perform FST soft-mute adjustment.

Key	Note
■▶II	Enter the FST adjustment mode. (Press for 1 second or longer.)

Operations in the FST adjustment mode are as follows:

Key	Description of display		Description
FM (UP) AM (DOWN)	Soft-mute adjustment	□ □ □ □ S D – F □	18dBμ (0) ↔ 36dBμ (F)
■▶II	Adjustment value memory	□ □ □ □ W R T □ □	Displays the data that has been written in the E2PROM when pressing the key for 2 seconds or longer.
▶II	Mode clear	□ □ □ □ 9 8.3 □ □	Clear the FST adjustment mode. (Returns to normal display and the test mode is retained.)

After completing the FST adjustment, if You wish to clear the test mode, You can do this using the reset button.

■ Test mode specifications in CD source

• Procedure in CD-DA media (KTD-02A)

Key	Description of display		Description
▶▶I	Track up procedure		Every time pressed, jumps to the track shown below. No.9 → No.15 → No.10 → No.11 → No.12 → No.13 → No.22 → No.14 → No.9 (recursive) But in case the disc has 8 tracks or less, playback starts with track No.1.
I◀◀	Track down procedure		Goes down by 1 track from the currently played track.
1	Jump procedure		Jump to No. 28 (Scratch 0.7mm for MUSIC line vibration testing)
2	Jump procedure		Jump to No. 14 (Blurring surface disc TCD-731RA Tr14)
3	Information display Mechanism model name Mechanism version	6 C 0 0 0 0 0 0 □	Display of Mechanism model name and Mechanism version. (When key is pressed while the display in the left is being shown, returns to normal display.)
6	Jump procedure		Jump to No. 15. Set the volume value to “25”. (For 20Hz 0dB DC protection false-operation FCT checking)

Used media: For CD, KTD-02A

TEST MODE

■ Audio-related test mode

Procedure	Note
Press the [AUD] key (main unit) Press the [AUD] and [*] keys (Remote control)	Enter audio adjustment mode (the initial item should be Fader, and then, Balance → Bass Level → Middle Level → Treble Level → SW Level → System Q → V-Offset → LPF Sub Woofer.

About audio adjustment items (include both Audio Function Mode and Audio Setup Mode)

Procedure	Item	Procedure	Description
For item forwarding procedure, press [AUD] key and [FM] key	Fader	[VOL] knob and [I◄◄ / ►►I] key	Adjust to 3 steps of R15 ↔ 0 ↔ F15. (Default value: 0)
	Balance	[VOL] knob and [I◄◄ / ►►I] key	Adjust to 3 steps of L15 ↔ 0 ↔ R15. (Default value: 0)
	Bass Level	[VOL] knob and [I◄◄ / ►►I] key	Adjust to 3 steps of -8 ↔ 0 ↔ +8. (Default value 0)
	Middle Level	[VOL] knob and [I◄◄ / ►►I] key	Adjust to 3 steps of -8 ↔ 0 ↔ +8. (Default value 0)
	Treble Level	[VOL] knob and [I◄◄ / ►►I] key	Adjust to 3 steps of -8 ↔ 0 ↔ +8. (Default value 0)
	LPF Sub woofer	[VOL] knob and [I◄◄ / ►►I] key	Adjust to 2 steps of 80Hz ↔ Through. (Default value: Through) (Only in models with Sub Woofer output)
	Volume Offset	[VOL] knob and [I◄◄ / ►►I] key	Adjust to 2 steps of -8 ↔ 0. (Default value 0) (Other than model with internal AUX) Adjust to 3 steps of -8 ↔ 0 ↔ +8. (Default value 0) (Only models with internal AUX)

Procedure	Note
Press the [B.BOOST] key for 1 second or longer	Switch Bass Boost (Note: Front key functions as MENU.)

■ MENU-related test mode

Procedure	Note
Press the [B.BOOST] key (main unit) Press the [DNPP/SBF] and [DIRECT] keys (Remote control)	Continuous forwarding by remote control is prohibited

■ Backup current measurement

Procedure	Note
While ACC OFF (Back Up ON), Reset	MUTE terminal is OFF after 2 seconds, not after 15 seconds. (During this time, the CD mechanism does not function.)

■ PREOUT switching

Procedure	Note
In the STANDBY source, press and hold [AUTO] key for 1 second or longer	Switches PREOUT

■ LCD (ED1) short check

Procedure	Note
In the STANDBY source, press [ATT] key	All lights are off → Turns on odd and even terminals alternatively every 125ms (terminals that have a maximum number of grids) → Turns on only the odd terminals → Turn on only the even terminals →

TEST MODE

■ Clearing CD mechanism information / Service information / DC offset error information (Clearing E2PROM data)

Status	Display	Description
While pressing and holding [B.BOOST] key and [ATT] key, reset-start.	C D O	At normal termination
	C D –	At abnormal termination

This mode is cancelled by resetting. (The last screen will not be retained.)

Data to be cleared is shown below.

CD mechanism information	I2C communication status display
	CD mechanism error log display
	Displays CD loading error data
	Displays CD EJECT error data
	Displays CD time code count error data (missing count)
	Displays CD time code count error data (count not updated)
Service Information	Power ON time display
	CD operation time display
	CD EJECT times display
	PANEL open/close times display
	Forced Power OFF information display
DC offset error information	DC offset error 1 display (Provides information on whether there is an improper connection or another error)
	DC offset error 2 display (Provides information on the number of capacitor leaks)

■ Clearing DC offset error detection data (E2PROM data clearing)

Procedure	Note
While pressing and holding [3] key and [6] key, reset-start.	Entering DC offset error display mode.

Procedure	Display	Description
Press and hold the [3] and [6] keys, and reset-start	d C E R	When DC offset error is detected (when either one of capacitors is leaking, or an improper connection or another error is detected)
	d C O K	When DC offset error is not detected (when none of capacitors leak, no improper connection or other error is detected)
1	d C 1 E R	When improper connection or other DC offset errors are detected.
	d C 1 O K	When improper connection or other DC offset errors are not detected.
■1	d C 1 O K	When detecting improper connection or other DC offset errors, clears detection data. (Clear E2PROM)
2	d C 2 4	When detecting capacitor leak, provides information on the number of capacitor leaks. (0~4)
■2	d C 2 0	When detecting capacitor leak, clears the number of capacitor leaks. (Clear E2PROM)

This mode is cancelled by resetting. (The last screen will not be retained.)

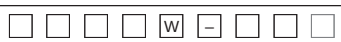
TEST MODE

■ FM/AM channel space switching

Procedure	Note
While Power OFF, press and hold [1] key and [5] key, and press [SRC] key to Power ON	FM200kHz/AM10kHz ↔ FM50kHz/AM9kHz

■ ROM data transfer

When replacing front-end (A1), this function is used to transfer E2PROM data (ROM correction, security and other data) to front-end (A1) to E2PROM of to mother unit (X34-), used for saving data, and, after completing replacement of front-end (A1), to recover data from the E2PROM of the mother unit (X34-), and for saving data to the new front-end (A1). Refer to “ROM data transfer processes” on the next page for details on front-end (A1) replacement procedures and on the data to be transferred.

Procedure	Display	Description
While pressing and holding [1] key and [3] keys, reset-start		All lights ON.
Press [B.BOOST] key (MENU)		MENU mode
Press [I◄◄] key or [►►I] key		Front-end (A1) → Mother unit (X34-). Data transfer processing.
		Mother unit (X34-) → Front-end (A1). Data transfer processing.
(In the above ROM READ status), ■[►II] key for 2 seconds or longer		Front-end (A1) → Mother unit (X34-). ROM data is being transferred.
		Front-end (A1) → Mother unit (X34-). ROM correction transfer, security and other data is OK.
		Front-end (A1) → Mother unit (X34-). Transfer of security and other data is OK.
		Front-end (A1) → Mother unit (X34-). ROM data transfer is NG.
(In the above ROM WRT status), ■[►II] key for 2 seconds or longer		Mother unit (X34-) → Front -end (A1). ROM data is being transferred.
		Mother unit (X34-) → Front-end (A1). ROM correction, security and other data transfer is OK.
		Mother unit (X34-) → Front-end (A1). ROM correction data transfer is OK.
		Mother unit (X34-) → Front-end (A1). Transfer of security and other data is OK.
		Mother unit (X34-) → Front-end (A1). ROM data transfer is NG
(In every status of ROM data [►II] transfer processing)		Clear from ROM correction data transfer processing

ROM DATA TRANSFER PROCESSES

When replacing front-end (A1) of mother unit (X34-), or when adding or replacing ROM correction (program correction with ROM IC (IC10)), the following activities are required.

■ Overview

When replacing front-end (A1) in the model where ROM correction and security data have been written into E2PROM, included in the front-end (A1) pack, the transfer function of the E2PROM data itself in the replaced front-end (A1) is required. This function in the above system configuration is used to allow for complete replacement of the front-end at any service center.

■ Overview of specifications

Procedures for replacement are as follows: To install the E2PROM to the mother unit (X34-), and replace front-end (A1) with new front-end after copying the data in the E2PROM (such as ROM correction data and other data) in the front-end (A1) to the mother unit (X34-) by operating the system, and then copy the data (such as ROM correction data and other data) into the mother unit to the E2PROM of the front-end (A1), operating the main body.

Tuner adjustment data was inserted during the tuner pack manufacturing, and data will not be transferred because front-end (A1) is built-in.

In addition, tuner adjustment data for new front-end (A1) is supplied as a service part in which data was inserted.

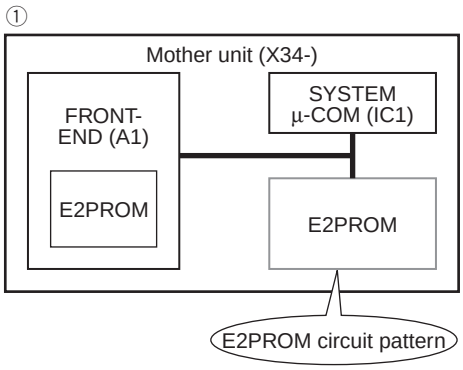
■ Data to be copied

- ROM correction data
- Other data
  - Security data
  - DEMO MODE ON/OFF status
  - POWER ON time (For maintenance)
  - Playback time (For maintenance)
  - EJECT count (For maintenance)
  - Panel open/close count (For maintenance)
  - CD I2C status (For maintenance)
  - CD offset error code (For maintenance)
  - CD sound skips count (For maintenance)
  - CD time code not updated count (For maintenance)
  - CD load switch errors count (For maintenance)
  - CD ejection errors count (For maintenance)
  - DC offset error (For maintenance)
  - Forced Power OFF information (For maintenance)
  - Serial number (For maintenance)
  - E2PROM data check data (For internal check)

■ Operation procedure

Operation procedure is different depending on the conditions. Proceed with the appropriate operation procedure depending on the specific condition.

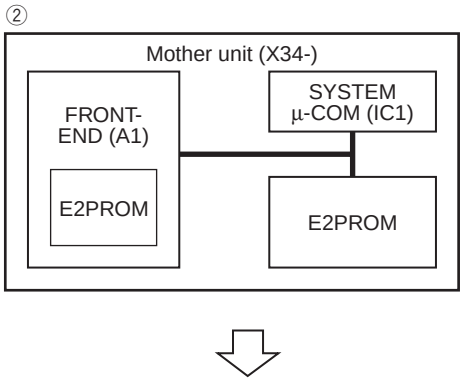
1. In case of replacing front-end (A1) without an applicable ROM correction.
2. In case of replacing front-end (A1) with an applicable ROM correction.
3. In case of applying new ROM correction at the same time when front-end (A1) is replaced. (No ROM correction has been carried out.)



Install new E2PROM.

Install E2PROM containing no data, in case of [1] and [2].

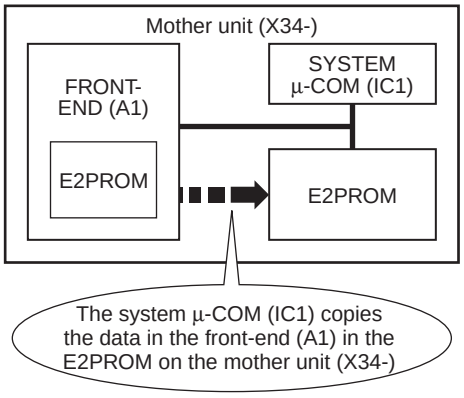
In case of [3], install maintenance E2PROM with an applicable ROM correction program.



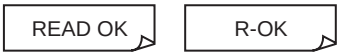
ROM DATA TRANSFER PROCESSES

Turn power on.
Press and hold the [1] and [3] keys and press reset button. (Enter the system in the test mode.)
Press [B.BOOST] key. (ROM data System enters data transfer mode.)
Press [⏮] (or [⏭].) (Select READ)
Press [⏯] key for 1 second or longer. (Data transfer)

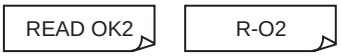
③



In case of [2]



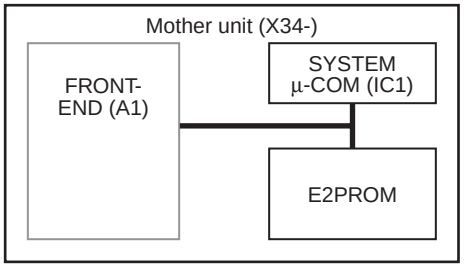
In case of [1] or [3]



Press [⏯] key. (Exit ROM data transfer mode.)
Turn power off.

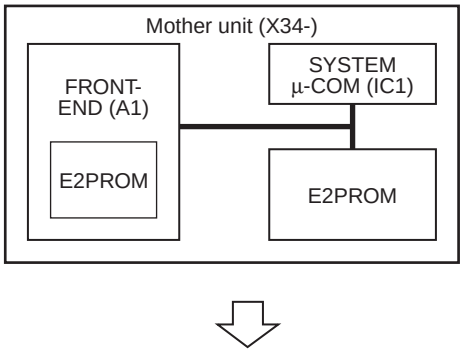
Remove front-end (A1).

④



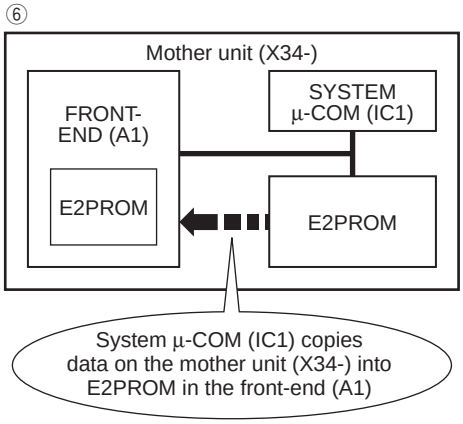
Install new front-end (A1).
No ROM correction or other data status.

⑤



Turn power on.
Press and hold the [1] and [3] keys and press reset button. (Enter the system in the test mode.)
Press [B.BOOST] key. (Start transferring ROM data.)
Press [⏮] (or [⏭].) (Select WRT)
Press [⏯] key for 1 second or longer. (Data transfer)

⑥



In case of [2] or [3]

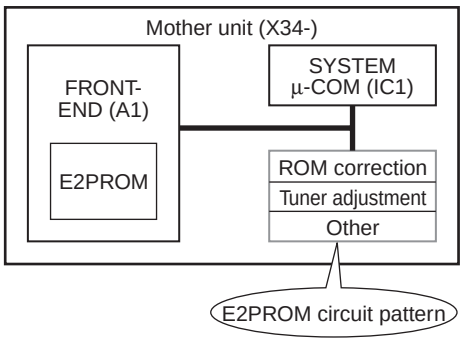
In case of [1]

Press [⏯] key. (Exit ROM data transfer mode.)

ROM DATA TRANSFER PROCESSES

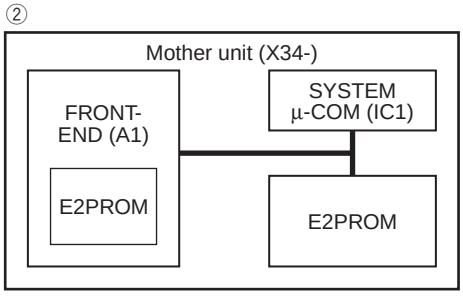
4. In case of applying a new ROM correction when front-end (A1) is replaced (There is ROM correction data.)
5. In case of applying a new ROM correction even when front-end (A1) is not replaced.

①



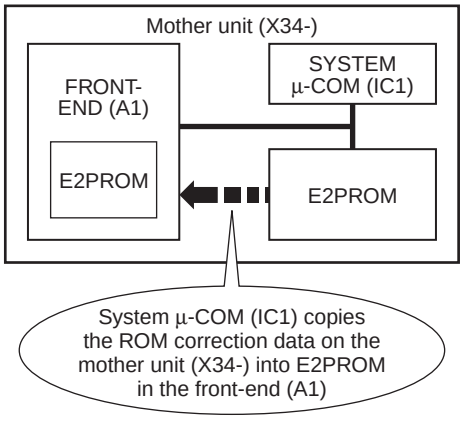
Install new E2PROM. (E2PROM that has been updated with ROM correction)

②



Turn power on.
Press and hold the [1] and [3] keys, press reset button. (Enter the system in the test mode.)
Press [B.BOOST] key. (ROM data System enters data transfer mode.)
Press [⏮] (or [⏭].) (Select WRT)
Press [⏯] key for 1 second or longer. (Data transfer)

③



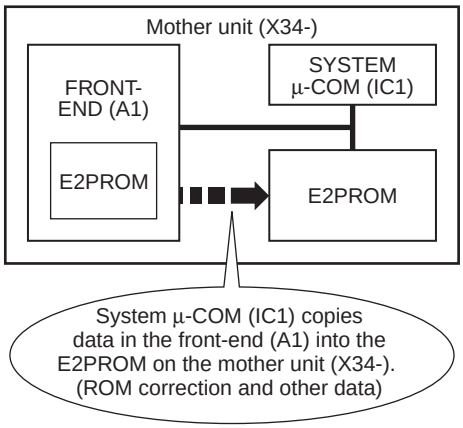
WRT OK1 | W-O1

In case of [4]

In case of [5]

Press [⏯] key. (Exit ROM data transfer mode.)

Press [⏮] (or [⏭].) (Select READ)
Press [⏯] key for 1 second or longer. (Data transfer)



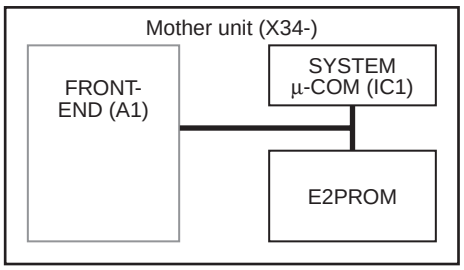
READ OK | R-OK

ROM DATA TRANSFER PROCESSES

Press [▶II] key. (Exit ROM data transfer mode.)
Turn power off.

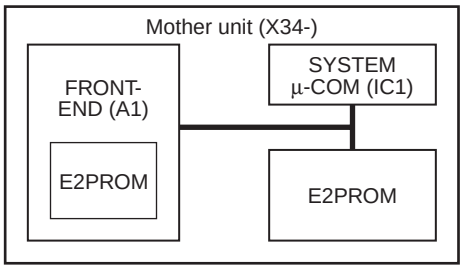
Remove front-end (A1).

④



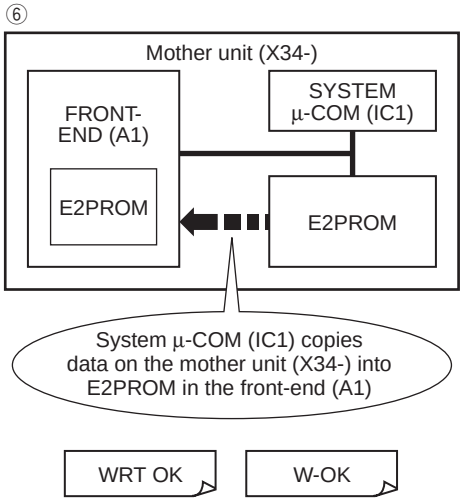
Install new front-end (A1).
No ROM correction or other data status.

⑤



Turn power on.
Press and hold the [1] and [3] keys press reset button. (Enter the system in the test mode.)
Press [B.BOOST] key. (Enter the system in ROM data transfer mode.)
Press [I◀◀] (or [▶▶I].) (Select WRT)
Press [▶II] key for 1 second or longer. (Data transfer)

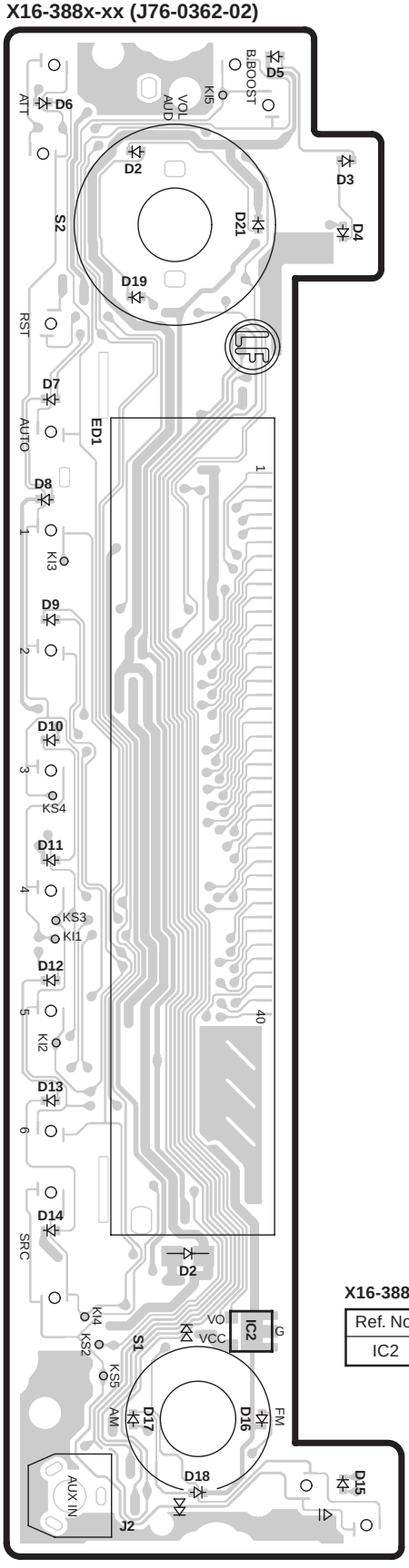
⑥



Press [▶II] key. (Exit ROM data transfer mode.)

PC BOARD
(COMPONENT SIDE VIEW)

SWITCH UNIT
X16-388x-xx (J76-0362-02)

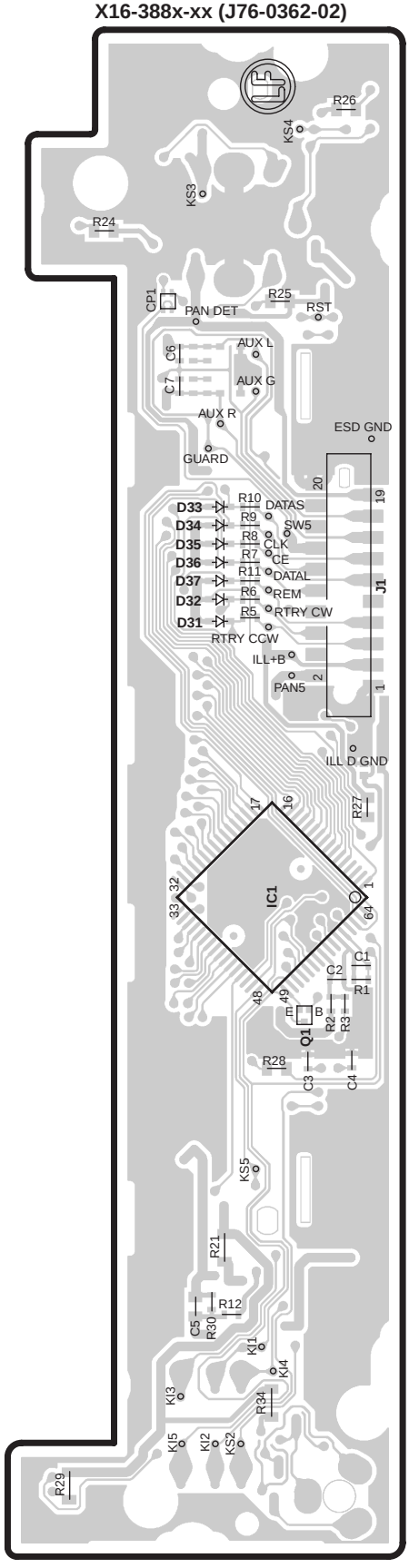


X16-388x-xx

Ref. No.	Address
IC2	6A

(FOIL SIDE VIEW)

SWITCH UNIT
X16-388x-xx (J76-0362-02)



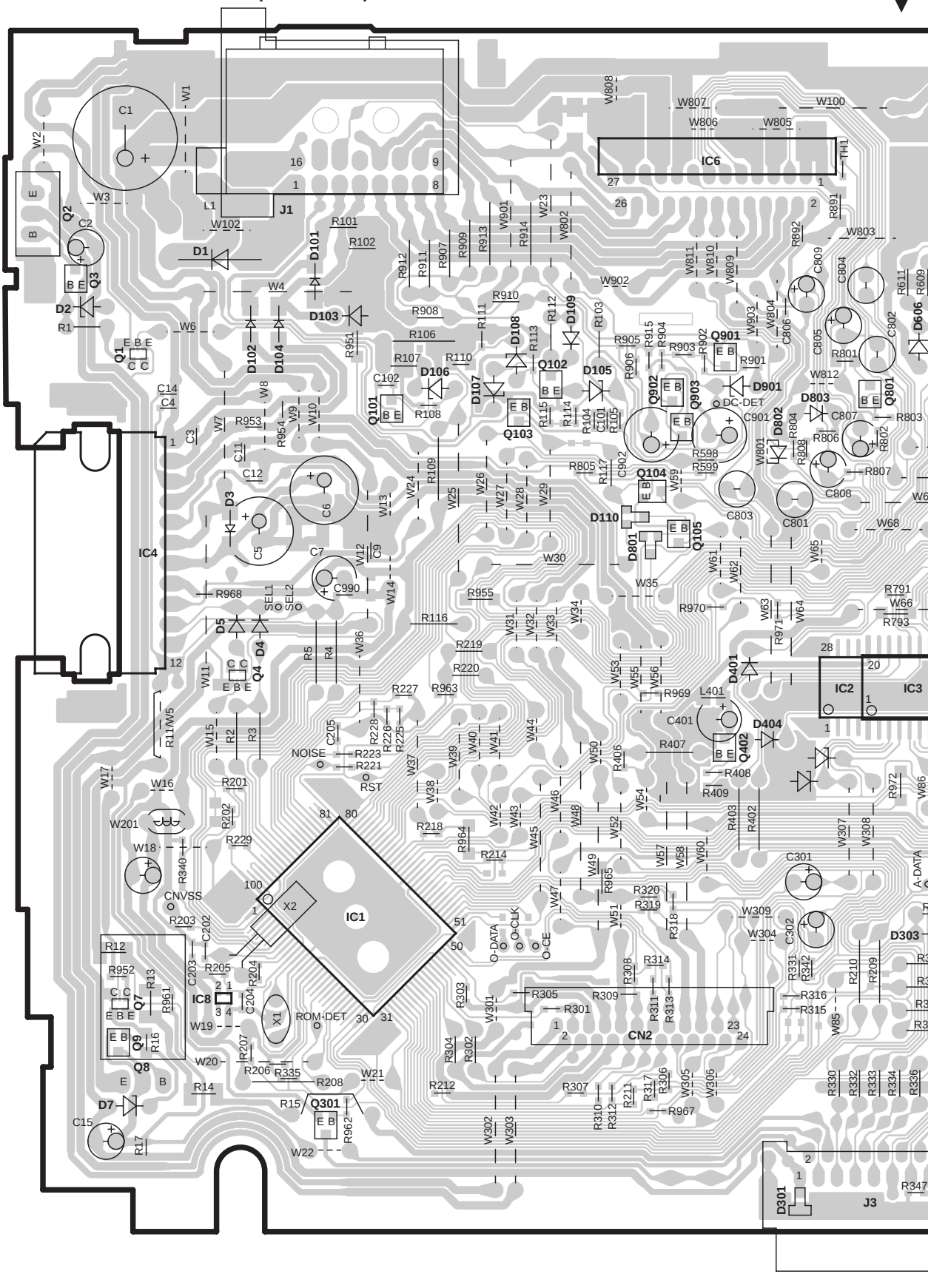
X16-388x-xx

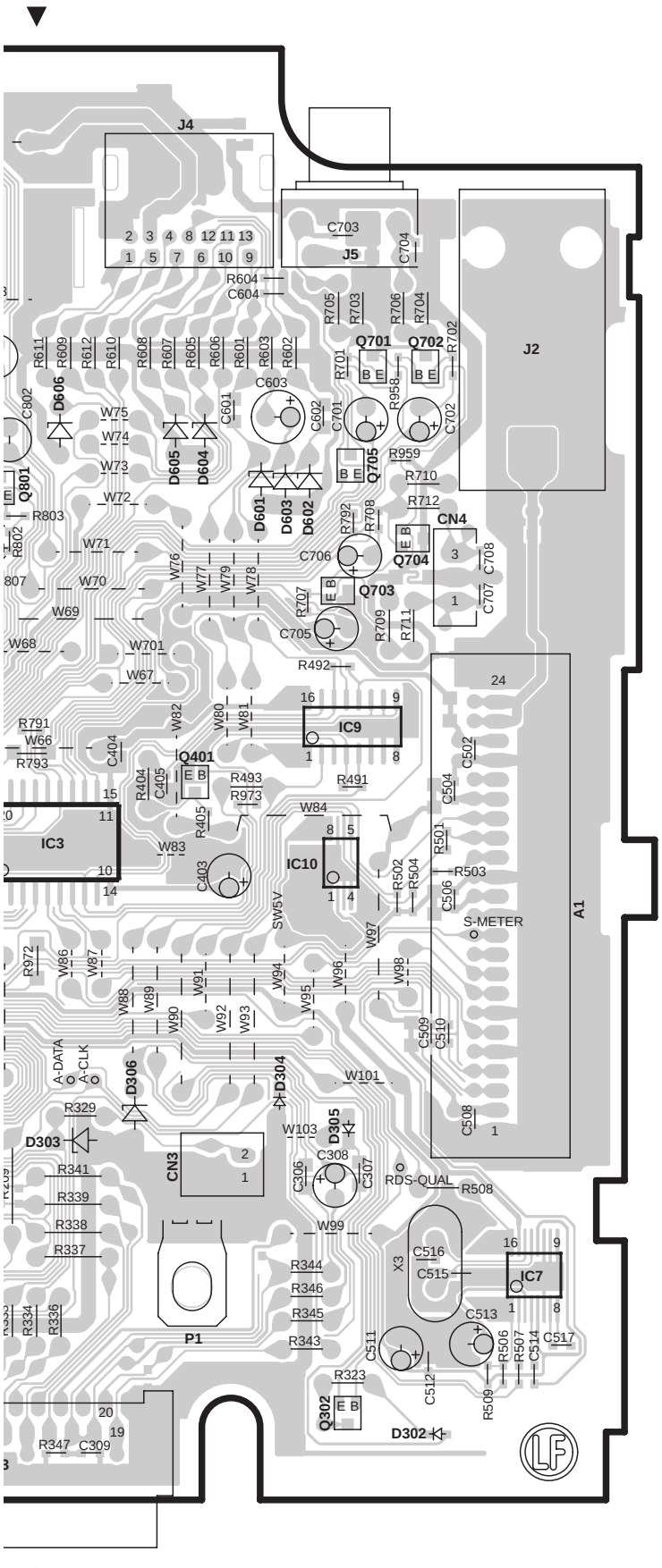
Ref. No.	Address
IC1	5D
Q1	5D

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

PC BOARD (FOIL SIDE VIEW)

ELECTRIC UNIT X34-469x-xx (J76-0358-02)





X34-469x-xx

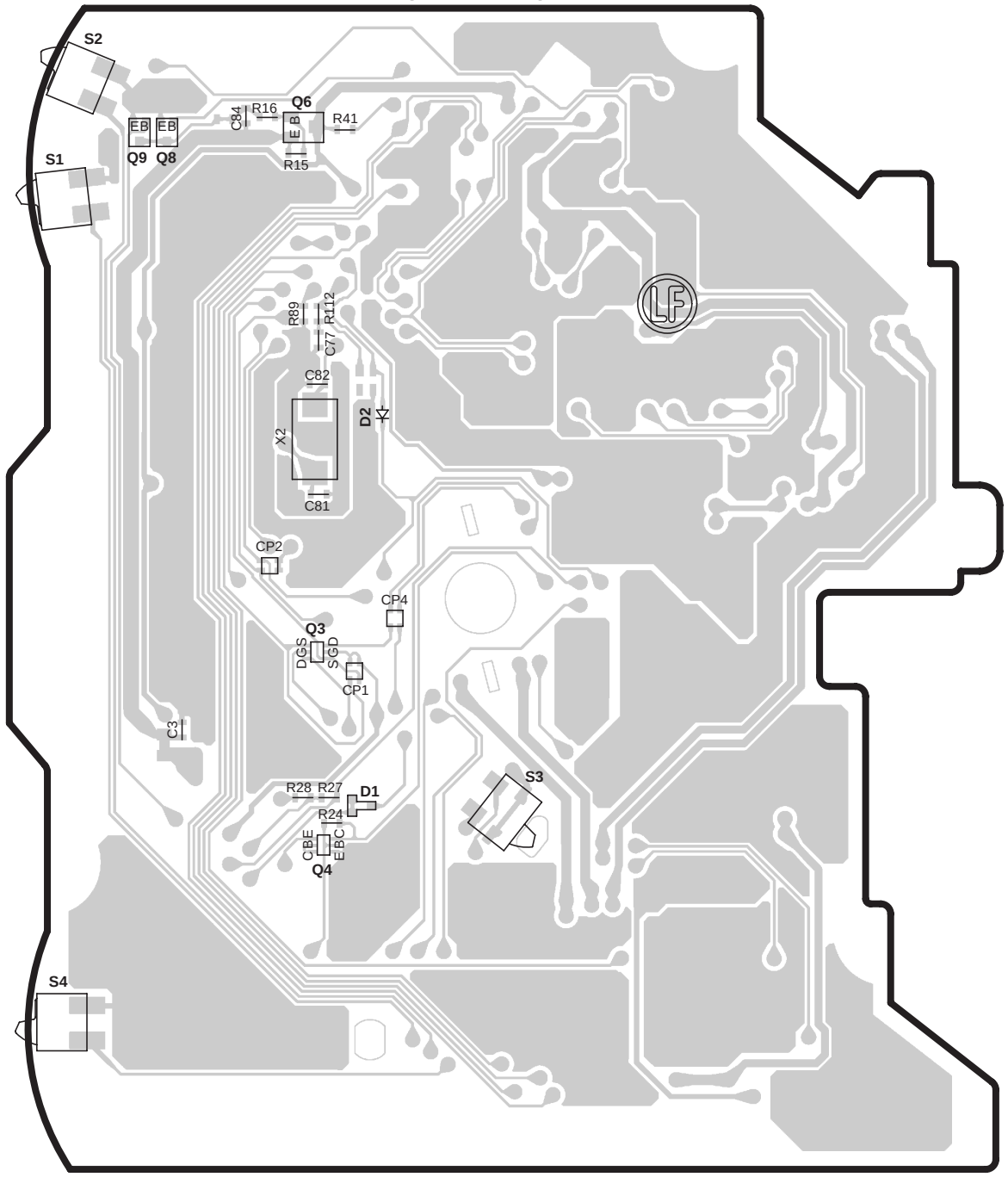
Ref. No.	Address
IC1	5H
IC2	4J
IC3	4K
IC4	4G
IC6	2J
IC8	6G
Q1	3G
Q2	2G
Q3	3G
Q4	4G
Q101	3H
Q102	3I
Q103	3I
Q104	3I
Q105	4I
Q301	6H
Q302	7L
Q402	5J
Q701	3L
Q702	3L
Q705	3L
Q901	3J
Q902	3I
Q903	3I

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

KDC-135/135CR/136

PC BOARD (COMPONENT SIDE VIEW)

CD PLAYER UNIT X32-5980-00 (J76-0377-02)



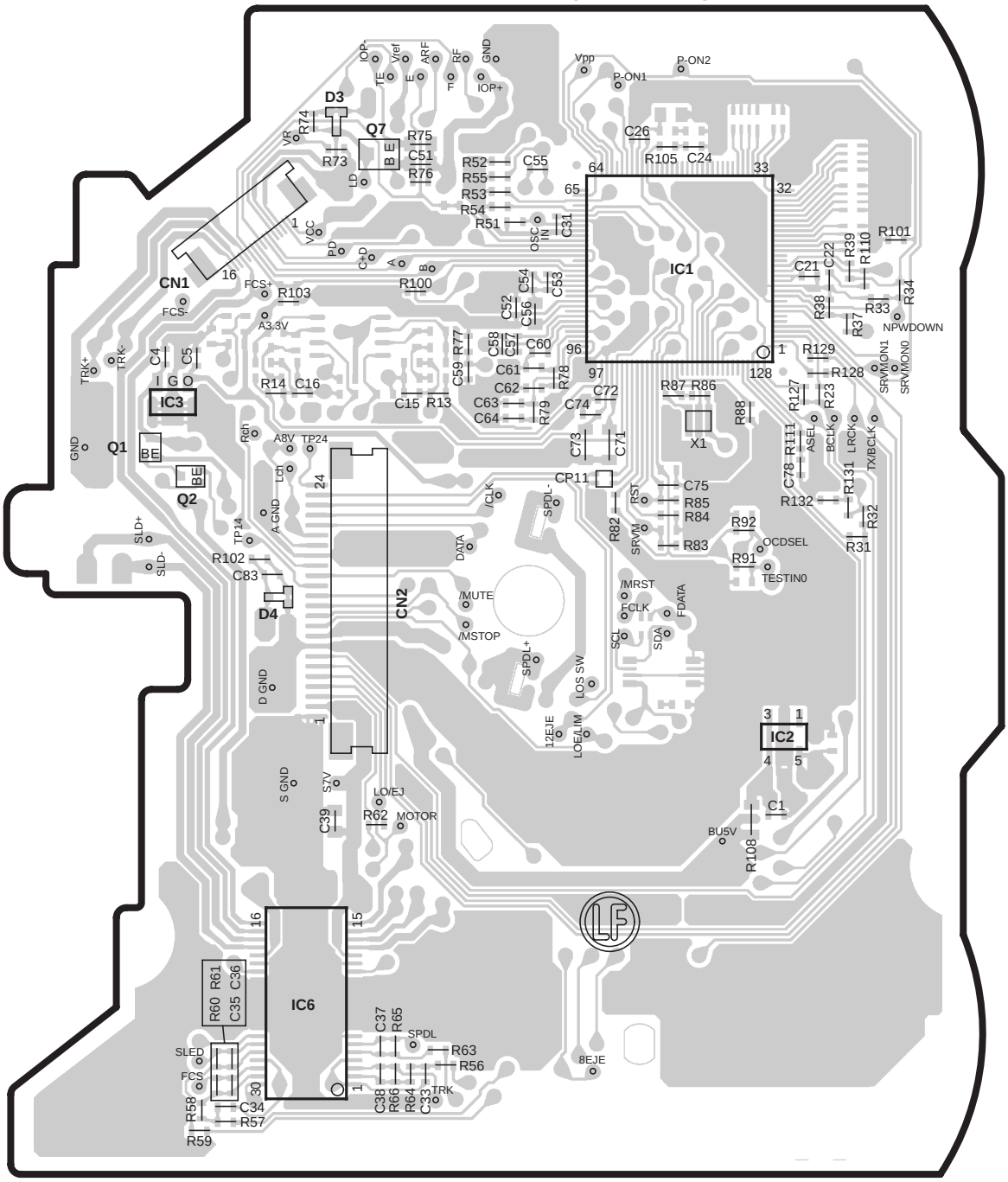
X32-5980-00

Ref. No.	Address
Q3	4Q
Q4	5Q
Q6	2Q
Q8	2Q
Q9	2Q

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

PC BOARD (FOIL SIDE VIEW)

CD PLAYER UNIT X32-5980-00 (J76-0377-02)

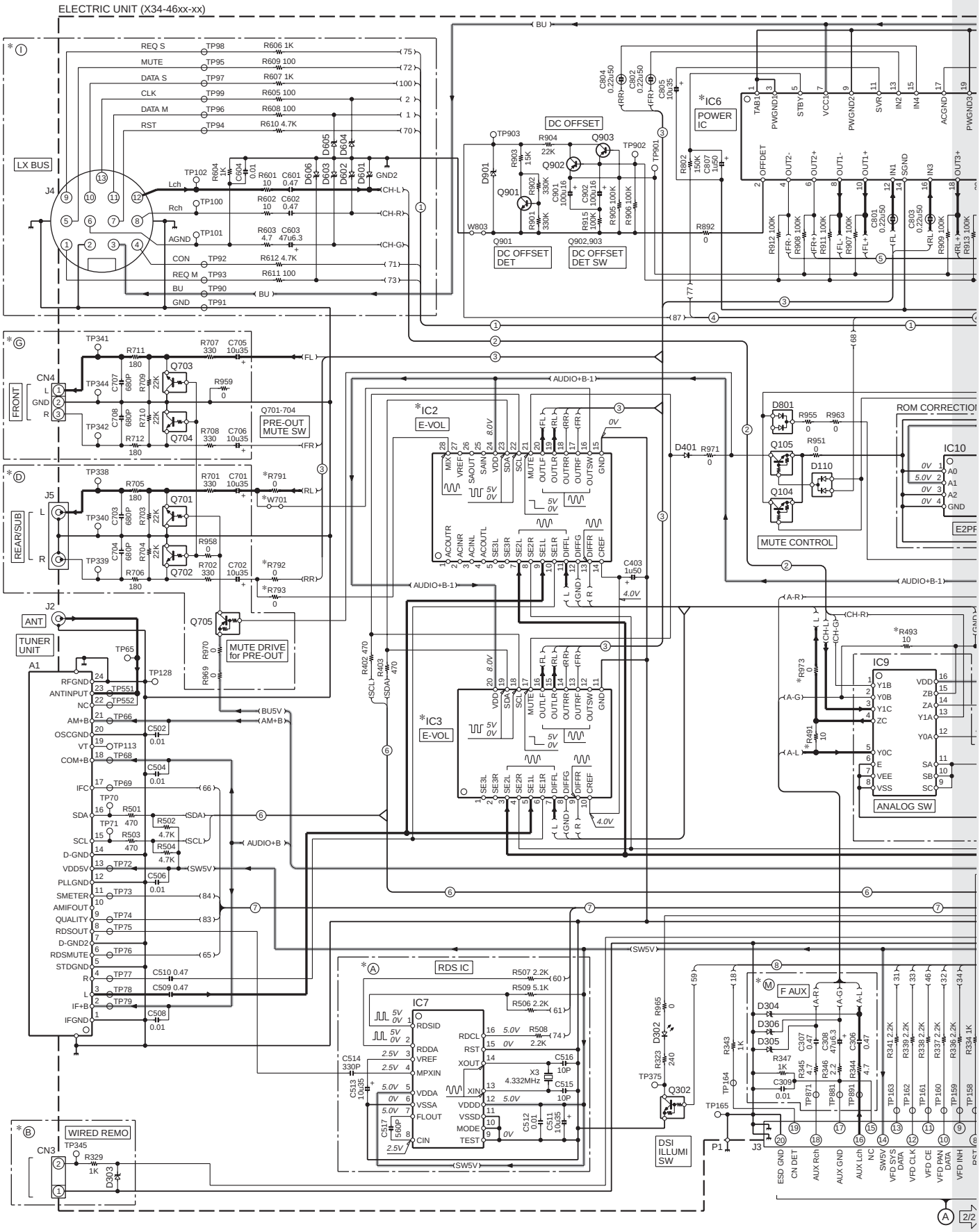


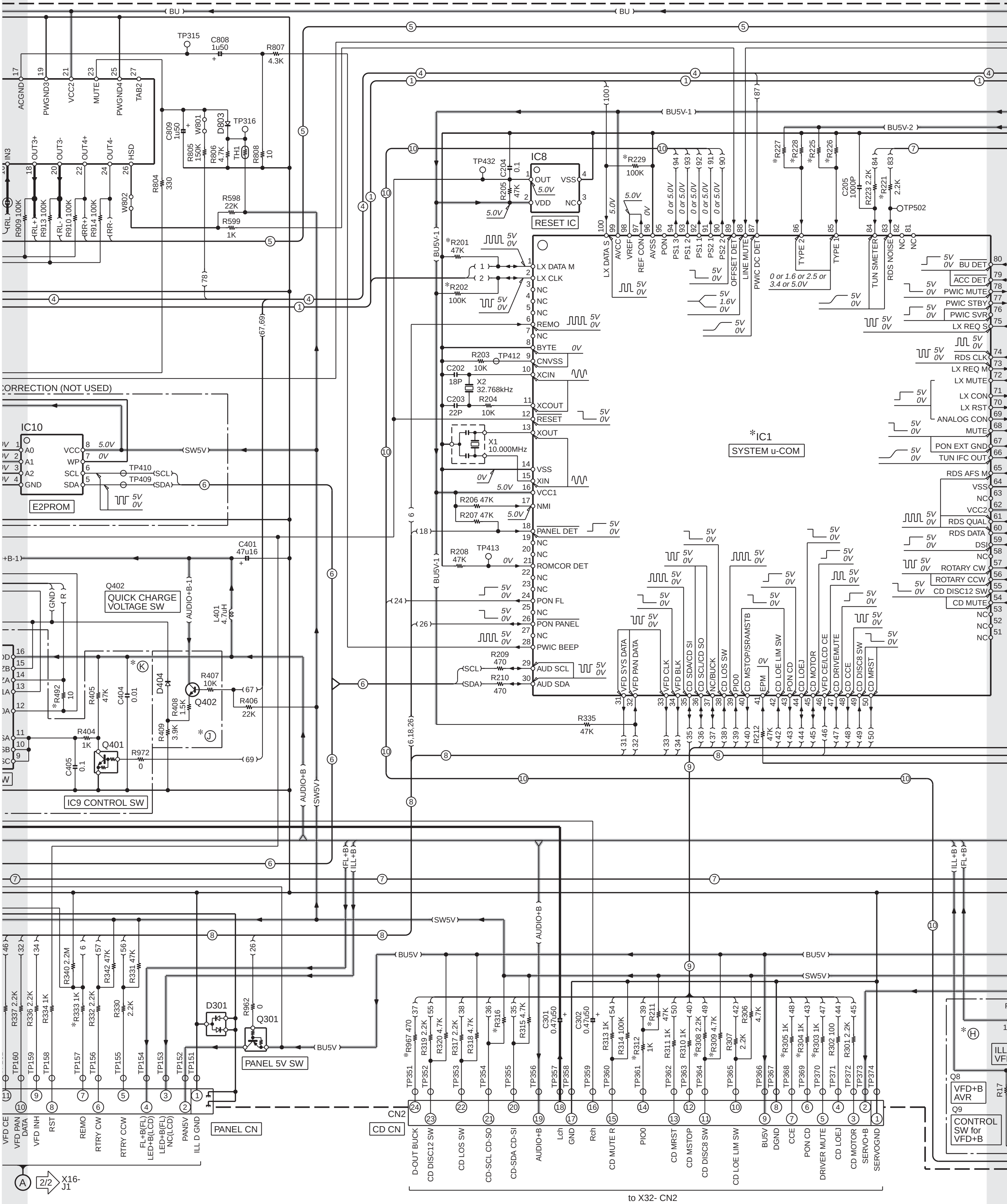
X32-5980-00

Ref. No.	Address	Ref. No.	Address
IC1	2X	Q1	3U
IC2	4X	Q2	3V
IC3	3V	Q7	2V
IC6	5V		

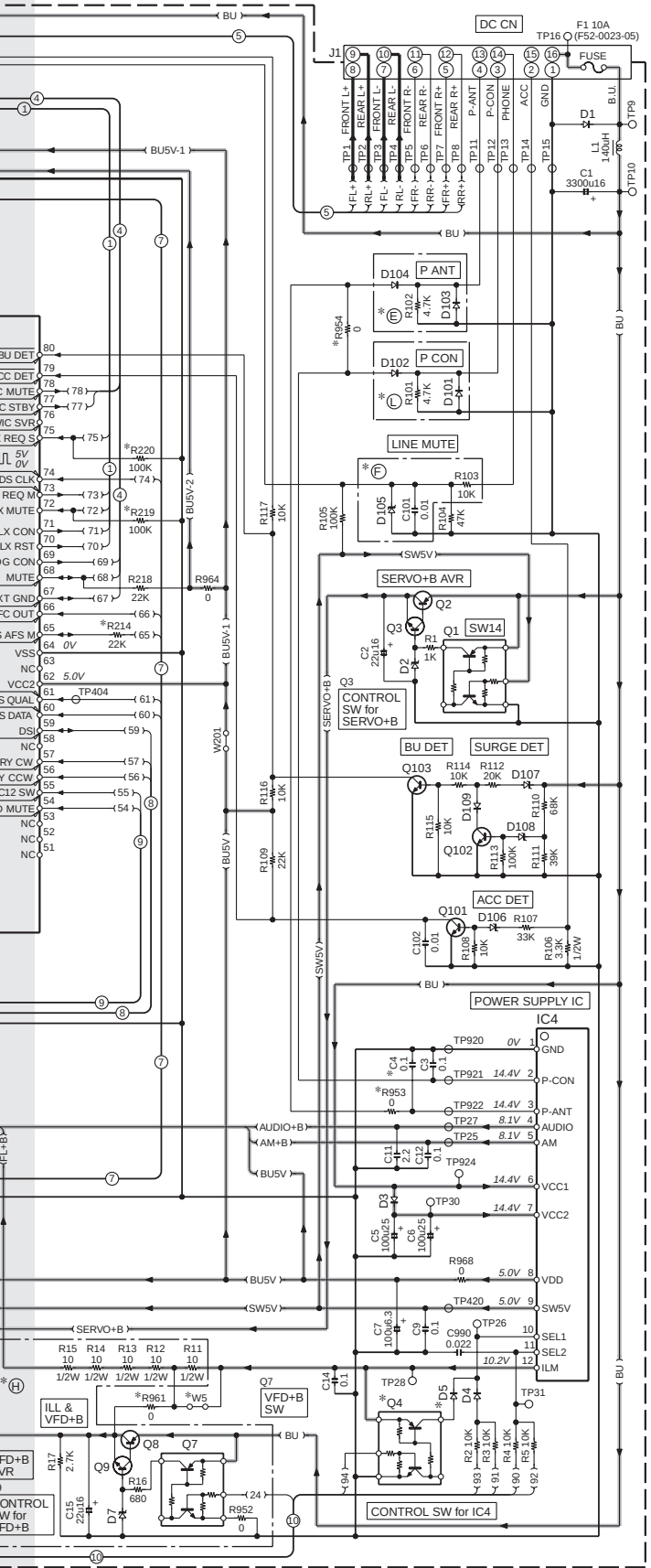
Refer to the schematic diagram for the values of resistors and capacitors.

KDC-135/135CR/136




IC8
RESET IC
IC10
E2PROM
CORRECTION (NOT USED)
*IC1
SYSTEM u-COM
QUICK CHARGE
VOLTAGE SW
IC9 CONTROL SW
Q401
Q402
Q301
D301
PANEL 5V SW
PANEL CN
CD CN
CN2
X1 10.000MHz
X2 32.768kHz
to X32- CN2
A 2/2 X16-J1
LX DATA M
LX CLK
REMO
BYTE
CNVSS
XCIN
XCOUT
RESET
XOUT
VSS
XIN
VCC1
NMI
PANEL DET
ROMCOR DET
PON FL
PON PANEL
PWIC BEEP
AUD SCL
AUD SDA
BU DET
ACC DET
PWIC MUTE
PWIC STBY
PWIC SVR
LX REQ S
RDS CLK
LX REQ M
LX MUTE
LX CON
LX RST
ANALOG CON
MUTE
PON EXT GND
TUN IFC OUT
RDS AFS M
VSS
VCC2
RDS QUAL
RDS DATA
DSI
ROTARY CW
ROTARY CCW
CD DISC12 SW
CD MUTE
VFD SYS DATA
VFD PAN DATA
VFD CLK
VFD BLK
CD SDA/CD SI
CD SCL/CD SO
NC/BUCK
CD LOS SW
PIO0
CD MSTOP/SRAMSTB
EPM
CD LOE LIM SW
PON CD
CD LOEJ
CD MOTOR
VFD CE/LCD CE
CD DRIVEMUTE
CD CCE
CD DISC8 SW
CD MRST
LX DATA S
AVCC
VREF
REF CON
AVSS
PON
PS1 3
PS1 2
PS1 1
PS2 1
PS2 2
OFFSET DET
LINE MUTE
PWIC DC DET
TYPE 2
TYPE 1
TUN SMETER
RDS NOISE
VFD CE
VFD PAN DATA
VFD INH
RST
REMO
RTRY CW
RTRY CCW
FL+B(FL) LED+B(LCD)
LED+B(FL) NC(LCD)
PAN5V
ILL D GND
D-OUT BUCK
CD DISC12 SW
CD LOS SW
CD-SCL CD-SO
CD-SDA CD-SI
AUDIO+B
Lch
GND
Rch
CD MUTE R
PIO0
CD MRST
CD MSTOP
CD DISC8 SW
CD LOE LIM SW
BU5V
DGND
CCE
PON CD
DRIVER MUTE
CD LOEJ
CD MOTOR
SERVO+B
SERVOGND
BU
BU5V-1
BU5V-2
SW5V
AUDIO+B
FL+B
ILL+B
VFD+B AVR
CONTROL SW for VFD+B

KDC-135/135CR/136



KDC-135/135CR/136 (1/2)

ELECTRIC UNIT (X34-46xx-xx)

MODEL NAME	DESTINATION	UNIT No.	Ⓐ	Ⓑ	Ⓓ	Ⓔ	Ⓕ	Ⓖ	Ⓗ	Ⓚ	Ⓛ	Ⓜ	C4	D5	IC1	IC2 or IC3	IC6	Q4	R201,202,219,220,229	R211,303-305,312,967	R214,221	R225	R226	R227	R228	R308,309	R316	R333	R491-493	R791,792	R793	R953	R954	R961	R973	W5	W701
E222/S	J1/J2	X34-4630-02	—	—	—	YES	YES	YES	—	—	—	YES	—	—	30302MAP54FP	E-TDA7418	KIC2102	—	—	—	—	—	—	47K	47K	47K	4.7K	—	YES	—	—	—	—	YES	—	—	—
E323S	J	X34-4630-01	—	—	—	YES	YES	YES	—	YES	—	YES	—	—	30622MGP823FP	E-TDA7418	KIC2092	—	YES	YES	—	—	—	47K	47K	—	2.2K	—	—	—	—	—	—	YES	—	—	—
RDT-121	J	X34-4690-01	—	—	—	—	—	—	—	—	—	—	—	—	30302MAPD32FP	E-TDA7418	E-TDA7386	—	—	—	—	—	—	47K	47K	47K	4.7K	—	YES	—	—	—	—	YES	YES	—	—
KDC-135	K4	X34-4690-10	—	—	YES	—	YES	—	YES	—	YES	YES	—	—	30302MAPD32FP	E-TDA7419	KIC2102	—	—	—	—	—	—	47K	47K	—	4.7K	—	YES	—	—	—	—	YES	YES	—	YES
KDC-135CR	K5	X34-4690-11	—	—	YES	—	YES	—	YES	—	YES	YES	—	—	30302MAPD32FP	E-TDA7419	KIC2102	—	—	—	—	—	—	47K	47K	—	4.7K	YES	YES	YES	—	—	—	YES	YES	—	YES
KDC-MP2035	K	X34-4630-10	—	—	YES	—	YES	YES	YES	YES	YES	YES	—	—	30622MGP823FP	E-TDA7419	KIC2102	—	YES	YES	—	—	—	47K	47K	—	2.2K	YES	YES	—	—	—	—	—	—	—	YES
KDC-MP205	K2	X34-4630-12	—	—	YES	—	YES	—	YES	YES	YES	YES	—	—	30622MGP823FP	E-TDA7419	KIC2102	—	YES	YES	—	—	—	47K	47K	—	2.2K	YES	YES	—	—	—	—	—	—	—	YES
KDC-MP235	K1	X34-4630-11	—	—	YES	—	YES	—	YES	YES	YES	YES	—	—	30622MEP825FP	E-TDA7419	KIC2102	—	YES	YES	—	—	—	47K	47K	—	2.2K	YES	YES	—	—	—	—	—	—	—	YES
KDC-MP235CR	K3	X34-4630-13	—	—	YES	—	YES	—	YES	—	YES	YES	—	—	30622MEP825FP	E-TDA7419	KIC2102	—	YES	YES	—	—	—	47K	47K	—	2.2K	YES	YES	—	—	—	—	—	—	—	YES
KDC-136	M7	X34-4690-21	—	—	YES	YES	YES	YES	—	—	—	YES	YES	YES	30302MAPD32FP	E-TDA7419	TB2904HQ	YES	—	—	—	—	—	47K	47K	22K	4.7K	—	YES	YES	—	—	—	YES	—	—	YES
KDC-MP3036	M9	X34-4630-24	—	—	YES	YES	YES	YES	—	YES	—	YES	YES	YES	30622MEP825FP	E-TDA7419	KIC2092	YES	—	YES	—	—	—	47K	47K	22K	2.2K	YES	—	—	—	—	—	—	—	—	YES
KDC-MP3036AX	M8	X34-4630-22	—	—	YES	YES	YES	YES	—	YES	—	YES	YES	YES	30622MEP825FP	E-TDA7419	KIC2092	YES	—	YES	—	—	—	47K	47K	22K	2.2K	YES	YES	—	—	—	—	YES	—	—	YES
KDC-MP336/RC/S	M6/M5/M7	X34-4630-23	—	—	YES	YES	YES	YES	—	YES	—	YES	YES	YES	30622MEP825FP	E-TDA7419	KIC2092	YES	—	YES	—	—	—	47K	47K	22K	2.2K	YES	YES	—	—	—	—	—	—	—	YES
KDC-MP336AX/AXS	M3/M4	X34-4630-23	—	—	YES	YES	YES	YES	—	YES	—	YES	YES	YES	30622MEP825FP	E-TDA7419	KIC2092	YES	—	YES	—	—	—	47K	47K	22K	2.2K	YES	YES	—	—	—	—	—	—	—	YES
KDC-MP4036AX	M1	X34-4630-21	—	—	YES	YES	YES	YES	—	YES	—	YES	YES	YES	30622MEP825FP	E-TDA7419	KIC2092	YES	—	YES	—	—	—	47K	47K	22K	2.2K	YES	YES	—	—	—	—	—	—	—	YES
KDC-MP436AX	M2	X34-4630-22	—	—	YES	YES	YES	YES	—	YES	—	YES	YES	YES	30622MEP825FP	E-TDA7419	KIC2092	YES	—	YES	—	—	—	47K	47K	22K	2.2K	YES	YES	—	—	—	—	—	—	—	YES
KDC-237SA/SG	E1/E2	X34-4672-78	YES	—	—	—	YES	YES	—	—	YES	YES	—	—	30302MAP54FP	E-TDA7418	TB2904HQ	—	—	—	—	—	—	47K	47K	—	4.7K	—	—	—	—	—	—	YES	—	—	—
KDC-237SAY/SGY	E3/E4	X34-4672-78	YES	—	—	—	YES	YES	—	—	YES	YES	—	—	30302MAP54FP	E-TDA7418	TB2904HQ	—	—	—	—	—	—	47K	47K	—	4.7K	—	—	—	—	—	—	YES	—	—	—
KDC-W237A/G	E7/E8	X34-4672-76	—	—	—	—	YES	YES	—	—	YES	YES	—	—	30622MEP825FP	E-TDA7418	TB2904HQ	—	—	—	—	—	—	47K	47K	—	2.2K	—	—	—	—	—	—	YES	—	—	—
KDC-W237AY/GY	E7/E8	X34-4672-77	—	—	—	—	YES	YES	—	—	YES	YES	—	—	30622MEP825FP	E-TDA7418	TB2904HQ	—	—	—	—	—	—	47K	47K	22K	2.2K	—	—	—	—	—	—	YES	—	—	—
KDC-W3037A/G	E3/E4	X34-4672-74	YES	—	—	—	YES	YES	—	—	YES	YES	—	—	30622MEP825FP	E-TDA7418	KIC2092	—	—	—	—	—	—	47K	47K	22K	2.2K	—	—	—	—	—	—	YES	—	—	—
KDC-W3037AY/GY	E3/E4	X34-4672-75	YES	—	—	—	YES	YES	—	—	YES	YES	—	—	30622MEP825FP	E-TDA7418	KIC2092	—	—	—	—	—	—	47K	47K	22K	2.2K	—	—	—	—	—	—	YES	—	—	—
KDC-W311A/G	E5/E6	X34-4672-74	YES	—	—	—	YES	YES	—	—	YES	YES	—	—	30622MEP825FP	E-TDA7418	KIC2092	—	—	—	—	—	—	47K	47K	22K	2.2K	—	—	—	—	—	—	YES	—	—	—
KDC-W311AY/GY	E5/E6	X34-4672-75	YES	—	—	—	YES	YES	—	—	YES	YES	—	—	30622MEP825FP	E-TDA7418	KIC2092	—	—	—	—	—	—	47K	47K	22K	2.2K	—	—	—	—	—	—	YES	—	—	—
KDC-W3537A/G	E1/E2	X34-4672-72	YES	YES	—	—	YES	YES	—	YES	—	YES	—	—	30622MGP823FP	E-TDA7418	KIC2092	—	YES	YES	—	—	—	47K	47K	22K	2.2K	YES	—	—	—	—	—	YES	—	—	—
KDC-W3537AY/GY	E1/E2	X34-4672-73	YES	—	—	—	YES	YES	—	YES	—	YES	—	—	30622MGP823FP	E-TDA7418	KIC2092	—	YES	YES	—	—	—	47K	47K	22K	2.2K	YES	—	—	—	—	—	YES	—	—	—
KDC-W4037	E	X34-4672-70	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	—	—	30622MGP823FP	E-TDA7419	KIC2092	—	YES	YES	—	—	—	47K	47K	22K	2.2K	YES	—	—	—	—	—	YES	—	—	YES
KDC-W4037Y	E	X34-4672-71	YES	—	YES	YES	YES	YES	YES	YES	YES	YES	—	—	30622MGP823FP	E-TDA7419	KIC2092	—	YES	YES	—	—	—	47K	47K	22K	2.2K	YES	—	—	—	—	—	YES	—	—	YES

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.

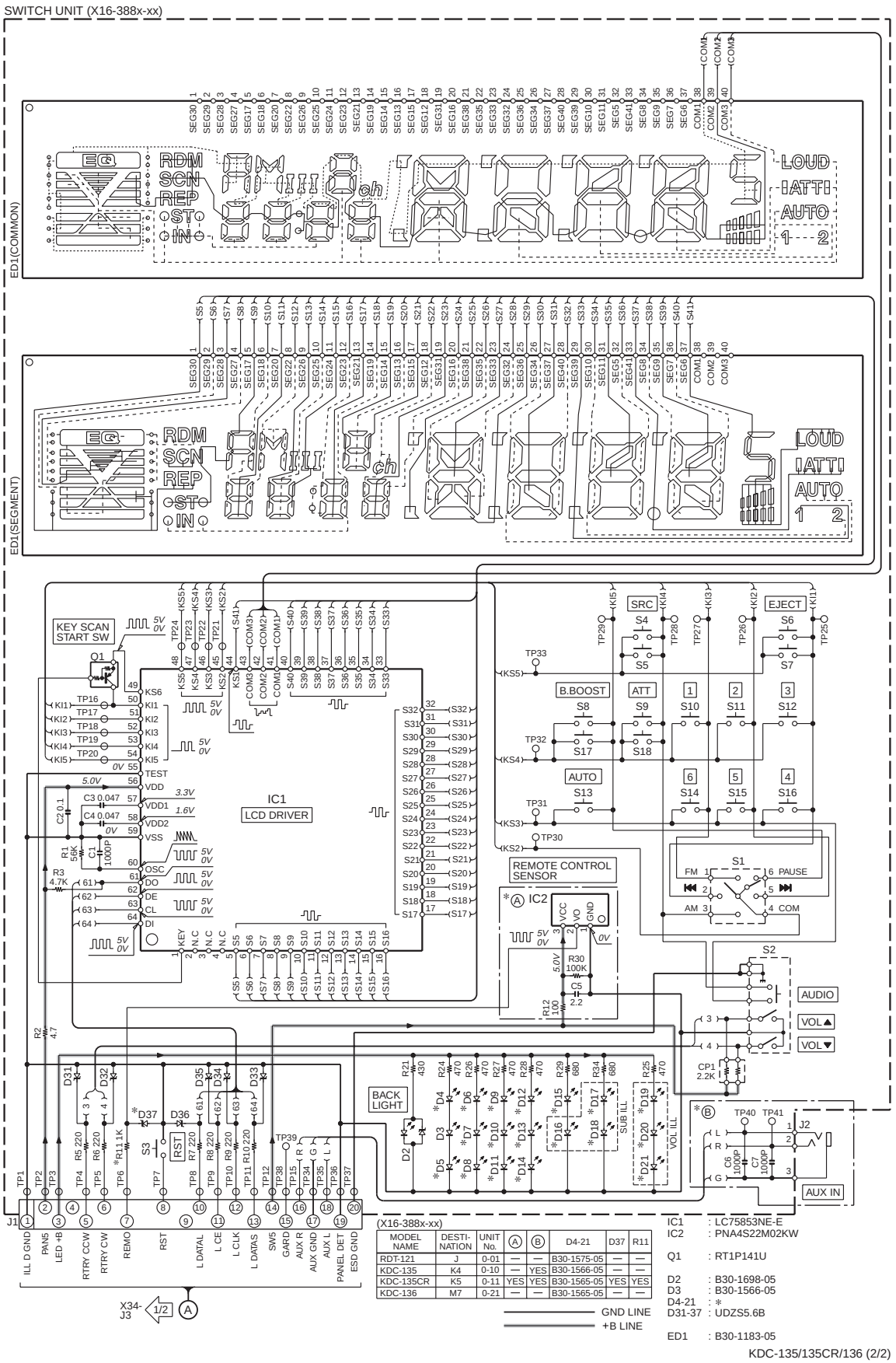
- DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

IC1 : ∗
IC2 : E-TDA7419
IC3 : E-TDA7418
IC4 : BD4913-V4
IC6 : ∗
IC7 : LC72725KV
IC8 : S-80836CNNB-J
IC9 : HEF4053BT
IC10 : NOT USED

Q1,4,7 : UMC2N
Q2,8 : 2SB1565
Q3,9,101-103,402,901 : 2SC4081
Q104,105,401 : RT1N441M
Q301 : RT1P144M
Q302 : RT1N144M
Q701-704 : RT1N430M
Q705 : RT1P241M
Q902,903 : 2SA1576A

D1 : S2V60∗A
D2 : MTZJ8.2(B)
D3,101,102,104 : D1F60-5063
D4,5,109,401,404,803 : 1SS133
D7 : MTZJ12(B)
D103 : AM01ZNF
D105,901 : MTZJ4.7(B)
D106-108,306,601-606 : MTZJ6.8(B)
D110,801 : MC2848
D301 : DA204U
D302 : B30-1567-05
D303 : MTZJ6.2(B)
D304,305 : UDZS6.8B

SIGNAL LINE
GND LINE
+B LINE



MODEL NAME	DESTINATION	UNIT No.	Ⓐ	Ⓑ	D4-21	D37	R11
RDT-121	J	0-01	—	—	B30-1575-05	—	—
KDC-135	K4	0-10	—	YES	B30-1566-05	—	—
KDC-135CR	K5	0-11	YES	YES	B30-1565-05	YES	YES
KDC-136	M7	0-21	—	—	B30-1565-05	—	—

IC1 : LC75853NE-E
IC2 : PNA4S22M02KW

Q1 : RT1P141U

D2 : B30-1698-05
D3 : B30-1566-05
D4-21 : *
D31-37 : UDZS5.6B

ED1 : B30-1183-05

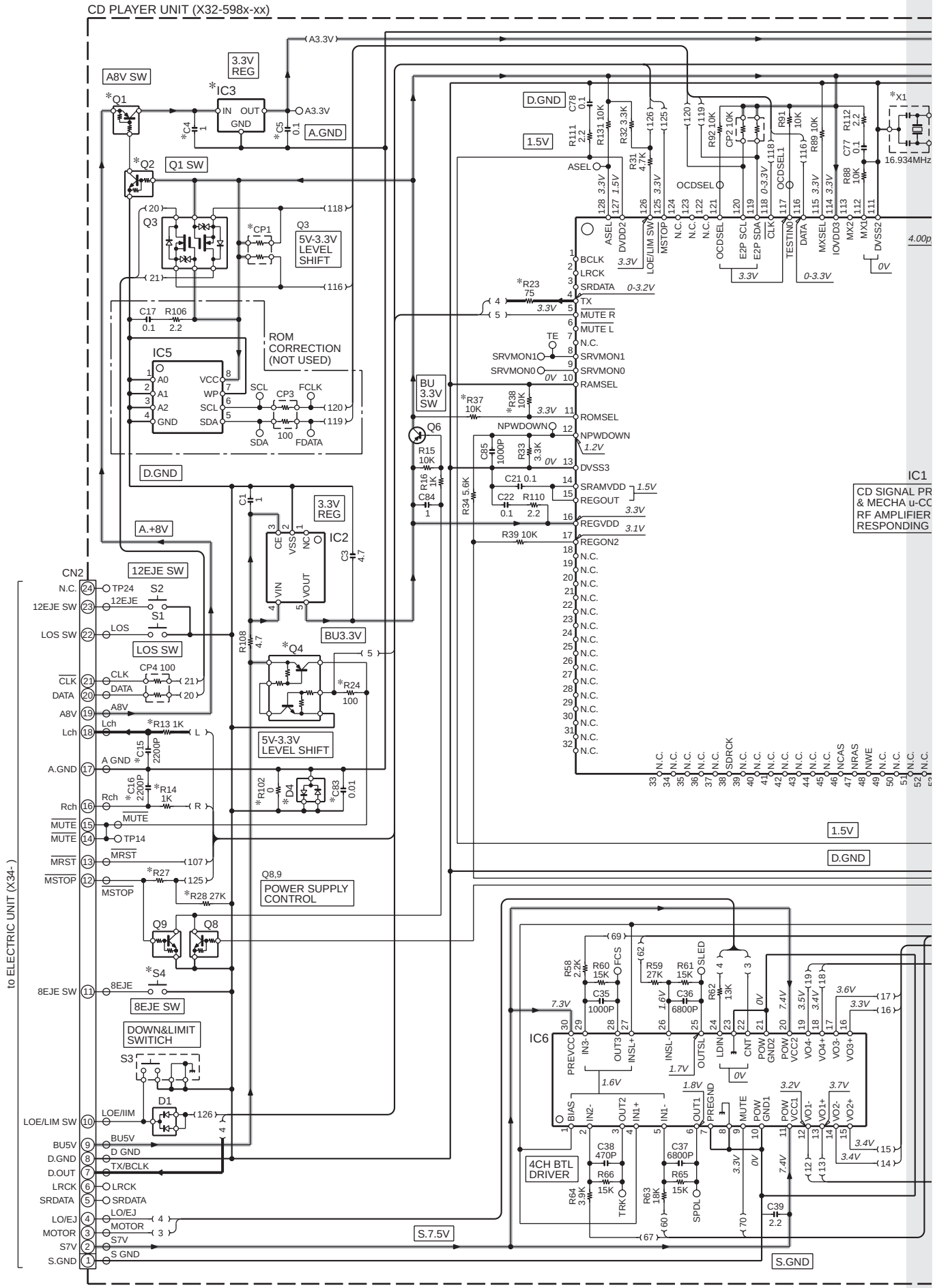
KDC-135/135CR/136 (2/2)

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

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

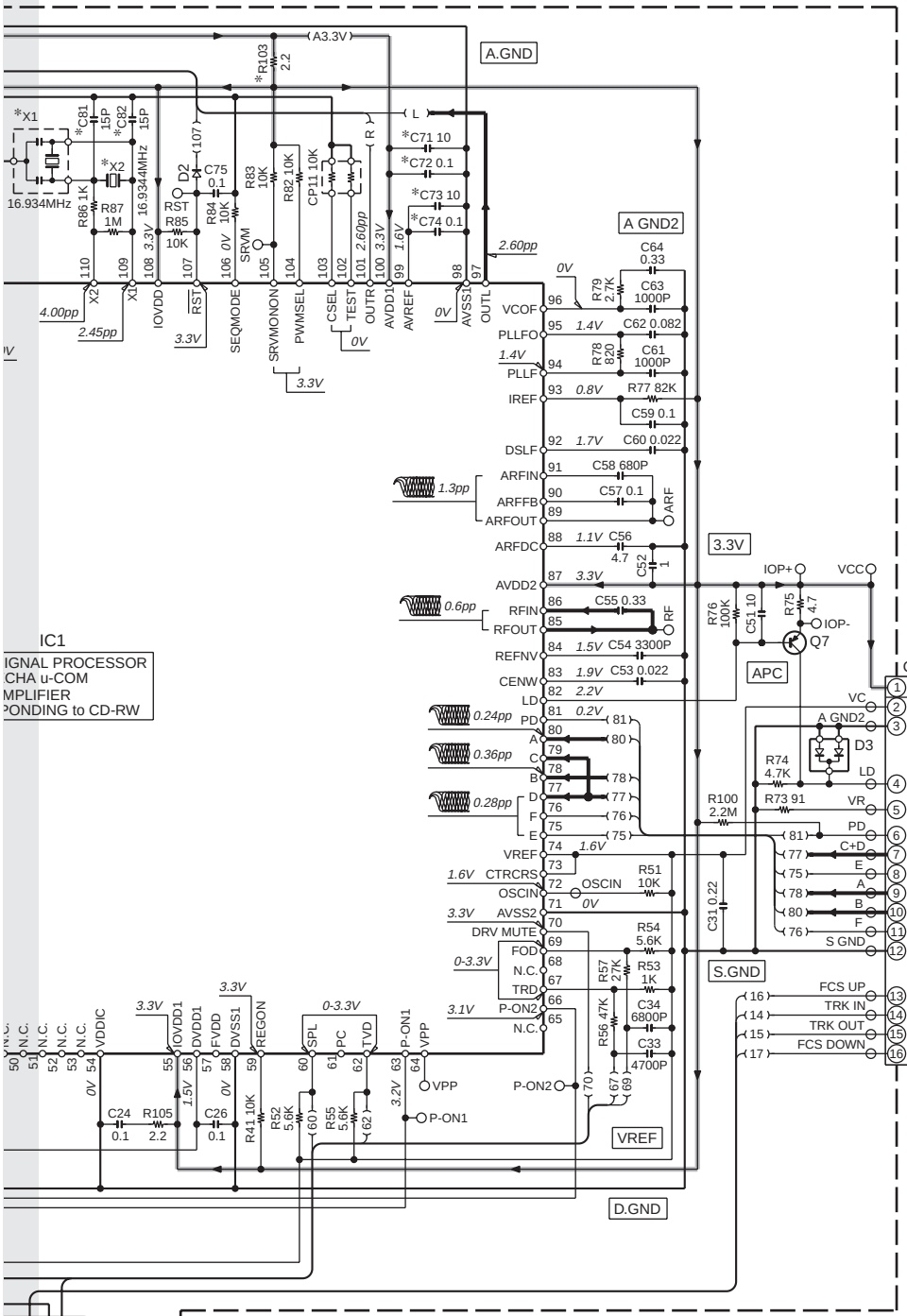
- DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

KDC-135/135CR/136



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.



(X32-598x-xx)

AUDIO	DESTINATION	UNIT No.	C4,5,15,16, 71,73,83	C72,74, 81,82	CP1	D4	IC3	Q1, 2,4	R13,14, 28,38	R23,24,37 102,103	R27	S4	X1	X2
ANALOG	K/M/E	0-00	YES	—	10K	YES	YES	YES	YES	—	22K	—	YES	—
OUTPUT	J	0-01	YES	—	10K	YES	YES	YES	YES	—	22K	YES	YES	—
DIGITAL	K/M/E	0-02	—	YES	2.2K	—	—	—	—	YES	100	—	—	YES
OUTPUT	J	0-03	—	YES	2.2K	—	—	—	—	YES	100	YES	—	YES

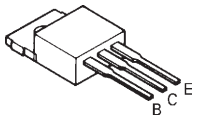
IC1 : MN6627781KA
IC2 : XC6219B332PR
IC3 : XC6201P332PRN
IC5 : (NOT USED)
IC6 : BA5824FP

Q1 : DTA143XUA
Q2,8,9 : DTC114YUA
Q3 : UM6K1N
Q4 : UMD9N
Q6 : 2SB1295-E
Q7 : 2SB0970

D1,3 : DAN202U
D2 : MA2S784-F
D4 : DA204U

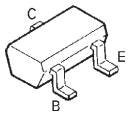
SIGNAL LINE
GND LINE
+B LINE

2SB1565

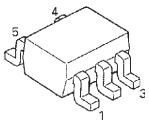


DTC114YUA
2SA1576A
2SB1295-E

2SC4081



UMC2N

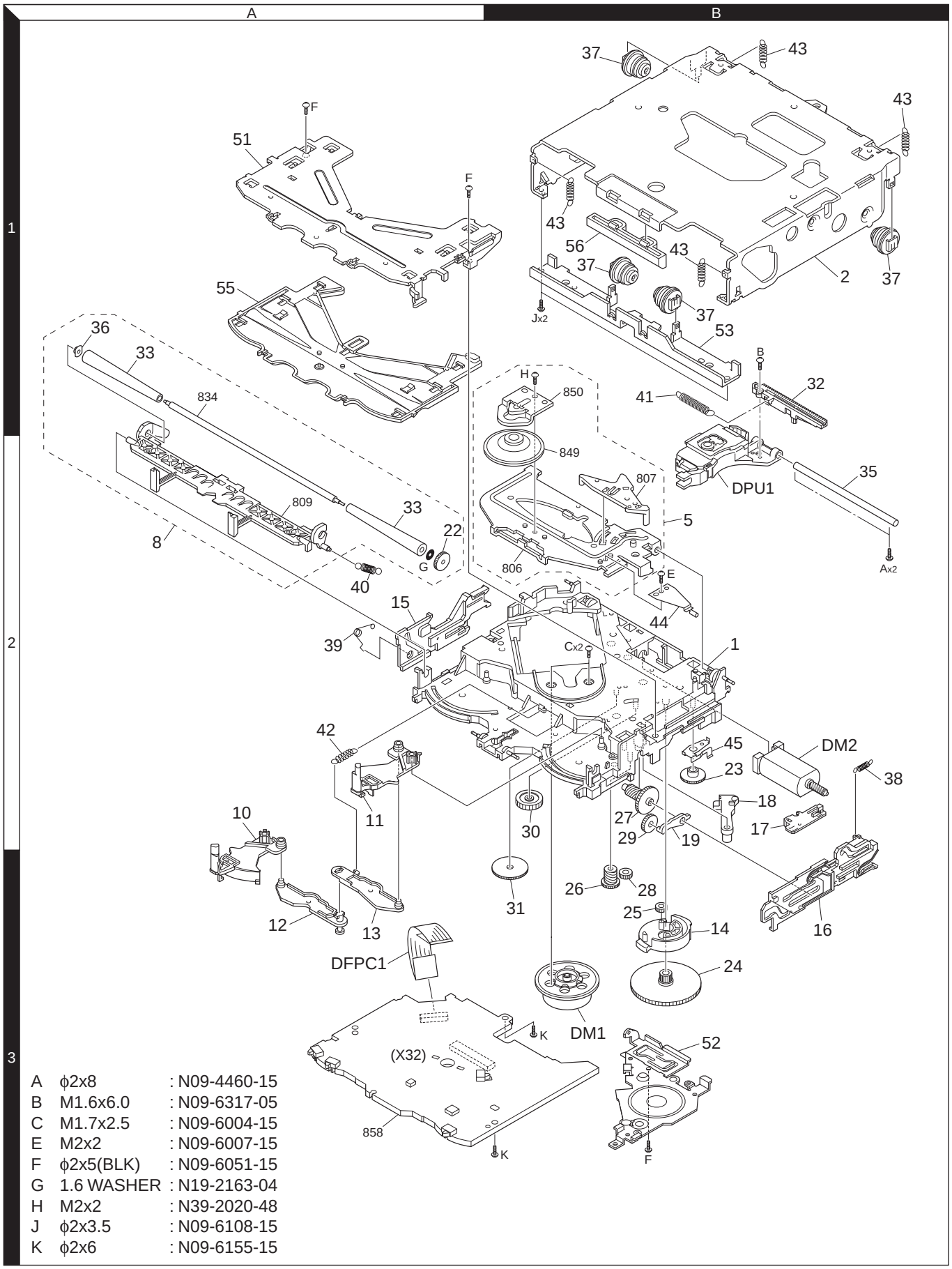


DAN202U

DA204U

KDC-135/135CR/136

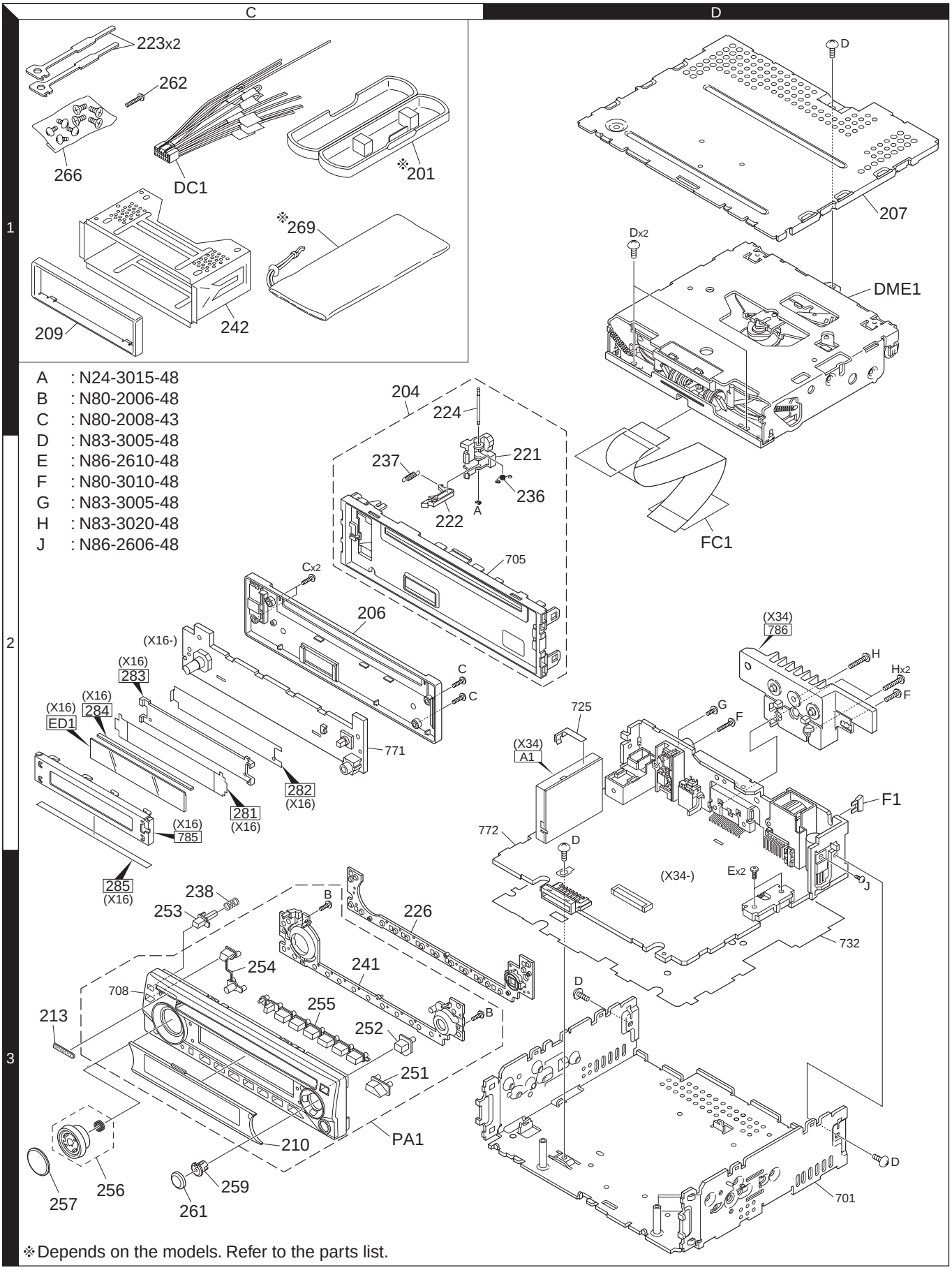
EXPLODED VIEW (CD MECHANISM)



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

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

EXPLODED VIEW (UNIT)



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

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-135/135CR/136					
201	1C		A02-2736-03	PLASTIC CABINET ASSY	M7
204	1C	✻	A22-3117-13	SUB PANEL ASSY	
206	2C	✻	A46-1846-11	REAR COVER	
207	1D		A52-0804-12	TOP PLATE	
PA1	3C	✻	A64-4039-02	PANEL ASSY	M7
PA1	3C	✻	A64-4040-12	PANEL ASSY	K4
PA1	3C	✻	A64-4041-12	PANEL ASSY	K5
-			B46-0681-04	ID CARD	
-		✻	B64-3691-00	INST. MANUAL (ENG.FRE.SPA)	K4K5
-		✻	B64-3693-00	INST. MANUAL (ENG.T-CHI)	M7
-		✻	B64-3694-00	INST. MANUAL (ARABIC)	M7
209	1C		B07-3122-01	ESCUTCHEON	K5M7
209	1C		B07-3126-01	ESCUTCHEON	K4
210	3C	✻	B10-4909-01	FRONT GLASS	M7
210	3C	✻	B10-4910-11	FRONT GLASS	K4
210	3C	✻	B10-4911-01	FRONT GLASS	K5
213	3C		B43-1518-04	BADGE	
221	2D		D10-4446-03	LEVER	
222	2C		D10-4447-03	LEVER	
223	1C		D10-4589-04	LEVER	
224	1C		D21-2329-04	SHAFT	
226	3C	✻	E29-2089-02	CONDUCTIVE RUBBER	
⚠ DC1	1C		E30-6415-15	DC CORD	
FC1	2D		E39-0736-05	FLAT CABLE (24-PIN)	
⚠ F1	2D		F52-0023-05	FUSE (MINI BLADE TYPE) (10A)	
236	2D		G01-2987-04	TORSION COIL SPRING	
237	2C		G01-3096-04	EXTENSION SPRING	
238	3C		G01-3244-04	COMPRESSION SPRING (REL)	
-		✻	H54-3911-03	ITEM CARTON CASE	K4
-		✻	H54-3912-03	ITEM CARTON CASE	K5
-		✻	H54-3923-03	ITEM CARTON CASE	M7
241	3C	✻	J19-7158-01	HOLDER	
242	1C		J21-9716-03	MOUNTING HARDWARE ASSY	
251	3C	✻	K24-4653-04	PUSH KNOB (SRC)	
252	3C	✻	K24-4652-04	PUSH KNOB (EJECT)	
253	3C	✻	K24-4654-04	PUSH KNOB (RELEASE)	
254	3C	✻	K25-1860-03	PUSH KNOB (MENU/ATT)	
255	3C	✻	K25-1859-02	PUSH KNOB (PRESET)	
256	3C	✻	K28-0201-03	KNOB ASSY (VOL)	
257	3C	✻	K28-0190-03	KEY TOP (VOL)	K5
257	3C	✻	K28-0191-03	KEY TOP (VOL)	K4M7
259	3C		K29-7141-03	KNOB BASE (FM/AM)	
261	3C	✻	K28-0195-03	KEY TOP (FM/AM)	K5
261	3C	✻	K28-0196-03	KEY TOP (FM/AM)	K4M7
262	1C		N84-4016-48	PAN HEAD TAPTITE SCREW	
266	1C		N99-1757-05	SCREW SET	
A	2C		N24-3015-48	E TYPE RETAINING RING	
B	3C		N80-2006-48	PAN HEAD TAPTITE SCREW	
C	2C		N80-2008-43	PAN HEAD TAPTITE SCREW	
D	1D		N83-3005-48	PAN HEAD TAPTITE SCREW	
E	3D		N86-2610-48	BINDING HEAD TAPTITE SCREW	
269	1C	✻	W01-1692-05	CARRYING CASE	K5
DME1	1D	✻	X92-5860-00	MECHANISM ASSY (DXM-6C00W)	
SWITCH UNIT (X16-388x-xx)					
281	2C		B11-1489-04	OPTICAL DIFFUSER	
282	2C		B11-1495-04	REFLECTION SHEET	
283	2C		B19-2366-02	LIGHTING BOARD	
D2			B30-1698-05	LED	
D3			B30-1566-05	LED (1608,RED)	K5M7
D3-21			B30-1566-05	LED (1608,RED)	K4
D4-21			B30-1565-05	LED (1608,PG)	K5M7
ED1	2C	✻	B38-1183-05	LCD	
C1			CK73GB1H102K	CHIP C 1000PF K	
C2			CK73GB1H104K	CHIP C 0.10UF K	
C3,4			CK73GB1H473K	CHIP C 0.047UF K	
C5			CK73FB1A225K	CHIP C 2.2UF K	K5
C6,7			CK73GB1H102K	CHIP C 1000PF K	K4K5
284	2C		E29-2068-04	CONDUCTIVE RUBBER	
J1		✻	E59-0852-05	RECTANGULAR PLUG	
J2		✻	E11-0650-05	3.5D PHONE JACK	K4K5
285	3C		F19-1468-04	BLIND PLATE	
CP1			RK74GA1J222J	CHIP-COM 2.2K J 1/16W	
R1			RK73GB2A563J	CHIP R 56K J 1/10W	
R2			RK73GB2A4R7J	CHIP R 4.7 J 1/10W	
R3			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R5-10			RK73GB2A221J	CHIP R 220 J 1/10W	
R11			RK73GB2A102J	CHIP R 1.0K J 1/10W	K5
R12			RK73GB2A101J	CHIP R 100 J 1/10W	K5
R21			RK73EB2E431J	CHIP R 430 J 1/4W	
R24-28			RK73FB2B471J	CHIP R 470 J 1/8W	
R29			RK73EB2E681J	CHIP R 680 J 1/4W	
R30			RK73GB2A104J	CHIP R 100K J 1/10W	K5
R34			RK73EB2E681J	CHIP R 680 J 1/4W	
S1			S70-0106-05	TACT SWITCH	
S2		✻	T99-0474-05	ROTARY ENCODER	
D31-36			UDZS5.6B	ZENER DIODE	K4M7
D31-37			UDZS5.6B	ZENER DIODE	K5
IC1			LC75853NE-E	MOS-IC	
IC2			PNA4S22M02KW	ANALOGUE IC	K5
Q1			RT1P141U	TRANSISTOR	
CD PLAYER UNIT (X32-5980-00) IN CD MECHA					
C1			CK73GB1A105K	CHIP C 1.0UF K	
C3			CK73GB0J475K	CHIP C 4.7UF K	
C4			CK73GB1A105K	CHIP C 1.0UF K	
C5			CK73GB1H104K	CHIP C 0.10UF K	
C15,16			CK73GB1H222K	CHIP C 2200PF K	
C21,22			CK73GB1H104K	CHIP C 0.10UF K	
C24			CK73GB1H104K	CHIP C 0.10UF K	
C26			CK73GB1H104K	CHIP C 0.10UF K	

K4 : KDC-135 **K5** : KDC-135CR **M7** : KDC-136
(**E** : Europe **K** : North America **M** : Other Areas **W** : Without Europe)

⚠ Indicates safety critical components.

PARTS LIST

CD PLAYER UNIT (X32-5980-00) IN CD MECHA

Ref. No.	Add	New	Parts No.	Description			Destination
C31			CK73GB1C224K	CHIP C	0.22UF	K	
C33			CK73GB1H472K	CHIP C	4700PF	K	
C34			CK73GB1H682K	CHIP C	6800PF	K	
C35			CK73GB1H102K	CHIP C	1000PF	K	
C36,37			CK73GB1H682K	CHIP C	6800PF	K	
C38			CK73GB1H471K	CHIP C	470PF	K	
C39			CK73FB1A225K	CHIP C	2.2UF	K	
C51			CK73FB0J106K	CHIP C	10UF	K	
C52			CK73GB1H104K	CHIP C	0.10UF	K	
C53			CK73GB1H223K	CHIP C	0.022UF	K	
C54			CK73GB1H332K	CHIP C	3300PF	K	
C55			CK73GB1A334K	CHIP C	0.33UF	K	
C56			CK73FB0J475K	CHIP C	4.7UF	K	
C57			CK73GB1H104K	CHIP C	0.10UF	K	
C58			CC73GCH1H681J	CHIP C	680PF	J	
C59			CK73GB1H104K	CHIP C	0.10UF	K	
C60			CK73GB1H223K	CHIP C	0.022UF	K	
C61			CC73GCH1H102J	CHIP C	1000PF	J	
C62			CK73GB1C823K	CHIP C	0.082UF	K	
C63			CC73GCH1H102J	CHIP C	1000PF	J	
C64			CK73GB1A334K	CHIP C	0.33UF	K	
C71			CK73EB1C106K	CHIP C	10UF	K	
C73			CK73EB1C106K	CHIP C	10UF	K	
C75			CK73GB1H104K	CHIP C	0.10UF	K	
C77,78			CK73GB1H104K	CHIP C	0.10UF	K	
C83			CK73GB1H103K	CHIP C	0.010UF	K	
C84			CK73GB1A105K	CHIP C	1.0UF	K	
C85			CK73GB1H102K	CHIP C	1000PF	K	
CN1			E41-2612-05	FLAT CABLE CONNECTOR			
CN2			E41-2083-15	FLAT CABLE CONNECTOR			
X1			L78-0851-05	RESONATOR (16.93MHZ)			
CP1,2			RK74GA1J103J	CHIP-COM	10K	J 1/16W	
CP4			RK74GA1J101J	CHIP-COM	100	J 1/16W	
CP11			RK74GA1J103J	CHIP-COM	10K	J 1/16W	
R13,14			RK73GB2A102J	CHIP R	1.0K	J 1/10W	
R15			RK73GB2A103J	CHIP R	10K	J 1/10W	
R16			RK73GB2A102J	CHIP R	1.0K	J 1/10W	
R27			RK73GH2A223D	CHIP R	22K	D 1/10W	
R28			RK73GH2A273D	CHIP R	27K	D 1/10W	
R31			RK73GB2A472J	CHIP R	4.7K	J 1/10W	
R32,33			RK73GB2A332J	CHIP R	3.3K	J 1/10W	
R34			RK73GB2A562J	CHIP R	5.6K	J 1/10W	
R38,39			RK73GB2A103J	CHIP R	10K	J 1/10W	
R41			RK73GB2A103J	CHIP R	10K	J 1/10W	
R51			RK73GB2A103J	CHIP R	10K	J 1/10W	
R52			RK73GB2A562J	CHIP R	5.6K	J 1/10W	
R53			RK73GB2A102J	CHIP R	1.0K	J 1/10W	
R54,55			RK73GB2A562J	CHIP R	5.6K	J 1/10W	
R56			RK73GB2A473J	CHIP R	47K	J 1/10W	
R57			RK73GB2A273J	CHIP R	27K	J 1/10W	
R58			RK73GB2A222J	CHIP R	2.2K	J 1/10W	
R59			RK73GB2A273J	CHIP R	27K	J 1/10W	
R60,61			RK73GB2A153J	CHIP R	15K	J 1/10W	
R62			RK73GB2A133J	CHIP R	13K	J 1/10W	
R63			RK73GB2A183J	CHIP R	18K	J 1/10W	
R64			RK73GB2A392J	CHIP R	3.9K	J 1/10W	
R65,66			RK73GB2A153J	CHIP R	15K	J 1/10W	
R73			RK73GB2A910J	CHIP R	91	J 1/10W	
R74			RK73GB2A472J	CHIP R	4.7K	J 1/10W	
R75			RK73FB2B4R7J	CHIP R	4.7	J 1/8W	
R76			RK73GB2A104J	CHIP R	100K	J 1/10W	
R77			RK73GB2A823J	CHIP R	82K	J 1/10W	
R78			RK73GB2A821J	CHIP R	820	J 1/10W	
R79			RK73GB2A272J	CHIP R	2.7K	J 1/10W	
R82-85			RK73GB2A103J	CHIP R	10K	J 1/10W	
R86			RK73GB2A102J	CHIP R	1.0K	J 1/10W	
R87			RK73GB2A105J	CHIP R	1.0M	J 1/10W	
R88,89			RK73GB2A103J	CHIP R	10K	J 1/10W	
R91,92			RK73GB2A103J	CHIP R	10K	J 1/10W	
R100			RK73GB2A225J	CHIP R	2.2M	J 1/10W	
R105			RK73GB2A2R2J	CHIP R	2.2	J 1/10W	
R108			RK73EB2E4R7J	CHIP R	4.7	J 1/4W	
R110-112			RK73GB2A2R2J	CHIP R	2.2	J 1/10W	
R131			RK73GB2A103J	CHIP R	10K	J 1/10W	
S1,2			S68-0863-05	PUSH SWITCH			
S3			S68-0862-05	PUSH SWITCH			
D1			DAN202U	DIODE			
D2			MA2S784-F	DIODE			
D3			DAN202U	DIODE			
D4			DA204U	DIODE			
IC1		✻	MN6627781KA	MOS-IC			
IC2			XC6219B332PR	ANALOGUE IC			
IC3			XC6201P332PR	ANALOGUE IC			
IC6			BA5824FP	ANALOGUE IC			
Q1			DTA143XUA	DIGITAL TRANSISTOR			
Q2			DTC114YUA	DIGITAL TRANSISTOR			
Q3			UM6K1N	DUAL FET			
Q4			UMD9N	TRANSISTOR			
Q6			2SB1295-E	TRANSISTOR			
Q7			2SB0970	TRANSISTOR			
Q8,9			DTC114YUA	DIGITAL TRANSISTOR			

ELECTRIC UNIT (X34-469x-xx)

D302			B30-1567-05	LED (1608,RED)			
C1		✻	CD04AZ1C332M2	ELECTRO	3300UF	16WV	
C2			CD04AB1C220M	ELECTRO	22UF	16WV	
C3			CK73GB1H104K	CHIP C	0.10UF	K	K4K5
C3,4			CK73GB1H104K	CHIP C	0.10UF	K	M7
C5,6			CD04AT1E101M	ELECTRO	100UF	25WV	
C7			CD04AB0J101M	ELECTRO	100UF	6.3WV	
C9			CK73GB1H104K	CHIP C	0.10UF	K	
C11			CK73FB1A225K	CHIP C	2.2UF	K	
C12			CK73GB1H104K	CHIP C	0.10UF	K	
C14			CK73GB1H104K	CHIP C	0.10UF	K	
C101,102			CK73GB1H103K	CHIP C	0.010UF	K	
C202			CC73GCH1H180J	CHIP C	18PF	J	
C203			CC73GCH1H220J	CHIP C	22PF	J	

K4 : KDC-135 **K5** : KDC-135CR **M7** : KDC-136
(**E** : Europe **K** : North America **M** : Other Areas **W** : Without Europe)

⚠ Indicates safety critical components.

PARTS LIST

ELECTRIC UNIT (X34-469x-xx)

Ref. No.	Add	New	Parts No.	Description				Destination
C204			CK73GB1H104K	CHIP C	0.10UF	K		
C205			CK73GB1H102K	CHIP C	1000PF	K		
C301,302			CD04AB1HR47M	ELECTRO	0.47UF	50WV		
C306,307			CK73FB1E474K	CHIP C	0.47UF	K		K4K5
C308			CD04AB0J470M	ELECTRO	47UF	6.3WV		K4K5
C309			CK73GB1H103K	CHIP C	0.010UF	K		K4K5
C401			CD04AB1C470M	ELECTRO	47UF	16WV		
C403			CD04AB1H010M	ELECTRO	1.0UF	50WV		
C502			CK73GB1H103K	CHIP C	0.010UF	K		
C504			CK73GB1H103K	CHIP C	0.010UF	K		
C506			CK73GB1H103K	CHIP C	0.010UF	K		
C508			CK73GB1H103K	CHIP C	0.010UF	K		
C509,510			CK73GB1A474K	CHIP C	0.47UF	K		
C701,702			CD04AB1V100M	ELECTRO	10UF	35WV		
C703,704			CC73GCH1H681J	CHIP C	680PF	J		
C801-804			C90-6735-05	NP-ELECT	0.22UF	50WV		
C805			CD04AB1V100M	ELECTRO	10UF	35WV		
C807			CD04AB1H010M	ELECTRO	1.0UF	50WV		
C808			C90-6802-05	ELECTRO	1UF	50WV		
C809			CD04AB1H010M	ELECTRO	1.0UF	50WV		
C901,902			CD04AB1C101M	ELECTRO	100UF	16WV		
C990			CK73GB1H223K	CHIP C	0.022UF	K		
CN2			E41-2581-05	FLAT CABLE CONNECTOR				
⚠ J1			E58-0991-05	RECTANGULAR RECEPTACLE				
J2		✻	E04-0334-05	RF COAXIAL CABLE RECEPTACLE				
J3		✻	E58-1060-05	RECTANGULAR RECEPTACLE				
J5		✻	E63-0941-05	PIN JACK				
W101-103			E31-0001-00	JUMPER WIRE				K4K5
L1			L33-2319-05	CHOKE COIL ASSY				
L401			L41-4795-33	SMALL FIXED INDUCTOR (4.7UH)				
X1		✻	L78-1218-05	RESONATOR (10.000MHZ)				
X2			L77-2920-05	CRYSTAL RESONATOR (32.768KHZ)				
F	2D		N80-3010-48	PAN HEAD TAPTITE SCREW				
G	2D		N83-3005-48	PAN HEAD TAPTITE SCREW				
H	2D		N83-3020-48	PAN HEAD TAPTITE SCREW				
J	3D		N86-2606-48	BINDING HEAD TAPTITE SCREW				
R1			RD14BB2C102J	RD	1.0K	J	1/6W	
R2-5			RD14BB2C103J	RD	10K	J	1/6W	
R101			RD14BB2C472J	RD	4.7K	J	1/6W	K4K5
R101,102			RD14BB2C472J	RD	4.7K	J	1/6W	M7
R103			RD14BB2C103J	RD	10K	J	1/6W	
R104			RK73GB2A473J	CHIP R	47K	J	1/10W	
R105			RK73GB2A104J	CHIP R	100K	J	1/10W	
R106			RD14DB2H332J	SMALL-RD	3.3K	J	1/2W	
R107			RD14BB2C333J	RD	33K	J	1/6W	
R108			RK73GB2A103J	CHIP R	10K	J	1/10W	
R109			RD14BB2C223J	RD	22K	J	1/6W	
R110			RK73FB2B683J	CHIP R	68K	J	1/8W	
R111			RK73GB2A393J	CHIP R	39K	J	1/10W	
R112			RD14BB2C203J	RD	20K	J	1/6W	
R113			RK73GB2A104J	CHIP R	100K	J	1/10W	
R114,115			RK73GB2A103J	CHIP R	10K	J	1/10W	
R116,117			RD14BB2C103J	RD	10K	J	1/6W	

Ref. No.	Add	New	Parts No.	Description				Destination
R203,204			RK73GB2A103J	CHIP R	10K	J	1/10W	
R205-207			RK73GB2A473J	CHIP R	47K	J	1/10W	
R208			RD14BB2C473J	RD	47K	J	1/6W	
R209,210			RD14BB2C471J	RD	470	J	1/6W	
R212			RK73GB2A473J	CHIP R	47K	J	1/10W	
R218			RK73GB2A223J	CHIP R	22K	J	1/10W	
R223			RK73GB2A222J	CHIP R	2.2K	J	1/10W	
R225,226			RK73GB2A473J	CHIP R	47K	J	1/10W	K5
R226			RK73GB2A473J	CHIP R	47K	J	1/10W	K4
R226,227			RK73GB2A473J	CHIP R	47K	J	1/10W	M7
R228			RK73GB2A223J	CHIP R	22K	J	1/10W	M7
R228			RK73GB2A473J	CHIP R	47K	J	1/10W	K4K5
R301			RK73GB2A222J	CHIP R	2.2K	J	1/10W	
R302			RD14BB2C101J	RD	100	J	1/6W	
R306			RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R307			RK73GB2A222J	CHIP R	2.2K	J	1/10W	
R310,311			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R313			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R314			RK73GB2A104J	CHIP R	100K	J	1/10W	
R315,316			RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R317			RK73GB2A222J	CHIP R	2.2K	J	1/10W	
R318			RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R319			RK73GB2A222J	CHIP R	2.2K	J	1/10W	
R320			RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R323			RD14BB2C241J	RD	240	J	1/6W	
R330			RD14BB2C222J	RD	2.2K	J	1/6W	
R331			RK73GB2A473J	CHIP R	47K	J	1/10W	
R332			RD14BB2C222J	RD	2.2K	J	1/6W	
R333,334			RD14BB2C102J	RD	1.0K	J	1/6W	K5
R334			RD14BB2C102J	RD	1.0K	J	1/6W	K4M7
R335			RK73GB2A473J	CHIP R	47K	J	1/10W	
R336-339			RD14BB2C222J	RD	2.2K	J	1/6W	
R340			RK73GB2A225J	CHIP R	2.2M	J	1/10W	
R341			RD14BB2C222J	RD	2.2K	J	1/6W	
R342			RK73GB2A473J	CHIP R	47K	J	1/10W	
R343			RD14BB2C102J	RD	1.0K	J	1/6W	
R344,345			RD14BB2C4R7J	RD	4.7	J	1/6W	K4K5
R346			RD14BB2C2R2J	RD	2.2	J	1/6W	K4K5
R347			RK73GB2A102J	CHIP R	1.0K	J	1/10W	K4K5
R402,403			RD14BB2C471J	RD	470	J	1/6W	
R406			RK73GB2A223J	CHIP R	22K	J	1/10W	K4
R407			RD14BB2C103J	RD	10K	J	1/6W	K4
R408			RK73GB2A152J	CHIP R	1.5K	J	1/10W	K4
R409			RK73GB2A392J	CHIP R	3.9K	J	1/10W	K4
R491,492			RK73GB2A100J	CHIP R	10	J	1/10W	K4K5
R493			RD14BB2C100J	RD	10	J	1/6W	K4K5
R501			RK73GB2A471J	CHIP R	470	J	1/10W	
R502			RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R503			RK73GB2A471J	CHIP R	470	J	1/10W	
R504			RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R598			RK73GB2A223J	CHIP R	22K	J	1/10W	
R599			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R701,702			RK73GB2A331J	CHIP R	330	J	1/10W	
R703,704			RD14BB2C223J	RD	22K	J	1/6W	
R705,706			RD14BB2C181J	RD	180	J	1/6W	

K4 : KDC-135 **K5** : KDC-135CR **M7** : KDC-136
(**E** : Europe **K** : North America **M** : Other Areas **W** : Without Europe)

⚠ Indicates safety critical components.

PARTS LIST

ELECTRIC UNIT (X34-469x-xx)

Ref. No.	Add	New	Parts No.	Description				Destination
R791,792			RK73GB2A000J	CHIP R	0.0	J	1/10W	K5
R793			RK73EB2E000J	CHIP R	0.0	J	1/4W	K4M7
R802			RK73GB2A154J	CHIP R	150K	J	1/10W	
R804			RK73GB2A331J	CHIP R	330	J	1/10W	
R805			RK73GB2A154J	CHIP R	150K	J	1/10W	
R806			RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R807			RK73GB2A432J	CHIP R	4.3K	J	1/10W	
R808			RK73GB2A100J	CHIP R	10	J	1/10W	
R892			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R901,902			RK73GB2A334J	CHIP R	330K	J	1/10W	
R903			RK73GB2A153J	CHIP R	15K	J	1/10W	
R904			RK73GB2A223J	CHIP R	22K	J	1/10W	
R905,906			RK73GB2A104J	CHIP R	100K	J	1/10W	
R907-914			RD14BB2C104J	RD	100K	J	1/6W	
R915			RK73GB2A104J	CHIP R	100K	J	1/10W	
R951			RK73EB2E000J	CHIP R	0.0	J	1/4W	
R953			RK73GB2A000J	CHIP R	0.0	J	1/10W	M7
R955			RK73EB2E000J	CHIP R	0.0	J	1/4W	
R958			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R961-963			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R964,965			RK73EB2E000J	CHIP R	0.0	J	1/4W	
R968-971			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R973			RK73GB2A000J	CHIP R	0.0	J	1/10W	K4K5
D1			S2V60✻A	DIODE				
D2			MTZJ8.2(B)	ZENER DIODE				
D3			D1F60-5063	DIODE				
D4			1SS133	DIODE				K4K5
D4,5			1SS133	DIODE				M7
D101,102			D1F60-5063	DIODE				
D103			AM01ZNF	DIODE				M7
D104			D1F60-5063	DIODE				M7
D105			MTZJ4.7(B)	ZENER DIODE				
D106-108			MTZJ6.8(B)	ZENER DIODE				
D109			1SS133	DIODE				
D110			MC2848	DIODE				
D301			DA204U	DIODE				
D304,305			UDZS6.8B	ZENER DIODE				K4K5
D306			MTZJ6.8(B)	ZENER DIODE				K4K5
D401			1SS133	DIODE				
D404			1SS133	DIODE				K4
D801			MC2848	DIODE				
D803			1SS133	DIODE				
D901			MTZJ4.7(B)	ZENER DIODE				
IC1		✻	30302MAPD32FP	MICROCONTROLLER IC				
IC2		✻	E-TDA7419	ANALOGUE IC				K4M7
IC3		✻	E-TDA7418	ANALOGUE IC				K5
IC4		✻	BD4913-V4	ANALOGUE IC				
IC6		✻	KKZ10Z	ANALOGUE IC				K4K5
IC6			TB2904HQ	ANALOGUE IC				M7
IC8			S-80836CNNB-J	MOS-IC				
Q1			UMC2N	TRANSISTOR				
Q2			2SB1565	TRANSISTOR				
Q3			2SC4081	TRANSISTOR				
Q4			UMC2N	TRANSISTOR				M7

Ref. No.	Add	New	Parts No.	Description	Destination
Q101-103			2SC4081	TRANSISTOR	
Q104,105			RT1N441M	TRANSISTOR	
Q301			RT1P144M	TRANSISTOR	
Q302			RT1N144M	TRANSISTOR	
Q402			2SC4081	TRANSISTOR	K4
Q701,702			RT1N430M	TRANSISTOR	
Q705			RT1P241M	TRANSISTOR	
Q901			2SC4081	TRANSISTOR	
Q902,903			2SA1576A	TRANSISTOR	
TH1			PRF18BE471QS2	POSITIVE RESISTOR	
A1	2D	✻	X86-4030-11	FRONT-END UNIT	

MECHANISM ASSY (X92-5860-00) DXM-6C00W

1	2B		A10-5328-11	CHASSIS	
2	1B		A10-5329-01	CHASSIS	
5	2B		D10-4910-13	ARM ASSY	
8	2A		D10-4911-03	LEVER ASSY	
10	2A		D10-4906-33	ARM	
11	2A		D10-4907-33	ARM	
12	3A		D10-4908-03	ARM	
13	3A		D10-4909-03	ARM	
14	3B		D10-4915-03	ARM	
15	2A		D10-4916-23	SLIDER	
16	3B		D10-4914-12	SLIDER	
17	2B		D10-4588-13	SLIDER	
18	2B		D10-4917-04	ARM	
19	2B		D10-4596-24	ARM	
22	2A		D13-2151-04	GEAR	
23	2B		D13-2152-04	GEAR	
24	3B		D13-2153-04	GEAR	
25	3B		D13-2154-04	GEAR	
26	3B		D13-2155-04	WORM	
27	2B		D13-2156-14	GEAR	
28	3B		D13-2157-04	GEAR	
29	2B		D13-2158-04	GEAR	
30	2B		D13-2168-04	GEAR	
31	3B		D13-2171-04	GEAR	
32	1B		D13-2400-13	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		G01-4615-04	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		G02-1547-04	FLAT SPRING	
51	1A		J22-0473-21	MOUNTING HARDWARE	
52	3B		J22-0474-12	MOUNTING HARDWARE	
53	1B		J22-0519-03	MOUNTING HARDWARE	
55	1A		J90-1138-31	GUIDE	

K4 : KDC-135 **K5** : KDC-135CR **M7** : KDC-136
(**E** : Europe **K** : North America **M** : Other Areas **W** : Without Europe)

⚠ Indicates safety critical components.

PARTS LIST

MECHANISM ASSY (X92-5860-00) DXM-6C00W

Ref. No.	Add	New	Parts No.	Description	Destination
56	1B		J90-1023-03	GUIDE	
DFPC1	3A		J86-0027-05	FPC (LEAD FREE)	
A	2B		N09-4460-15	TAPTITE SCREW (PT2X8)	
B	1B		N09-6317-05	TAPTITE SCREW (1.6X6.0)	
C	2B		N09-6004-15	MACHINE SCREW (M1.7X2.5)	
E	2B		N09-6007-15	MACHINE SCREW (M2X2)	
F	1A		N09-6051-15	TAPTITE SCREW (PT2X5)	
G	2A		N19-2163-04	FLAT WASHER (1.6X6X0.25)	
H	1B		N39-2020-48	PAN HEAD MACHINE SCREW (M2X2)	
J	1B		N09-6108-15	TAPTITE SCREW (M2X3.5)	
K	3B		N09-6155-15	SEMS (TAPTITE SCREW) (PT2X6)	
DM1	3B		T42-1066-14	DC MOTOR (SPINDLE)	
DM2	2B		T42-1067-14	DC MOTOR (LOADING/SLED)	
DPU1	2B		X93-2130-01	OPTICAL PICKUP ASSY (LF)	

Ref. No.	Add	New	Parts No.	Description	Destination

K4 : KDC-135 **K5** : KDC-135CR **M7** : KDC-136
(**E** : Europe **K** : North America **M** : Other Areas **W** : Without Europe)

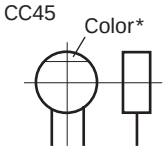
⚠ Indicates safety critical components.

PARTS LIST

CAPACITORS

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

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



• Capacitor value

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

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

(Less than 10pF)

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

• Voltage rating

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

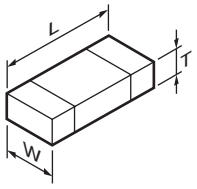
• Chip capacitors

(EX) CC 73 F SL 1H 000 J
1 2 3 4 5 6 7
(Chip) (CH, RH, UJ, SL)

(EX) CK 73 F F 1H 000 Z
1 2 3 4 5 6 7
(Chip) (B, F)

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

• Dimension



Chip capacitor

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

RESISTORS

• Chip resistor (Carbon)

(EX) RD 73 E B 2B 000 J
1 2 3 4 5 6 7
(Chip) (B, F)

• Carbon resistor (Normal type)

(EX) RD 14 B B 2C 000 J
1 2 3 4 5 6 7

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

Chip resistor

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

• Rating wattage

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

KDC-135/135CR/136

SPECIFICATIONS

FM tuner section

KDC-135/135CR
- Frequency range (200kHz space) ..... 87.9MHz~107.9MHz

KDC-136
- Frequency range (50kHz space) ..... 87.5MHz~108.0MHz
- 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

KDC-135/135CR
- Frequency range (10kHz space) ..... 530kHz~1700kHz

KDC-136
- Frequency range (9kHz space) ..... 531kHz~1611kHz
- 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 ..... 500~200rpm (CLV)
Wow & Flutter ..... Below Measurable Limit
Frequency response (±1dB) ..... 10Hz~20kHz
Total harmonic distortion (1kHz) 0.01%
Signal to Noise ratio (1kHz) 93dB
Dynamic range 93dB

Audio section

Maximum output power
- KDC-135/135CR ..... 50W x 4
- KDC-136 ..... 45W x 4

Full Bandwidth Power (at less than 1% THD) ..... 22W x 4
Speaker Impedance ..... 4~8Ω
Tone action
- Bass ..... 100Hz±8dB
- Middle ..... 1kHz±8dB
- Treble ..... 10kHz±8dB

Preout level / Load (during disc play) 2000mV/10kΩ
Preout impedance ..... ≦600Ω

Auxiliary input (KDC-135/135CR)

Frequency response (±1dB) ..... 20Hz~20kHz
Input Maximum Voltage 1200mV
Input Impedance 100kΩ

General

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

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

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