

PORTABLE MD PLAYER  
**DMC-K3**  
 SERVICE MANUAL

**KENWOOD**

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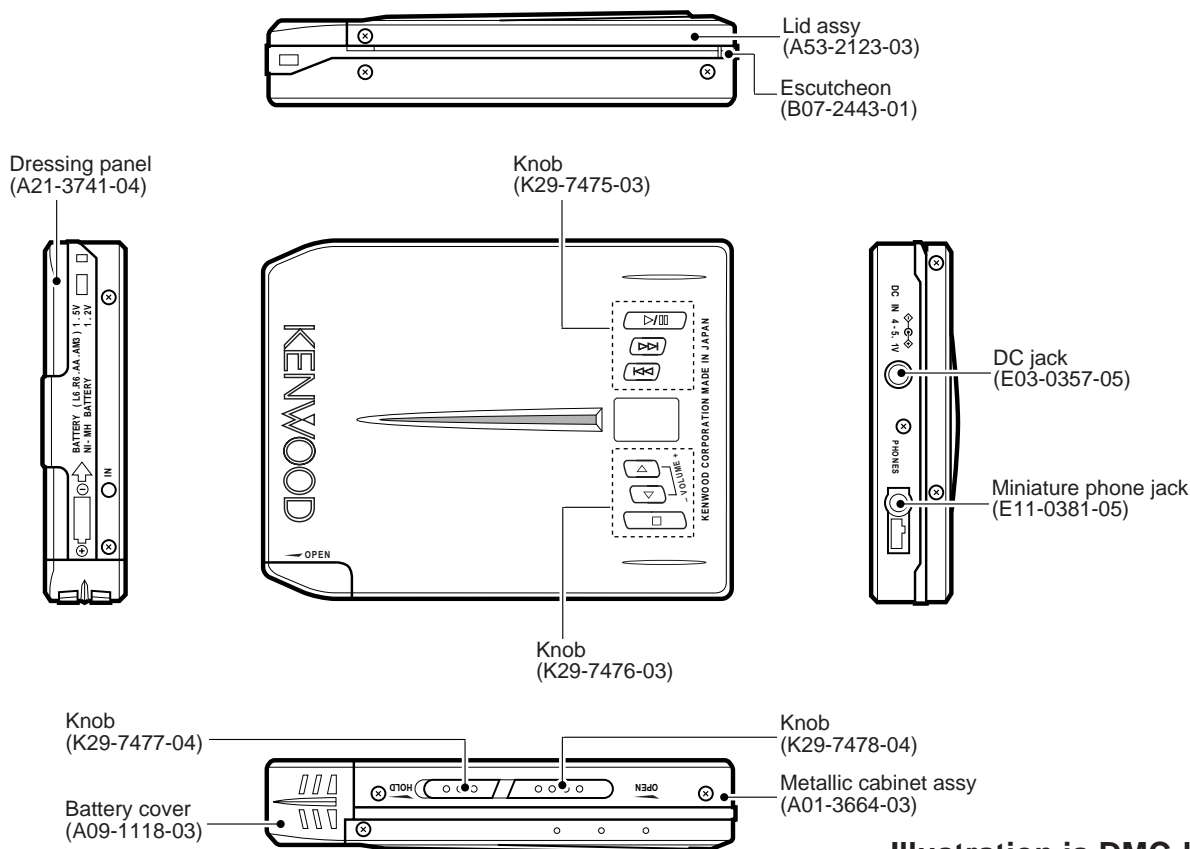


Illustration is DMC-K3(S).

## SPECIFICATIONS

<b>System</b> .....	Mini disc digital audio system
<b>Read method</b> .....	Noncontact optical reading system (semiconductor laser)
<b>Sampling frequency</b> .....	44.1 kHz
<b>Audio compression</b> .....	ATRAC (Adaptive Transform Acoustic Coding)
<b>Number of channels</b> .....	2 channels
<b>Frequency response</b> .....	20 Hz to 20,000 Hz ( $\pm 3$ dB)
<b>Wow &amp; flutter</b> .....	Less than unmeasurable limit ( $\pm 0.001$ % W.PEAK)
<b>Input/Output terminal</b> ..	Remote control/Phones jack
<b>Rated power output</b> .....	9 mW+9 mW
<b>Power source</b>	
DC IN jack (4-5.1V)	
:	Specially provided AC adaptor
:	Car battery adaptor (sold separately, DC-C70)
DC 1.5V :	Commercially sold AA alkaline battery (LR-6) $\times$ 1
DC 1.2V :	Specially provided rechargeable battery (NB-150) $\times$ 1
	(Charging time : About 3 hours)

<b>Battery life</b> (Fully charge, with "PS on" setting ON)	
Specially provided rechargeable battery (NB-150) $\times$ 1 .....	Approx. 7 hours
Commercially sold AA alkaline battery (LR-6) $\times$ 1 .....	Approx. 8 hours
• At 0.5mW+0.5mW output (32 $\Omega$ load).	
• Standard value during continuous use/charging in an temperature of 25°C.	
• Time of use may vary depending on battery maker, battery type, use environment, and temperatute.	
• Time will be shorter when "PS off" Mode is set.	
<b>Dimensions</b> (not including protruding parts)	
W :	99 mm (3-7/8")
H :	17 mm (11/16")
D :	75 mm (2-15/16")
<b>Weight (Net)</b> .....	115g (0.25 lb)
	not including the accessory rechargeable batter
	140g (0.31 lb)
	including the accessory rechargeable battery

- Notes**
1. KENWOOD follows a policy of continuous advancements in development. For reason specifications may be changed without notice.
  2. The full performance may not be exhibited in an extremely cold location (under a water-freezing temperature).

In compliance with Federal Regulations, following are reproductions of labels on, or inside the product relating to laser product safety.

KENWOOD-Corp. certifies this equipment conforms to DHHS Regulations No. 21 CFR 1040. 10, Chapter 1, Subchapter J.

**DANGER : Laser radiation when open and interlock defeated. AVOID DIRECT EXPOSURE TO BEAM.**

# DMC-K3

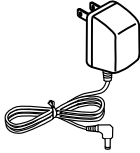
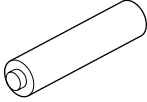
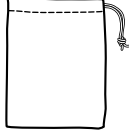
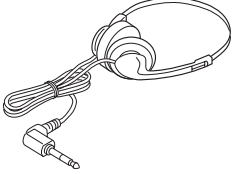
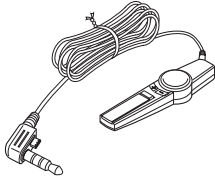
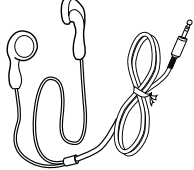
## CONTENTS / ACCESSORIES

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### Accessories

<p>AC adapter (1) * (W09-)</p> 	<p>Batteries : NB150 (1) (W09-1267-05)</p> 	<p>Carrying case (1) (W01-0938-05)</p> 	<p>Stereo headphone (1) * (W01-0963-05)</p> 
<p>Remotcon (1) (A70-1258-05)</p> 	<p>Stereo headphone (1) * (W01-)</p> 	<p>* Refer to parts list on page 17.</p>	

### Caution

#### Beware of condensation

When water vapor comes into contact with the surface of cold material, water drops are produced. If condensation occurs, correct operation may not be possible, or the unit may not function correctly. This is not a malfunction, however, and the unit should be dried. (To do this, turn the POWER switch ON and leave the unit as it is for several hours.)

Be especially careful in the following conditions:

- When the unit is brought from a cold place to warm place, and there is a large temperature difference.
- When a heater starts operating.
- When the unit is brought from an air-conditioned place to a place of high temperature with high humidity.
- When there is a large difference between the internal temperature of the unit and the ambient temperature, or in conditions where condensation occurs easily.

#### Resetting the unit

This system uses a microcomputer so it may malfunction due to external noise or interference. In such a case, unplug the power cord and remove the batteries, then plug the power cord again and insert the batteries again.

### Troubleshooting

Symptom	Cause	Remedy
Unit fails to turn ON.	<ul style="list-style-type: none"> <li>•The disc holder is not securely closed.</li> <li>•The battery is depleted.</li> <li>•HOLD status is engaged.</li> </ul>	<ul style="list-style-type: none"> <li>•Close disc holder securely.</li> <li>•Charge the battery.</li> <li>•Deactivate HOLD status.</li> </ul>
There is no sound.	<ul style="list-style-type: none"> <li>•The volume is at minimum level.</li> <li>•The remote control or headphones are disconnected.</li> </ul>	<ul style="list-style-type: none"> <li>•Increase the volume.</li> <li>•Insert plug securely.</li> </ul>
The unit does not respond to key operation.	<ul style="list-style-type: none"> <li>•HOLD status is engaged.</li> <li>•The battery is depleted.</li> <li>•The remote control or headphone plug is not securely inserted.</li> <li>•The disc holder is not securely closed.</li> </ul>	<ul style="list-style-type: none"> <li>•Deactivate HOLD status.</li> <li>•Charge the battery.</li> <li>•Insert plug securely.</li> <li>•Close disc holder securely.</li> </ul>
Sound skips.	<ul style="list-style-type: none"> <li>•The disc is scratched or damaged or the recording is not good.</li> <li>•The unit is in a place where there is excessive vibration.</li> </ul>	<ul style="list-style-type: none"> <li>•Replace the MD.</li> <li>•Move the unit to a place where there is little vibration or set to "PS off".</li> </ul>
Battery does not charge.	<ul style="list-style-type: none"> <li>•You are using commercial rechargeable battery.</li> <li>•The unit has become hot because of exposure to direct sunlight etc.</li> <li>•You are using another AC adaptor than the accessory adaptor.</li> <li>•The AC adaptors has become disconnected.</li> </ul>	<ul style="list-style-type: none"> <li>•Use the special rechargeable battery (NB-150)</li> <li>•Wait until the unit has cooled to normal temperature.</li> <li>•Use the accessory AC adaptor.</li> <li>•Connect the AC adaptor securely.</li> </ul>

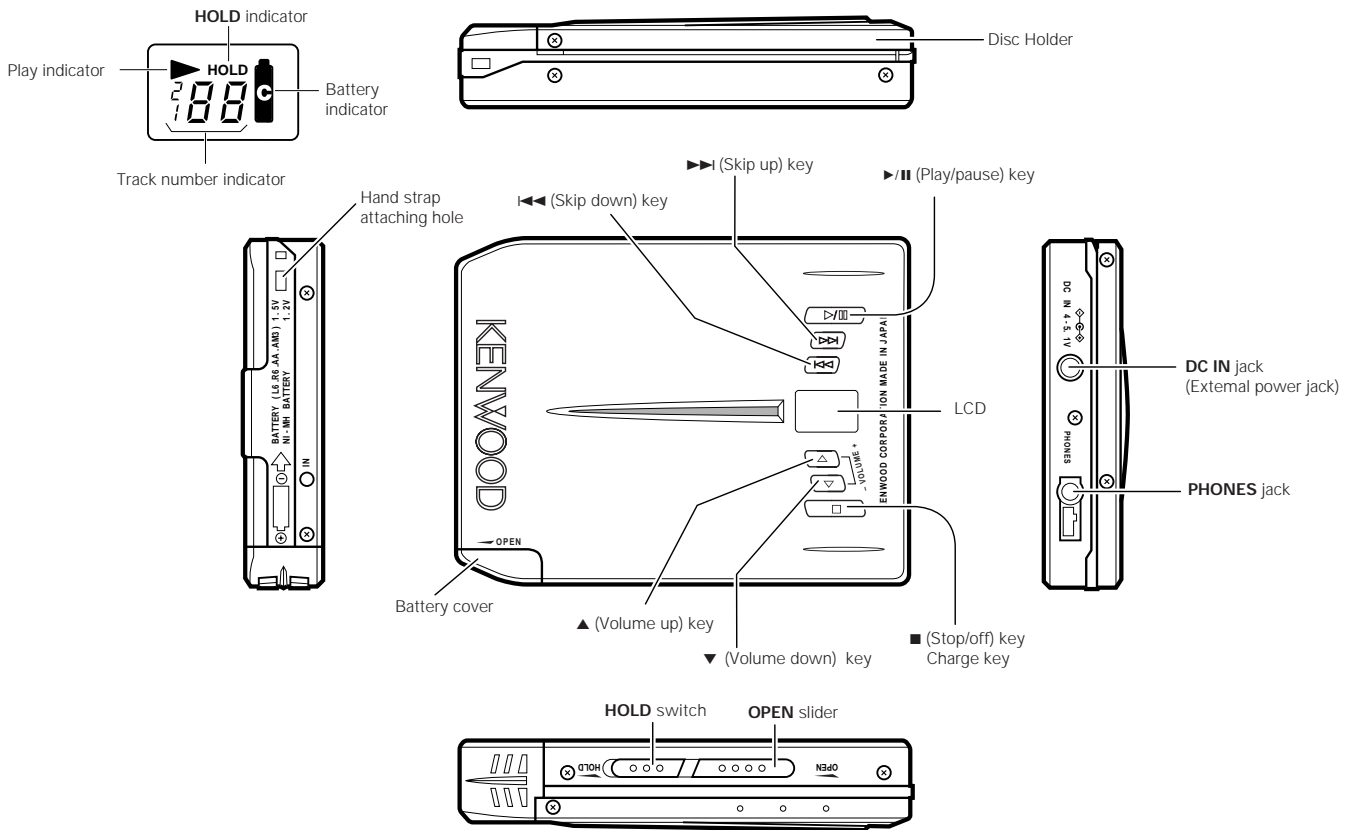
### Meaning of display messages

Message	Meaning	Action
"noDISC"	•There is no MD in the unit.	•Insert a MD into the unit.
"BLANK "	•Nothing is recorded on this MD.	•Replace the disc with a prerecorded MD when playing it back.
"ERROR "	<ul style="list-style-type: none"> <li>•The *UTOOC contents are faulty.</li> <li>•The disc is scratched or damaged, so playback is not possible.</li> </ul>	<ul style="list-style-type: none"> <li>•Replace the MD.</li> <li>•Replace the MD.</li> </ul>

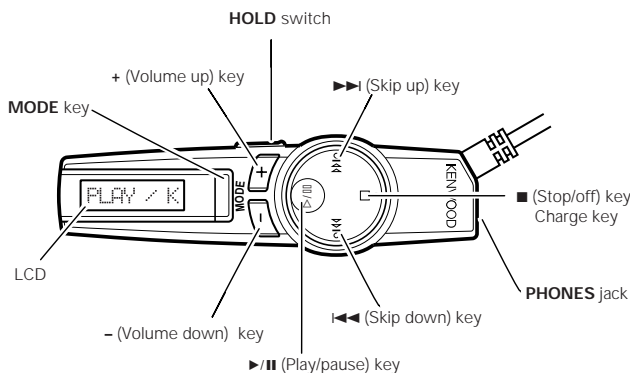
\*UTOOC: A recordable MD has an area for recording so-called UTOOC (User's Table of Contents) data. The UTOOC contains number of tracks, playing time, written data, and other rewritable information.

## CONTROLS

### Main Unit



### Remote Control



#### MODE key (Only by remote control operation)

Use this key to set playback-related features and other convenient functions. Please also read "Playback (Application)" and "Convenient functions" for details.

The mode changes each time the MODE key is pressed.

- ① Fast forward/fast reverse (search)
- ② Changing the display mode
- ③ Play Mode
- ④ Changing the tone (BASS BOOST)
- ⑤ Original display

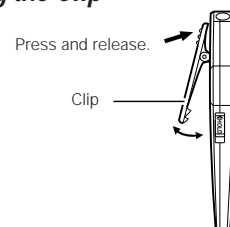
When the MODE key is held depressed for more than 2 seconds:

The mode changes each time the MODE key is pressed.

- ① AUTO PLAY
- ② AUTO POWER SAVE
- ③ Operating tone (Beep)
- ④ Original display

● To change one of the above set-ups after returning to the original display, restart from the step of pressing and holding the MODE key for more than 2 seconds.

#### Using the Clip



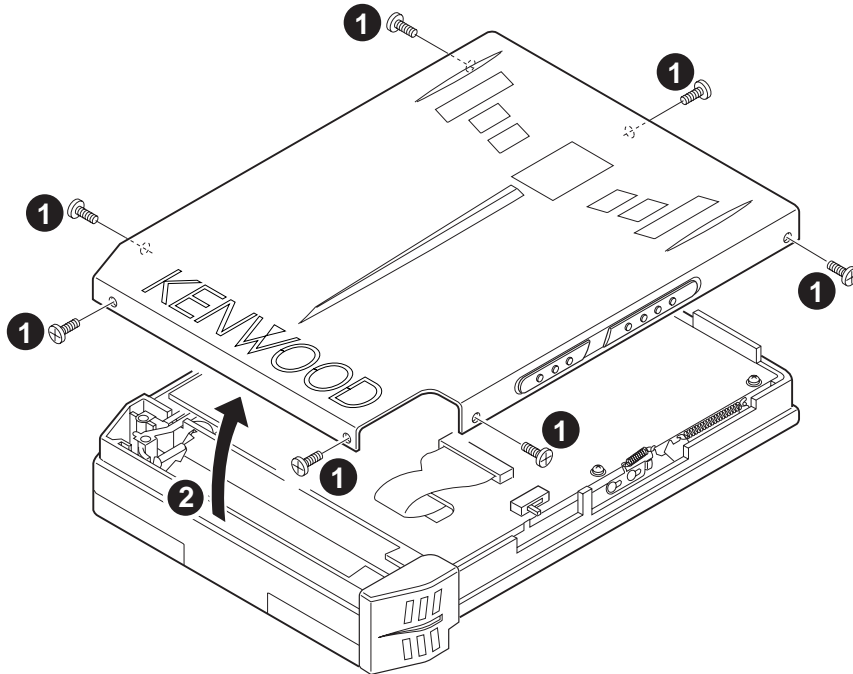
● Clip the remote control unit to the edge of your bag or pocket.

# DMC-K3

## DISASSEMBLY FOR REPAIR

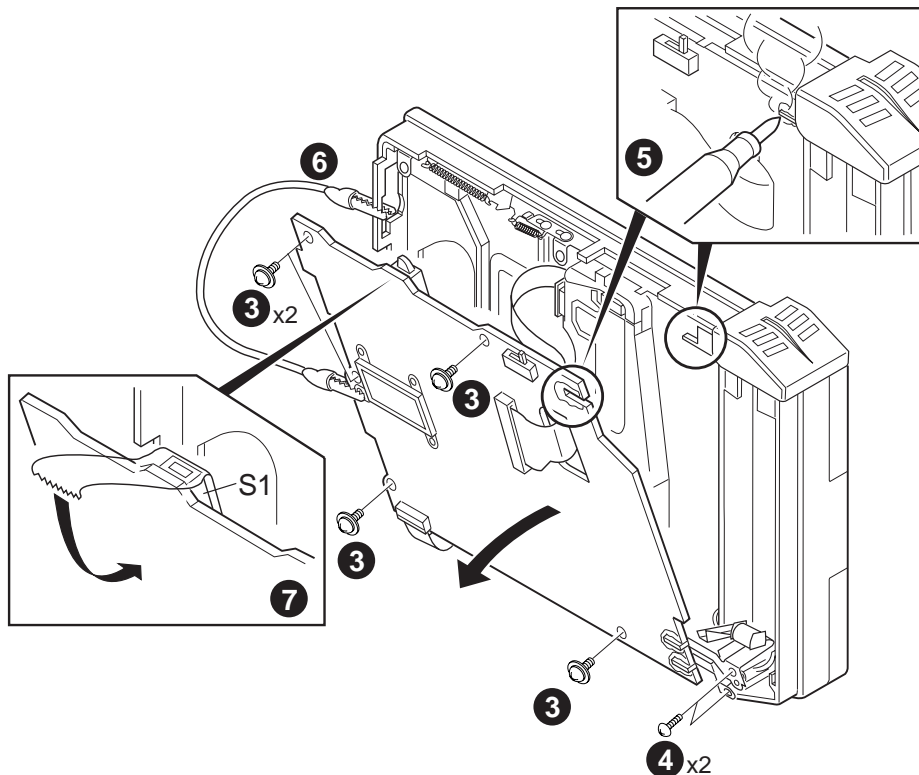
### How to Remove Case

1. Remove 7 screws(1).
2. Slide the case to the opposite side of the battery case(2).



### How to Check PCB

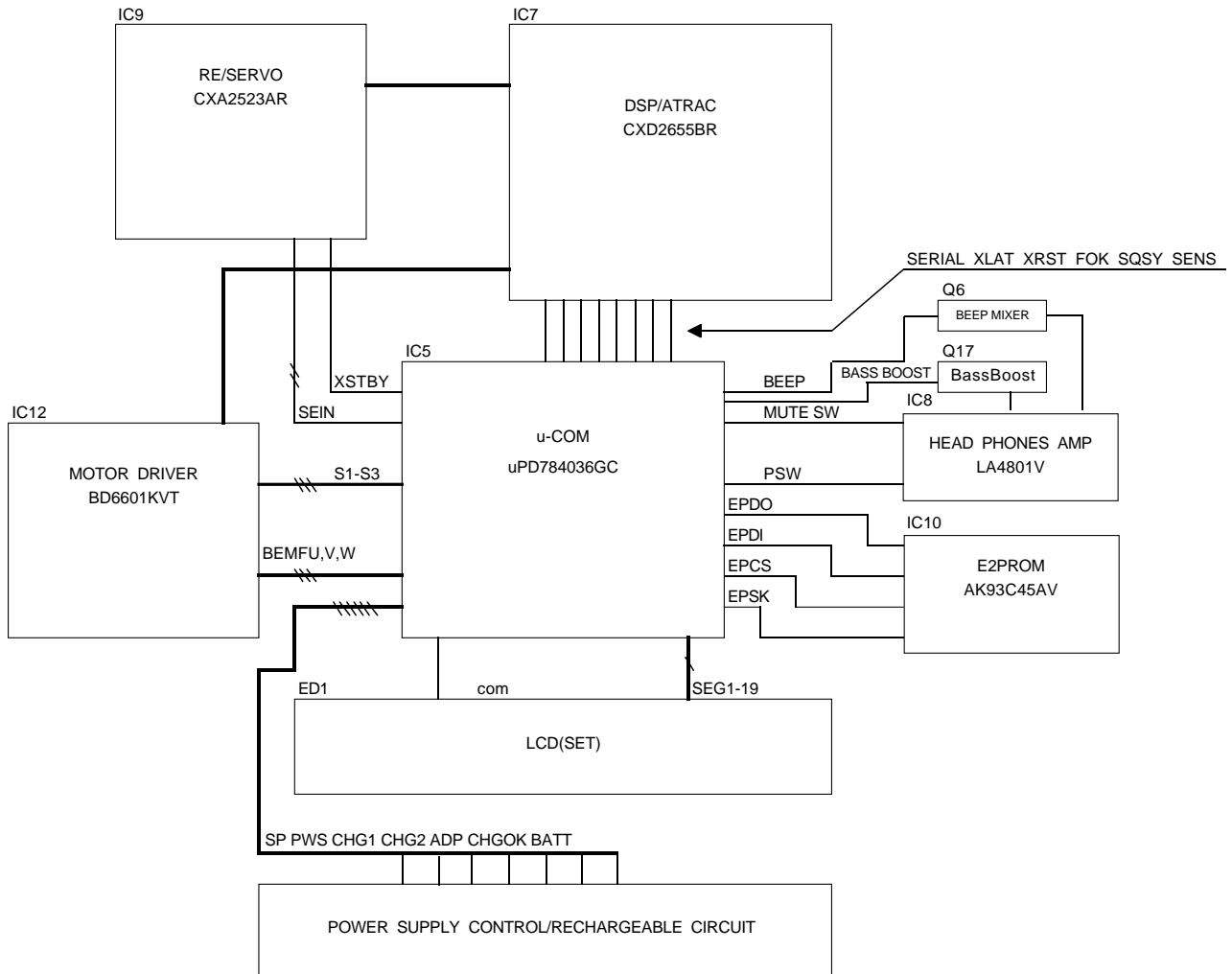
3. Remove 7 screws(3x5, 4x2) and unsolder the corner of pcb(6).
4. Connect the ground wire to the LCD mounting hardware and the frame of the unit(5).
5. Fix the switch 1 (ON mode) by the tape(7). And check the unit with standing it.



## CIRCUIT DESCRIPTION

### 1. Main microprocessor : uPD784036GC831 (X33 : IC5)

#### 1-1 Microprocessor periphery block diagram(X33)



#### 1-2 Pin description

Pin No.	Name	I/O	Description	
			Function	H/L
1	XLAT	O	DSP IC (CXD2655BR) LATCH signal	
2	XRST	O	DSP IC (CXD2655BR) HARD RESET signal	
3	XSTBY	O	RF/SERVO IC (CXA2523AR) STAND BY signal	
4	LDON	O	PICK UP LASER on/off signal	L: LIGHTING H: NON LIGHTING
5	BEEP	O	BEEP output/ to HP AMP	
6	BASS BOOST	O	Analog bass boost control	L: BOOST ON H: BOOST OFF
7	RESET	-	μ-com RESET	
8	VDD	-	μ-com +power supply	
9	X2	O	μ-com SYSTEM CLOCK OSC port (out)	
10	X1	I	μ-com SYSTEM CLOCK OSC port (in)	
11	VSS	-	μ-com GND	
12	LCD DATA	O	LCD remocon display data serial output	
13	BEMFW	I	SLED MOTOR comparator signal(W)	
14	BEMFV	I	SLED MOTOR comparator signal(V)	
15	BEMFU	I	SLED MOTOR comparator signal(U)	
16~18	S1~3	O	SLED MOTOR control signal for DRIVER input port	
19	NC	O	-	

## CIRCUIT DESCRIPTION

Pin No.	Name	I/O	Description	
			Function	H/L
20	SP	O	SYSTEM POWER port DSP IC (CXD2655BR) RF/SERVO IC (CXA2523AR) Motor Driver/HP amp VCC2 power supply	H: ON L: OFF
21	CHG1	O	Rechargeable circuit control signal (SET UP POWER SUPPLY)	H: RECHARGEABLE L: NORMAL
22	CHG2	O	Rechargeable circuit control signal (START RECHARGEABLE)	H: RECHARGEABLE L: NORMAL
23,24	TEST0,1	I	Test mode setting	TEST1/0 HH: TEST1 HL: TEST2/3 LH: TEST4
25~43	SEG19~1	O	Set's LCD segment output 19~1	
44	NC	O	–	
45	VSS	–	μ-com GND	
46	TEST	–	μ-com TEST port (CONNECT GND)	
47	COM	O	Set's LCD COMMON	
48	EPSK	O	E2PROM CLOCK output	
49	PW SW	O	HP amp power supply (CONNECT HP. AMP POWER SUPPLY PORT)	H: ON L: OFF
50	MUTE SW	O	HP amp mute control	L: MUTE ON    H:MUTE OFF
51	PWS	O	DRAM/LCD remocon power supply port	H: ON            L:OFF
52	EPCS	O	E2PROM LATCH signal	
53	EPDI	O	E2PROM DATA signal	
54	EPDO	I	E2PROM DATA signal	
55	VDD	–	μ-com +power supply	
56	KEY0	I	Set's key input	TAKE IN A/D
57	KEY1	I	LCD remocon key input	TAKE IN A/D
58	ADP	I	Adaptor DC detector	TAKE IN A/D
59	CHGOK	I	Rechargeable battery detector	TAKE IN A/D
60	BATT	I	Battery DC input	TAKE IN A/D
61	SEIN(REVERSE)	I	SLED ERROR signal (REVERSE)	TAKE IN A/D
62	SEIN(FORWARD)	I	SLED ERROR signal (FORWARD)	TAKE IN A/D
63	ADON	O	AVREF voltage output	
64	AVDD	–	μ-com A/D power supply	
65	AVREF1	–	μ-com A/D reference voltage input	
66	AVSS	–	μ-com A/D GND	
67,68	NC	O	–	
69,70	AVREF2,3	–	μ-com D/A reference voltage input	
71	JTYPE	I	–	H: EXCEPT JAPAN    L:JAPAN
72	HOLD	I	HOLD SW	
73	XINT	I	DSP IC (CXD2655BR) XINT EDGE intercept input	H: L: ↓ EDGE INTERCEPT
74	SQSY	I	DSP IC (CXD2655BR) ADIP SYNC intercept input	H: L: ↓ EDGE INTERCEPT
75	LID SW	I	LID OPEN SW	H: CLOSE            L:OPEN
76	SCLK	O	DSP IC (CXD2655BR) SERIAL CLOCK input	
77	W.UP	I	μ-com WAKU UP input EDGE intercept	H: L: ↓ EDGE INTERCEPT
78	SENS	I	DSP IC (CXD2655BR) SENSE signal	
79	SRDT	I	DSP IC (CXD2655BR) SERIAL DATA signal	
80	SWDT	O	DSP IC (CXD2655BR) SERIAL DATA signal	

## CIRCUIT DESCRIPTION

### 1-3 Voltage matrix key (u-COM pin ⑤⑥, ⑤⑦)

SET 6KEY	PIN 56 KEY0					
Port voltage [V]	0	0.4	0.8	1.2		
Key function	▶	■	◀◀	▶▶		
Port voltage [V]	1.6	2	2.4	2.8		
Key function	VOL.DOWN	VOL.UP	KEY OFF			

REMOCON 8KEY	PIN 57 KEY1						
Port voltage [V]	0	0.21	0.46	0.73	1.02		
Key function	▶	■	▶▶	◀◀	VOLUP		
Port voltage [V]	1	1.6	1.9	2.23			
Key function	VOL.DOWN	MODE	HOLD	Exist remocon			
Port voltage [V]	2.57	2.8					
Key function		Non remocon					

## 2. TEST MODE

- \* Test mode I is required when disassemble or replace the laser pickup and MD mechanism.
- \* Test mode I and II are required when replace the E2PROM.
- \* Need the remote control for adjustment procedure.

### How to Reset the Unit.

- \* Connect the AC adapter to the wall outlet with pressing <SKIP> key.
- \* Contents of initialization.
 

Volume	VOL 10
Repeat	OFF
Bass boost	BOOST 1
Remocon mode	DISC/TRACK(title mode)
Auto Play	OFF
Resume TNO	TNO[1]
Auto power save	ON
Beep	ON
Display in Remocon	[ENG]
Display in unit	[En]

Power off after display shows for 2 seconds

### 2-1 TEST MODE I(Adjusting Mode)

- \* Contents(to memorize the adjustment result to E2PROM)
  - 1) EF Balance(automatic/manual)
  - 2) Focus Bias(automatic/manual)
 Note:Automatic adjustment only in this manual

#### 2-1-1 Setting

- 1) Connect the #24(P\_TEST1) and 23(P\_TEST0) ports of IC5 to 2.8v(VDD) port. Next to AC adapter.  
Mode is STOP.  
Remote cont [TEST1]  
Unit [o1]
- 2) Press the SKIP UP key. To memorized the proper value of FE balance automatically. Manual adjustment if press the SKIP DOWN key.

### 2-1-2 Automatic FE Balance and FOCUS Bias

#### Adjustment

- 1) The FE balance setting value of the default starts a servo by the value which is memorized in E2PROM. Incidentally, there are 3 kinds of memory area(high/Low reflection Pit/Low reflection groove)which store a balance setting value E2PROM. At the time of automatic adjustment this 3kinds of areas are used appropriately according to a disc.
  - \* There is a setting range of 32 steps(00h-1Fh) in the balance setting value. The default value are
 

High reflection	51h
Low reflection	10h (pit)
Low reflection	90h (groove)

- 2) Display shows the following if automatic adjustment proceeds.

Remote cont [WAIT O] --- O means in operation mode.

Unit [o1]

- 3) Adjustment is over if loading the pre recorded disc. In case of the recordable disc, the servo will be "03" mode. Read the TOC in lead area and read the header and access lead -in area in CPLAY mode

Remote cont [WAIT O]

Unit [o1]

- 4) Proceed pit area adjustment after TOC read if loading the recordable disc. Change to focus bias check after TOC read if loading the pre recorded disc.

Remote cont [WAIT O]

- 5) Change to FOCUS Bias step after pit area adjustment if loading the recordable disc.

Remote cont [WAIT O]

Unit [o1]

#### 2-1-3 Focus Bias Check

- 1) The Focus bias will be adjusted automatically at the focus bias points(+16,0,-16)  
Remote cont [\*80 OO] left 2 figures: bias setting value +80h right 3 figures: C1 error rate(OVR;4 figures)

- 2) Display shows setting value+80h. Press the PLAY/PAUSE key to stop Automatic Adjustment.

Remote cont [\*80 10] changed value  
[TEST 1] the play/pause key is pressed

Unit [o1] changed value  
[oo] the play/pause key is pressed

### 2-2 TEST MODE II (AUDIO SPEC)

- \* Item of audio specification(use test disc TDYS1)

- 1) Reference

TNO[ 2]: 1kHz sinewave,0dB,L &R, Emphasis off

## CIRCUIT DESCRIPTION

- 2) Frequency Response  
TON[ 3]: 40Hz sinewave,0dB,L&R,Emphasis off
- 3) Modulation Noise  
TON[ 6]: 20kHz sinewave,0dB,L&R,Emphasis off
- 4) Noise Ratio  
TON[ 7]: 40Hz Infinity Zero,- dB,L&R,Emphasis off
- 5) Channel Separation  
TON[ 8]: 1kHz sinewave,0dB,L,Emphasis off
- 6) Channel Separation  
TON[ 10]: 1kHz sinewave,0dB,R,Emphasis off
- 7) Deemphasis  
TON[ 13]: 16kHz sinewave,-9.04dB,L&R,Emphasis on

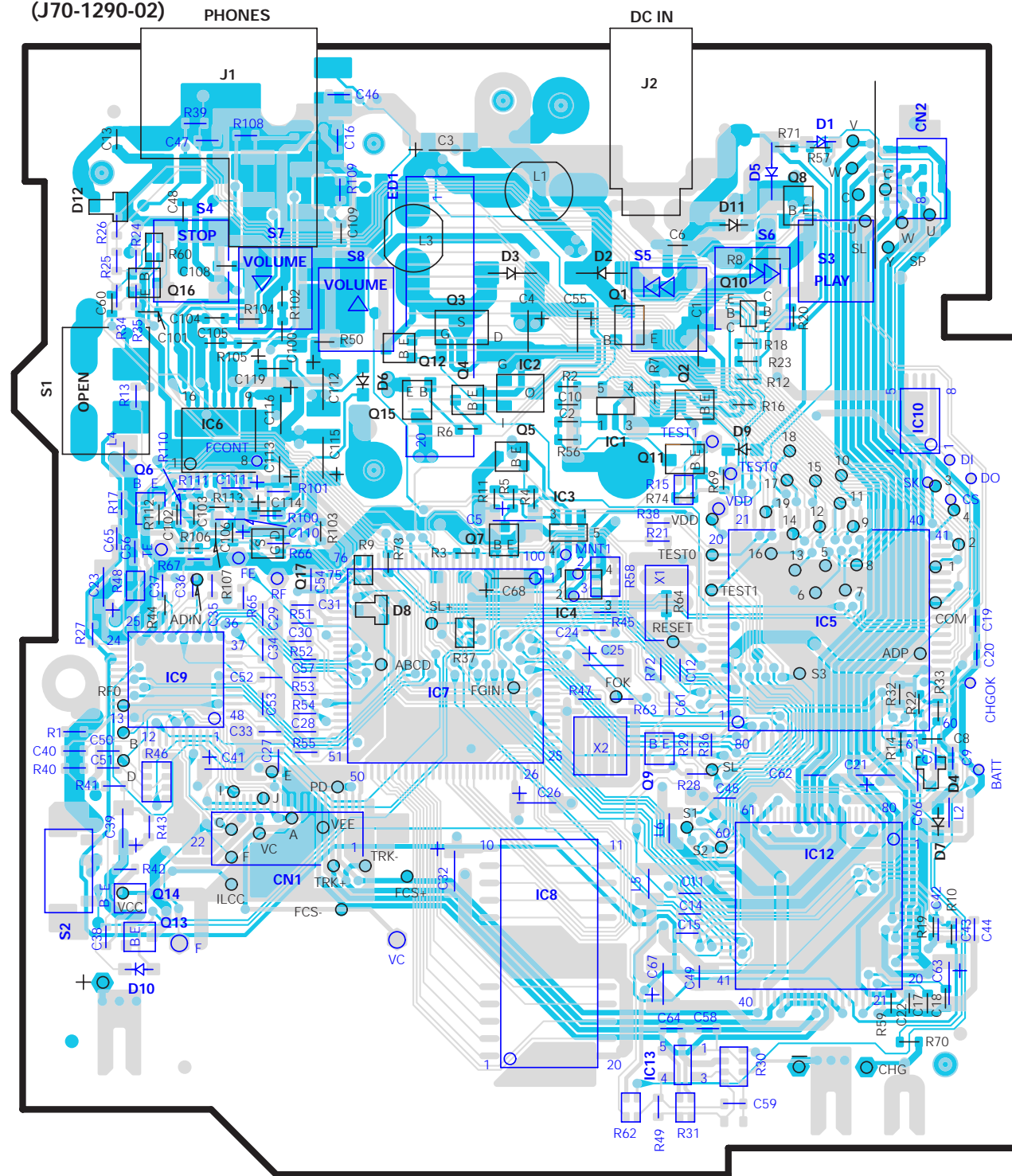
### 2-2-1 Procedures

- 1) Connect #23(P\_TEST0) of IC5 to 2.8V(VDD) and #24(P\_TEST1) of that to GND. Next Connect AC adapter to the unit.(the unit will be in CPLAY mode after TOC reads)  
Remocon [TEST 4]  
Unit [o4]
- 2) The unit will be in CPLAY after TOC reading.  
Remocon [TOC OK]  
Unit [o4]
- 3) Choose and playback TNO-02 on the disc by PLAY/PAUSE key  
Remocon [02] playback TNO  
Unit [o4]
- 4) Choose and playback every TNO in the above table by PLAY/PAUSE key. TNO will be chosen TNO 02 if repressing the PLAY/PAUSE key after STOP key pressed,  
Remocon [03] playback TNO  
Unit [o4]



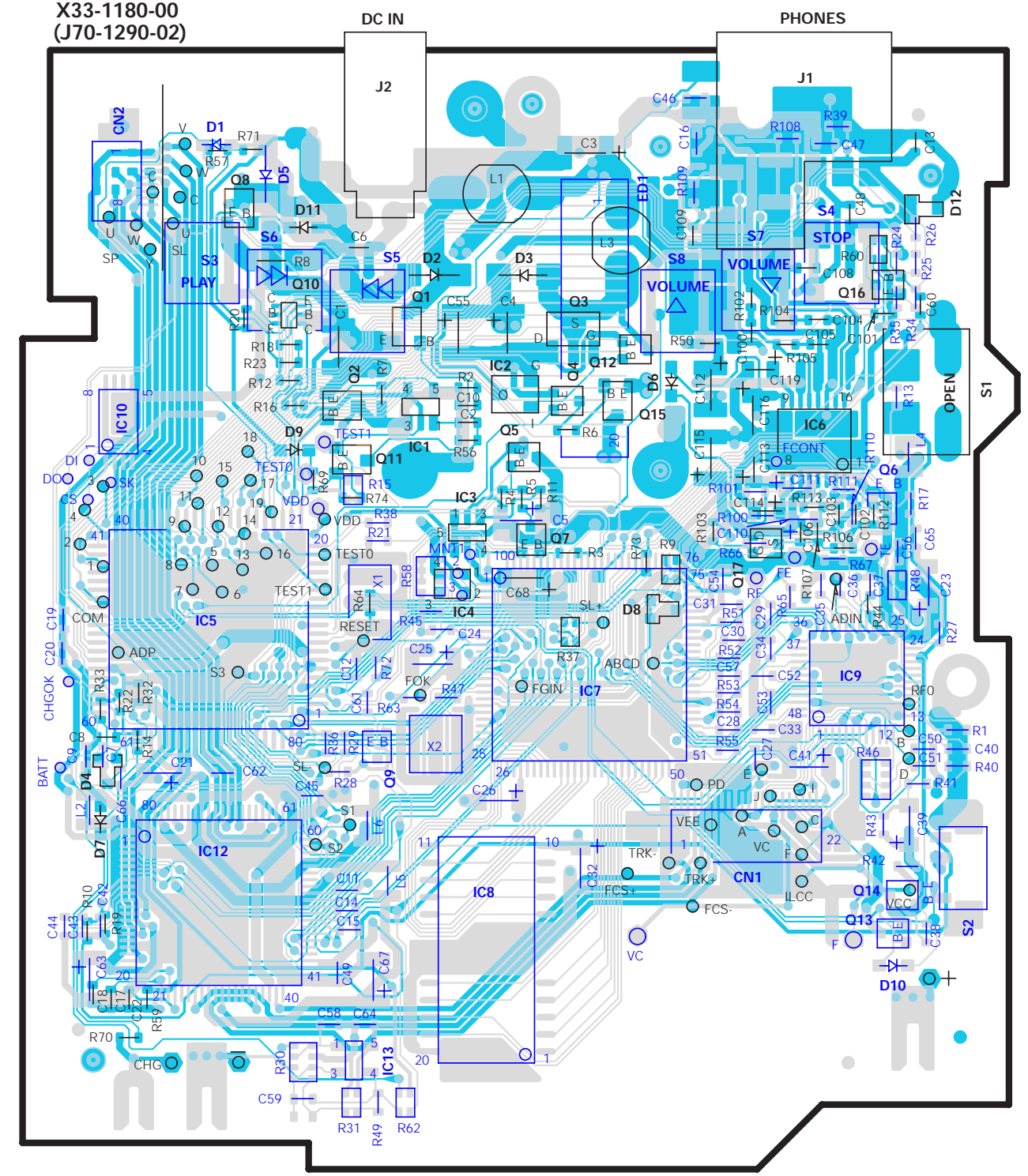
# PC BOARD(Component side view)

X33-1180-00  
(J70-1290-02)



# PC BOARD(Foil side view)

X33-1180-00  
(J70-1290-02)



DMC-K3(S)				
DESTINATION	COUNTRY	ABB.	UNIT No.	R28 R29
JAPAN	J	X33-1180-00	YES	NO
EUROPE	E	X33-1182-71	NO	YES
U.K.	T			

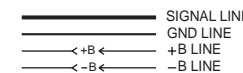
DMC-K3(L)				
DESTINATION	COUNTRY	ABB.	UNIT No.	R28 R29
JAPAN	J	X33-1180-00	YES	NO

DMC-K3(BL)				
DESTINATION	COUNTRY	ABB.	UNIT No.	R28 R29
U.S.A.	K	X33-1182-71	NO	YES
EUROPE	E			
U.K.	T			

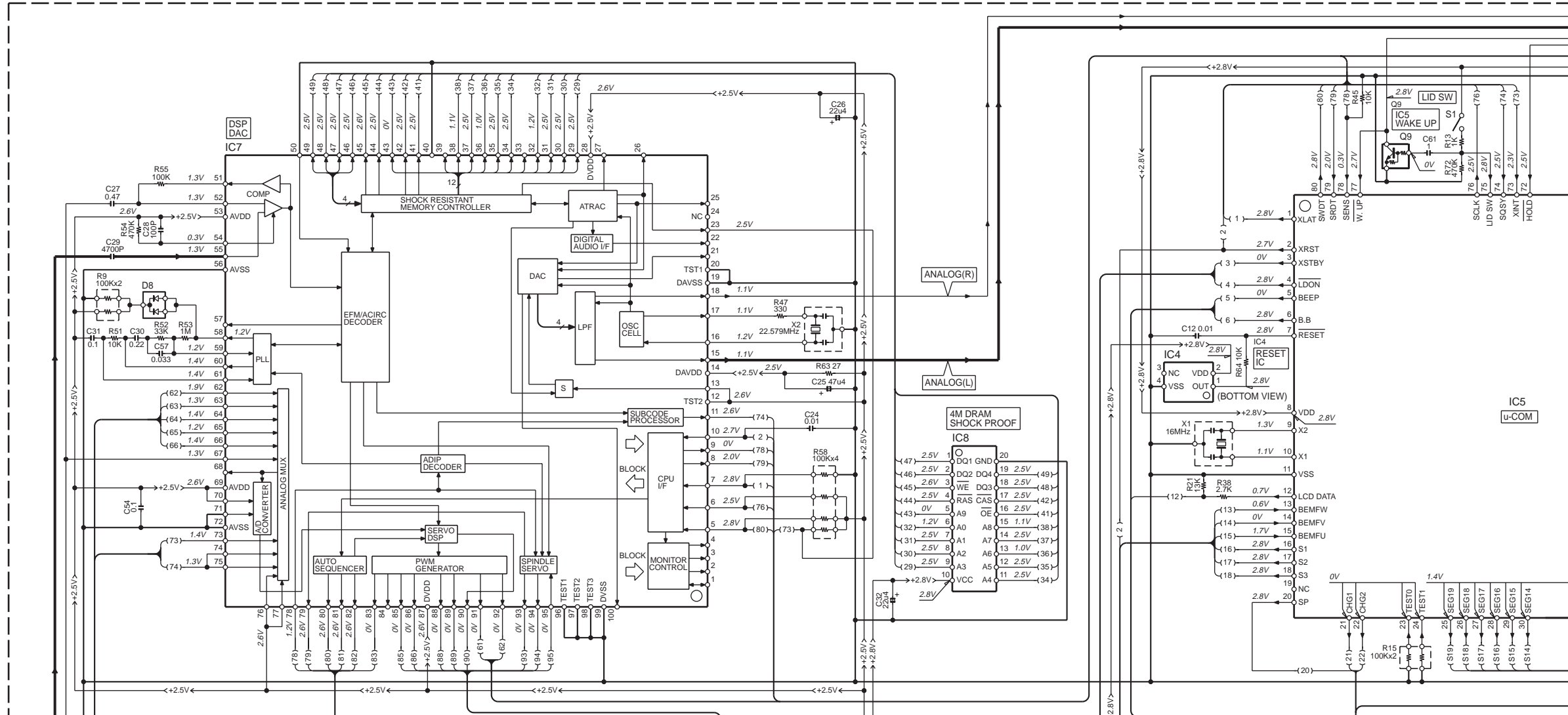
- IC1 : XC6365B103MR
- IC2 : XC6383B281MR
- IC3 : XC62EP2502MR
- IC4 : S-80823ALNP
- IC5 : UPD784036GC831
- IC6 : LA4801V
- IC7 : CXD2655BR
- IC8 : MN41V4400TT-07 or MN41V4400TT-08
- IC9 : CXA2523AR
- IC10 : AK93C45AV
- IC12 : BD6601AKVT
- IC13 : NJU7011F

- Q1,11,15 : CPH3106
- Q2 : DTC323TK
- Q3 : XP161A0390PR
- Q4,6,9 : DTC114YUA
- Q5,14 : 2SA1745(6.7)
- Q7 : 2SC4116(Y,GR)
- Q8 : CPH3209
- Q10 : UMX1N
- Q12,16 : DTC114TUA
- Q13 : DTA114EUA
- Q17 : 2SK3018

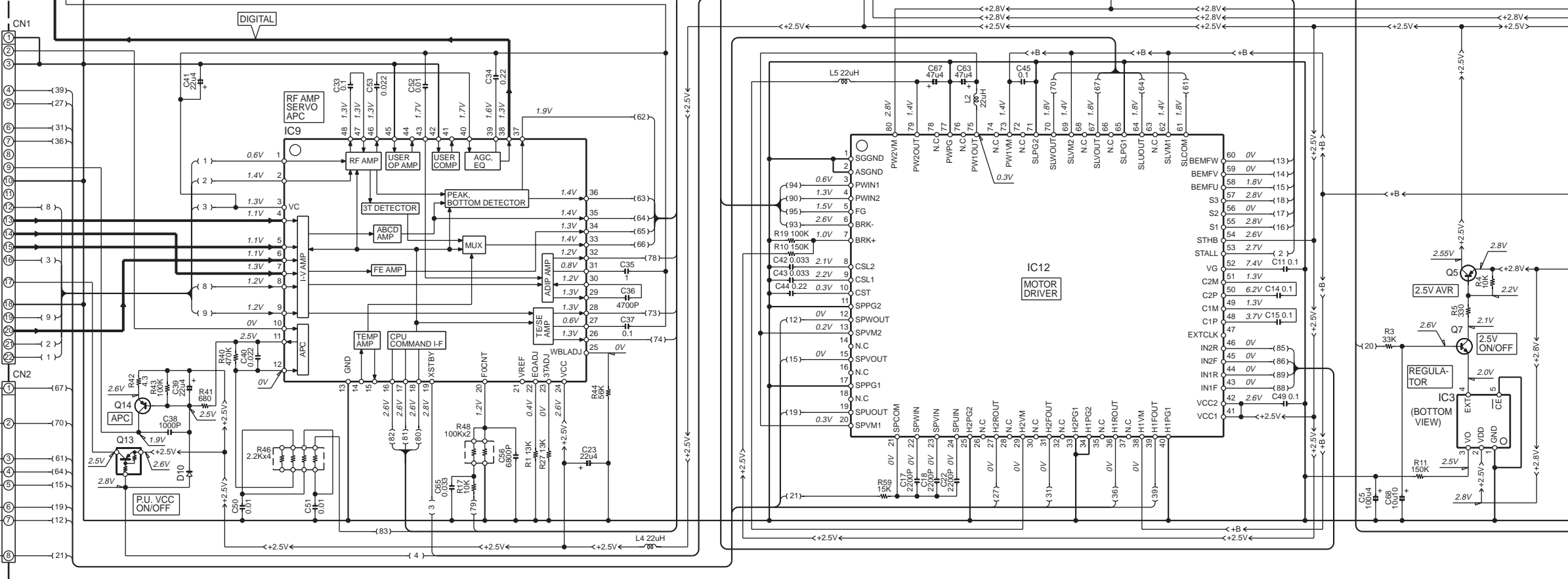
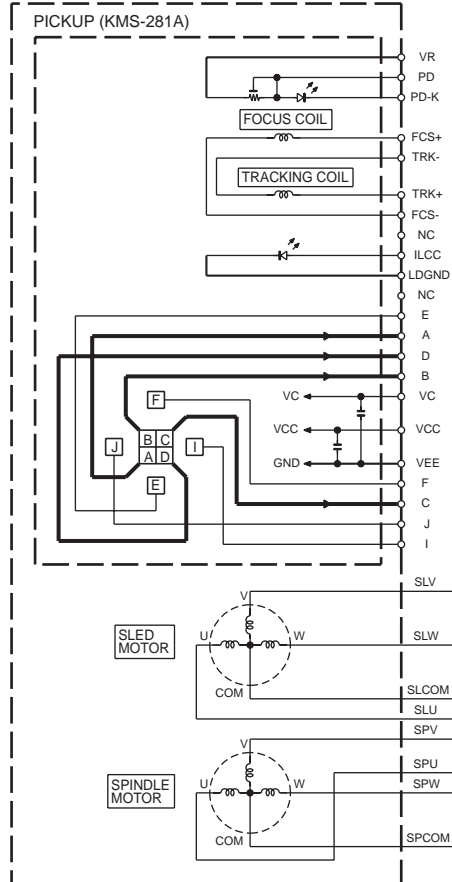
- D1,7,10,11 : MA111
- D2,3,5 : U2FW44N
- D4 : RB717F
- D8,12 : DA204U
- D9 : UDZ10B
- ED1 : B38-0172-05

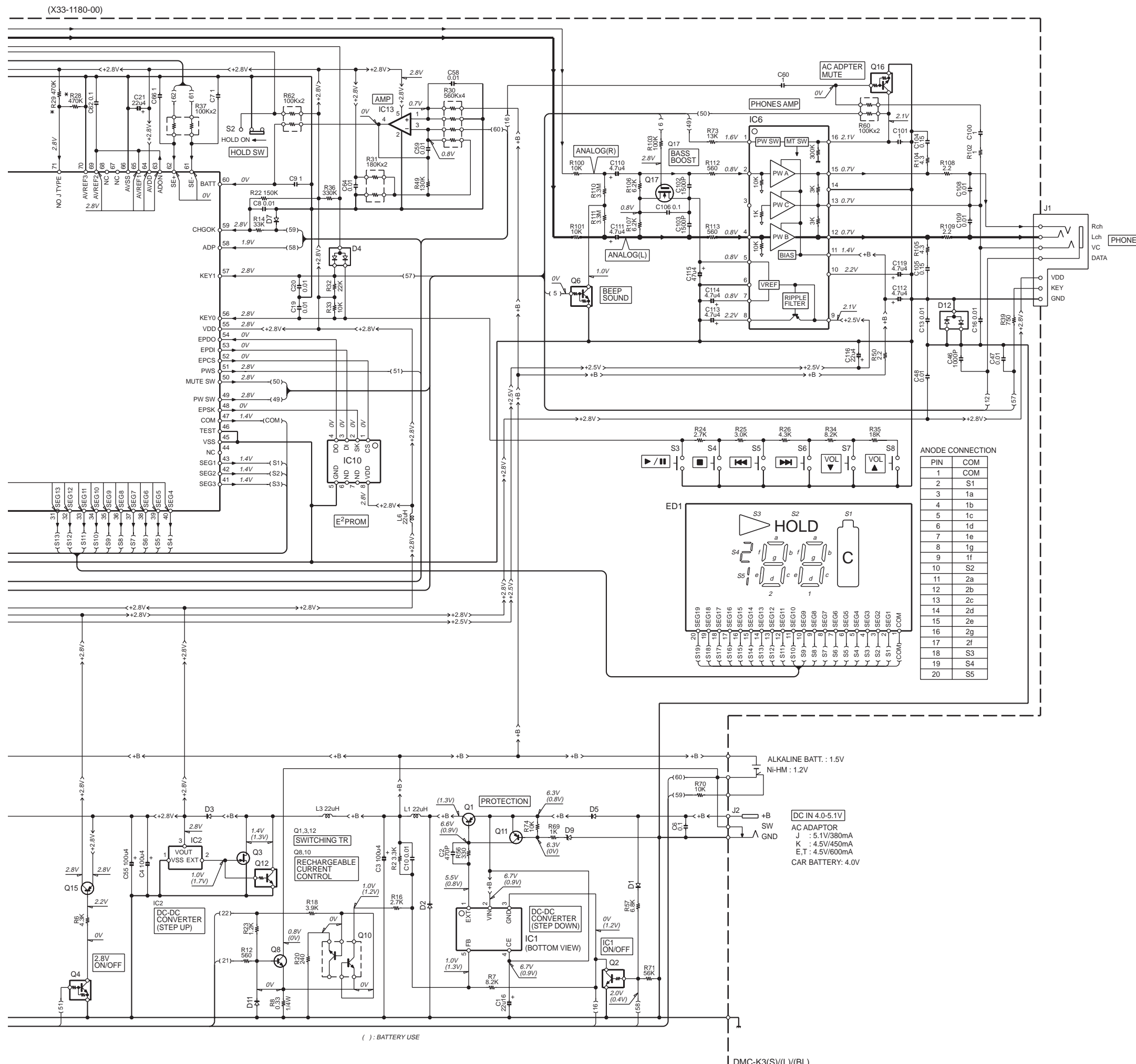


(X33-1180-00)

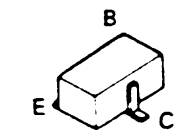


MECHA. ASS'Y MDP-03 (X92-2140-10)



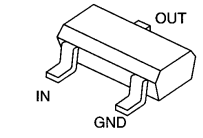


DTC114YUA  
DTC323TK  
2SA1745  
2SC4116

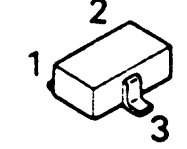


DTA114EUA

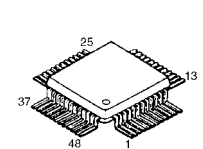
IN  
OUT  
GND



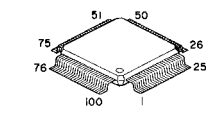
DA204U



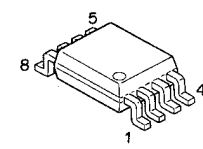
CXA2523AR



CXD2655BR



AK93C45AV



CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). Δ indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). 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.

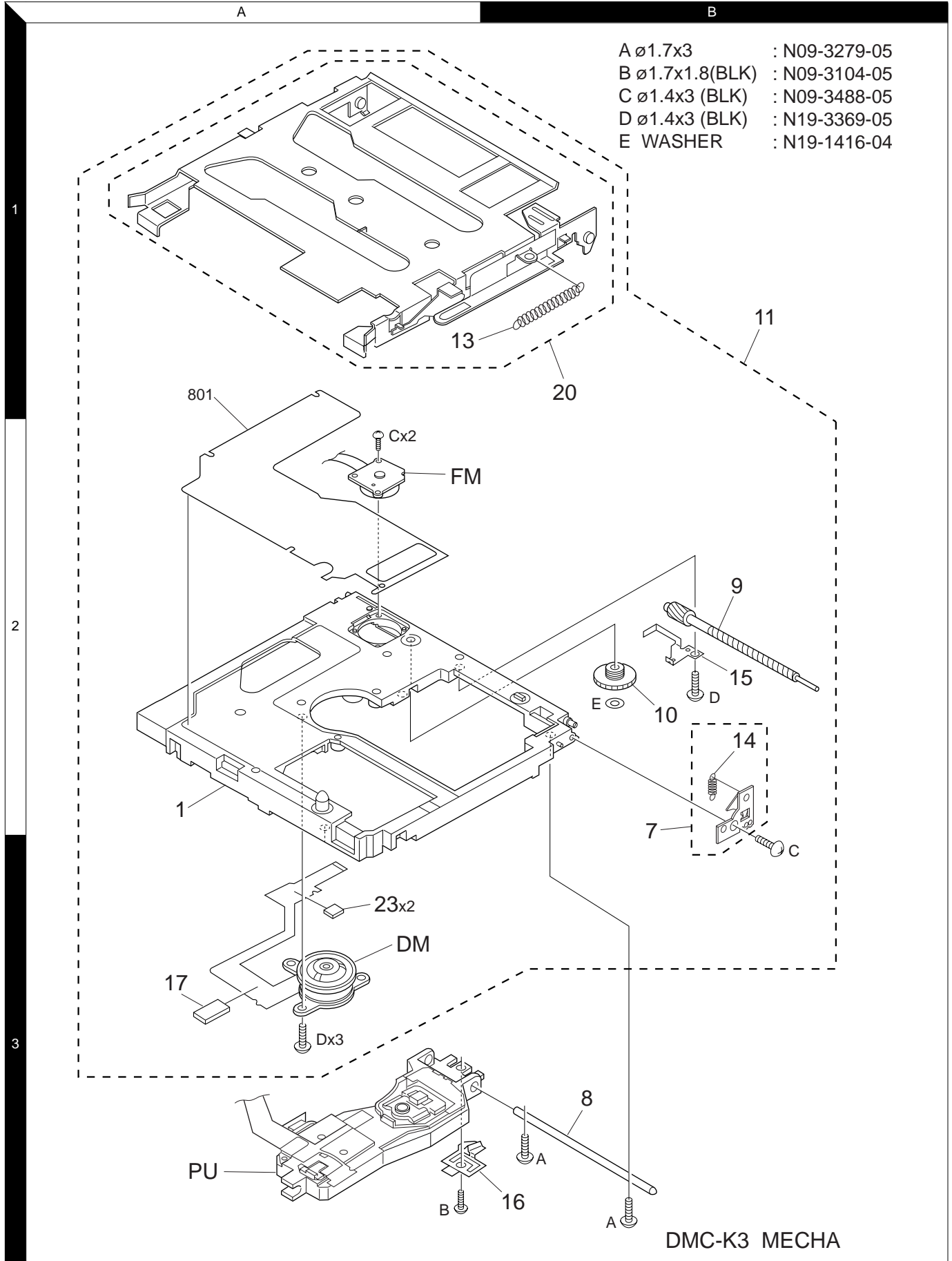
The DC voltage is an actual reading measured with a high impedance type voltmeter. The measurement value may vary depending on the measuring instruments used or on the product.

( ) : BATTERY USE



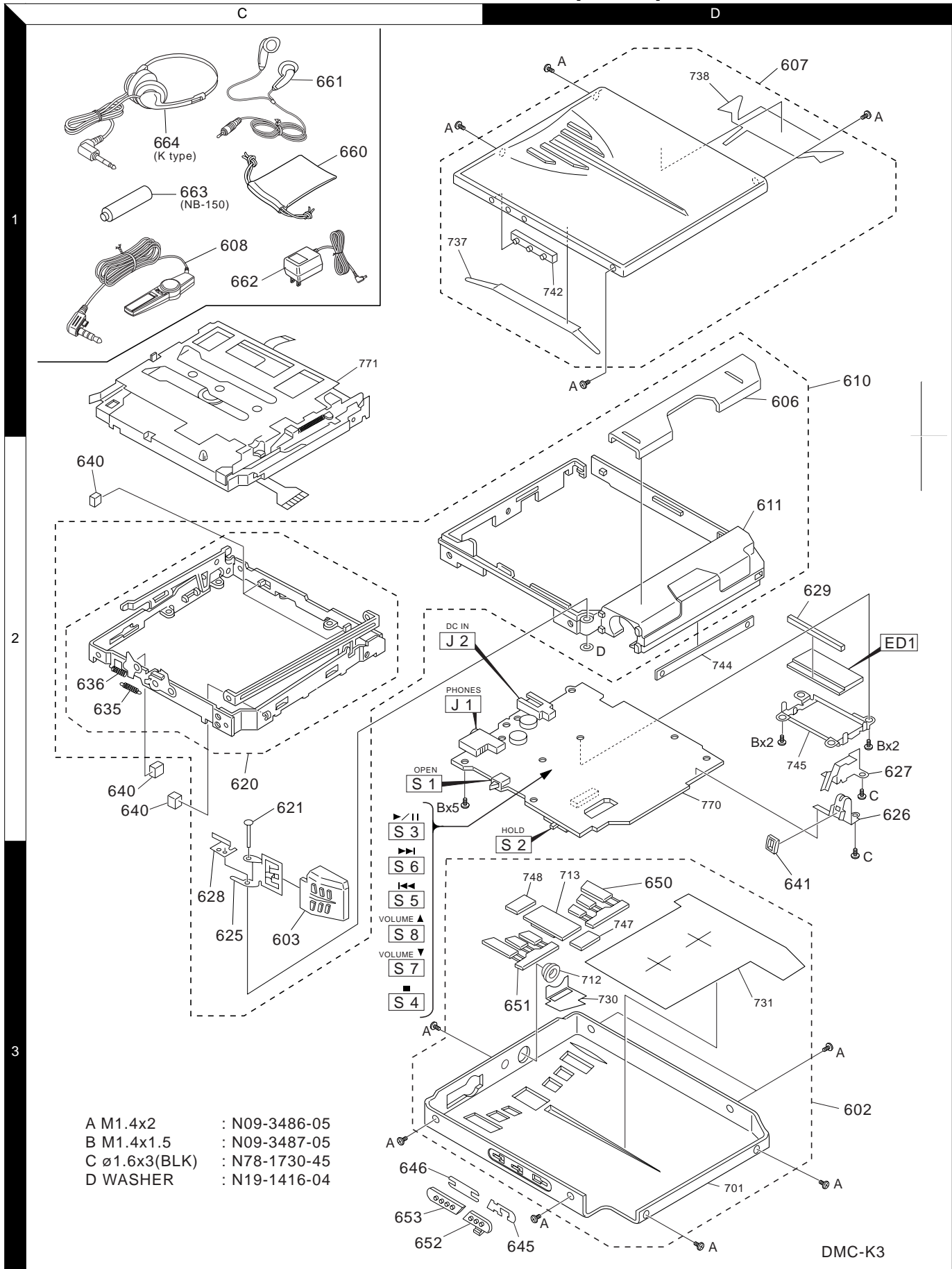
# DMC-K3

## EXPLODED VIEW (MECHANISM)



# DMC-K3

## EXPLODED VIEW (UNIT)



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

\* New Parts

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

①

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
<b>DMC-K3</b>						
602	3D	*	A01-3662-03	METALLIC CABINET ASSY	K1	
602	3D	*	A01-3664-03	METALLIC CABINET ASSY	E1T1	
602	3D	*	A01-3670-03	METALLIC CABINET ASSY	E2T2	
603	3C	*	A09-1118-03	BATTERY COVER	E1T1	
603	3C	*	A09-1119-03	BATTERY COVER	K1E2T2	
606	1D	*	A21-3741-04	DRESSING PANEL	E1T1	
606	1D	*	A21-3750-04	DRESSING PANEL	K1E2T2	
607	1D	*	A53-2123-03	LID ASSY	E1T1	
607	1D	*	A53-2125-03	LID ASSY	K1E2T2	
608	1C	*	A70-1258-05	REMOTE CONTROLLER ASSY		
610	1D	*	B07-2442-02	ESCUTCHEON ASSY	E1T1	
610	1D	*	B07-2444-02	ESCUTCHEON ASSY	K1E2T2	
611	2D	*	B07-2443-01	ESCUTCHEON		
-			B46-0100-50	WARRANTY CARD	E1T1E2	
-			B46-0100-50	WARRANTY CARD	T2	
-			B46-0197-00	QUESTIONNAIRE CARD	K1	
-			B46-0328-03	WARRANTY CARD	K1	
-		*	B60-4092-00	INSTRUCTION MANUAL(EN)	T1K1T2	
-		*	B60-4093-00	INSTRUCTION MANUAL(FR)	E1E2	
-		*	B60-4094-00	INSTRUCTION MANUAL(GE)	E1E2	
-		*	B60-4095-00	INSTRUCTION MANUAL(NE)	E1E2	
-		*	B60-4096-00	INSTRUCTION MANUAL(IT)	E1E2	
-		*	B60-4097-00	INSTRUCTION MANUAL(ES)	E1E2	
620	2C	*	D10-3847-02	ARM ASSY		
621	2C	*	D21-1930-04	SHAFT		
625	3C	*	E23-1776-04	TERMINAL ASSY		
626	2D	*	E23-1780-04	TERMINAL		
627	2D	*	E23-1781-04	TERMINAL		
628	3C	*	E23-1779-04	TERMINAL		
629	2D	*	E29-1642-05	CONDUCTIVE RUBBER		
635	2C	*	G01-4103-04	EXTENSION SPRING		
636	2C	*	G01-4104-04	EXTENSION SPRING		
-			H21-0347-04	PROTECTION SHEET		
-			H25-0336-04	PROTECTION BAG		
-			H25-1588-04	PROTECTION BAG (BATTERY)		
-		*	H50-3198-03	ITEM CARTON CASE	K1	
-		*	H50-3199-03	ITEM CARTON CASE	E1T1	
-		*	H50-3201-03	ITEM CARTON CASE	E2T2	
640	2C	*	J02-1437-04	INSULATOR		
641	3D	*	J19-5962-04	HOLDER		
645	3D	*	J30-0494-04	SPACER		
646	3C	*	J30-0495-04	SPACER		
650	3D	*	K29-7475-03	KNOB	PLAY	
651	3D	*	K29-7476-03	KNOB	SONATA	
652	3C	*	K29-7477-04	KNOB		
653	3C	*	K29-7478-04	KNOB		
660	1C		W01-0938-05	CARRYING CASE		
661	1C	*	W01-0960-05	STEREO HEADPHONE(INNER)	E1T1E2	
661	1C	*	W01-0960-05	STEREO HEADPHONE(INNER)	T2	
662	1C		W08-0658-05	AC ADAPTER	E1E2	
662	1C		W08-0659-05	AC ADAPTER	T1T2	

L : Scandinavia K : USA P : Canada R : Mexico C : China I : Malaysia  
Y : PX(Far East, Hawaii) T : Europe E : Europe G : Germany V : China(Shanghai)  
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\* New Parts

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②

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
662	1C		W09-1251-05	AC ADAPTER	K1	
663	1C	*	W09-1267-05	BATTERY (NI-MH)NB-150		
664	1C	*	W01-0963-05	STEREO HEADPHONE(OPEN)	K1	
<b>CONTROL (X33-1180-00)</b>						
ED1	2D	*	B38-0172-05	LIQUID CRYSTAL		
C1		*	C92-0206-05	TANTAL	22UF	16WV
C2			CK73GB1H471K	CHIP C	470PF	K
C3-5			C92-0170-05	TANTAL	100UF	4WV
C6			CK73GB1C104K	CHIP C	0.10UF	K
C7			CK73GF1A105Z	CHIP C	1.0UF	Z
C8			CK73GB1E103K	CHIP C	0.010UF	K
C9			CK73GF1A105Z	CHIP C	1.0UF	Z
C10			CK73GB1E103K	CHIP C	0.010UF	K
C11			CK73GB1C104K	CHIP C	0.10UF	K
C12, 13			CK73GB1E103K	CHIP C	0.010UF	K
C14, 15			CK73GB1C104K	CHIP C	0.10UF	K
C16			CK73GB1E103K	CHIP C	0.010UF	K
C17, 18			CK73GB1H222K	CHIP C	2200PF	K
C19, 20			CK73GB1E103K	CHIP C	0.010UF	K
C21			C92-0623-05	CHIP TAN	22UF	4WV
C22			CK73GB1H222K	CHIP C	2200PF	K
C23			C92-0623-05	CHIP TAN	22UF	4WV
C24			CK73GB1E103K	CHIP C	0.010UF	K
C25			C92-0619-05	CHIP TAN	47UF	4WV
C26			C92-0623-05	CHIP TAN	22UF	4WV
C27			CK73GF1A474Z	CHIP C	0.47UF	Z
C28			CC73GCH1H101J	CHIP C	100PF	J
C29			CK73GB1H472K	CHIP C	4700PF	K
C30			CK73GF1C224Z	CHIP C	0.22UF	Z
C31			CK73GB1C104K	CHIP C	0.10UF	K
C32			C92-0623-05	CHIP TAN	22UF	4WV
C33			CK73GB1C104K	CHIP C	0.10UF	K
C34			CK73GF1C224Z	CHIP C	0.22UF	Z
C35			CK73GF1A105Z	CHIP C	1.0UF	Z
C36			CK73GB1H472K	CHIP C	4700PF	K
C37			CK73GB1C104K	CHIP C	0.10UF	K
C38			CK73GB1H102K	CHIP C	1000PF	K
C39			C92-0623-05	CHIP TAN	22UF	4WV
C40			CK73GB1E223K	CHIP C	0.022UF	K
C41			C92-0623-05	CHIP TAN	22UF	4WV
C42, 43			CK73GB1C333K	CHIP C	0.033UF	K
C44			CK73GF1C224Z	CHIP C	0.22UF	Z
C45			CK73GB1C104K	CHIP C	0.10UF	K
C46			CK73GB1H102K	CHIP C	1000PF	K
C47, 48			CK73GB1E103K	CHIP C	0.010UF	K
C49			CK73GB1C104K	CHIP C	0.10UF	K
C50-52			CK73GB1E103K	CHIP C	0.010UF	K
C53			CK73GB1E223K	CHIP C	0.022UF	K
C54			CK73GB1C104K	CHIP C	0.10UF	K
C55			C92-0170-05	TANTAL	100UF	4WV
C56			CK73GB1H682K	CHIP C	6800PF	K
C57			CK73GB1C333K	CHIP C	0.033UF	K
C58, 59			CK73GB1E103K	CHIP C	0.010UF	K
C60, 61			CK73GF1A105Z	CHIP C	1.0UF	Z

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PARTS LIST

DMC-K3

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③

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
C62			CK73GB1C104K	CHIP C	0.10UF	K
C63			C92-0619-05	CHIP TAN	47UF	4WV
C64			CK73GB1E103K	CHIP C	0.010UF	K
C65			CK73GB1C333K	CHIP C	0.033UF	K
C66			CK73GF1A105Z	CHIP C	1.0UF	Z
C67			C92-0619-05	CHIP TAN	47UF	4WV
C68			C92-0628-05	CHIP-TAN	10UF	10WV
C100, 101			CK73GF1A105Z	CHIP C	1.0UF	Z
C102, 103			CK73GB1H152K	CHIP C	1500PF	K
C104, 105			CK73GB1A154K	CHIP C	0.15UF	K
C106			CK73GB1C104K	CHIP C	0.10UF	K
C108, 109			CK73GB1E103K	CHIP C	0.010UF	K
C110, 111		*	C92-0195-05	TANTAL	4.7UF	4WV
C112			C92-0619-05	CHIP TAN	47UF	4WV
C113, 114		*	C92-0195-05	TANTAL	4.7UF	4WV
C115			C92-0619-05	CHIP TAN	47UF	4WV
C116			C92-0623-05	CHIP TAN	22UF	4WV
C119		*	C92-0195-05	TANTAL	4.7UF	4WV
CN1		*	E40-8322-05	FLAT CABLE CONNECTOR		
CN2			E40-8047-05	FLAT CABLE CONNECTOR		
J1			E11-0381-05	MINIATURE PHONE JACK(4P+3P)		
J2			E03-0357-05	DC JACK		
L1			L33-0377-05	CHOKO COIL		
L2		*	L40-2201-89	SMALL FIXED INDUCTOR(22UH,K)		
L3			L33-0377-05	CHOKO COIL		
L4-6		*	L40-2201-89	SMALL FIXED INDUCTOR(22UH,K)		
X1		*	L78-0693-05	RESONATOR (16M)		
X2		*	L78-0697-05	RESONATOR (22.57M)		
R1			RK73GB1J133J	CHIP R	13K	J 1/16W
R2			RK73GB1J332J	CHIP R	3.3K	J 1/16W
R3			RK73GB1J333J	CHIP R	33K	J 1/16W
R4			RK73GB1J103J	CHIP R	10K	J 1/16W
R5			RK73GB1J331J	CHIP R	330	J 1/16W
R6			RK73GB1J432J	CHIP R	4.3K	J 1/16W
R7			RK73GB1J822J	CHIP R	8.2K	J 1/16W
R8		*	R92-1918-05	METAL GLAZE	0.33	J 1/4W
R9		*	RK75GA1J104J	CHIP R	100K	J 1/16W
R10, 11			RK73GB1J154J	CHIP R	150K	J 1/16W
R12			RK73GB1J561J	CHIP R	560	J 1/16W
R13			RK73GB1J102J	CHIP R	1.0K	J 1/16W
R14			RK73GB1J333J	CHIP R	33K	J 1/16W
R15		*	RK75GA1J104J	CHIP R	100K	J 1/16W
R16			RK73GB1J272J	CHIP R	2.7K	J 1/16W
R17			RK73GB1J103J	CHIP R	10K	J 1/16W
R18			RK73GB1J392J	CHIP R	3.9K	J 1/16W
R19			RK73GB1J104J	CHIP R	100K	J 1/16W
R20			RK73GB1J241J	CHIP R	240	J 1/16W
R21			RK73GB1J133J	CHIP R	13K	J 1/16W
R22			RK73GB1J154J	CHIP R	150K	J 1/16W
R23			RK73GB1J122J	CHIP R	1.2K	J 1/16W
R24			RK73GB1J272J	CHIP R	2.7K	J 1/16W
R25			RK73GB1J302J	CHIP R	3.0K	J 1/16W
R26			RK73GB1J432J	CHIP R	4.3K	J 1/16W
R27			RK73GB1J133J	CHIP R	13K	J 1/16W

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④

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
R29			RK73GB1J474J	CHIP R	470K	J 1/16W
R30		*	RK75GB1J564J	CHIP R	560K	J 1/16W
R31		*	RK75GA1J184J	CHIP R	180K	J 1/16W
R32		*	R92-1917-05	METAL GLAZE	22K	F 1/16W
R33			RK73GB1J103J	CHIP R	10K	J 1/16W
R34			RK73GB1J822J	CHIP R	8.2K	J 1/16W
R35			RK73GB1J183J	CHIP R	18K	J 1/16W
R36			RK73GB1J334J	CHIP R	330K	J 1/16W
R37		*	RK75GA1J104J	CHIP R	100K	J 1/16W
R38			RK73GB1J272J	CHIP R	2.7K	J 1/16W
R39			RK73GB1J751J	CHIP R	750	J 1/16W
R40			RK73GB1J474J	CHIP R	470K	J 1/16W
R41			RK73GB1J681J	CHIP R	680	J 1/16W
R42		*	RK73GB1J4R3J	CHIP R	4.3	J 1/16W
R43			RK73GB1J104J	CHIP R	100K	J 1/16W
R44			RK73GB1J563J	CHIP R	56K	J 1/16W
R45			RK73GB1J103J	CHIP R	10K	J 1/16W
R46		*	RK75GB1J222J	CHIP R	2.2K	J 1/16W
R47			RK73GB1J331J	CHIP R	330	J 1/16W
R48		*	RK75GA1J104J	CHIP R	100K	J 1/16W
R49		*	RK73GB1J134J	CHIP R	130K	J 1/16W
R50			RK73GB1J2R2J	CHIP R	2.2	J 1/16W
R51			RK73GB1J103J	CHIP R	10K	J 1/16W
R52			RK73GB1J333J	CHIP R	33K	J 1/16W
R53			RK73GB1J105J	CHIP R	1.0M	J 1/16W
R54			RK73GB1J474J	CHIP R	470K	J 1/16W
R55			RK73GB1J104J	CHIP R	100K	J 1/16W
R56			RK73GB1J331J	CHIP R	330	J 1/16W
R57			RK73GB1J682J	CHIP R	6.8K	J 1/16W
R58		*	RK75GB1J104J	CHIP R	100K	J 1/16W
R59			RK73GB1J153J	CHIP R	15K	J 1/16W
R60		*	RK75GA1J104J	CHIP R	100K	J 1/16W
R62		*	RK75GA1J104J	CHIP R	100K	J 1/16W
R63			RK73GB1J270J	CHIP R	27	J 1/16W
R64			RK73GB1J103J	CHIP R	10K	J 1/16W
R69			RK73GB1J102J	CHIP R	1.0K	J 1/16W
R70			RK73GB1J103J	CHIP R	10K	J 1/16W
R71			RK73GB1J563J	CHIP R	56K	J 1/16W
R72			RK73GB1J474J	CHIP R	470K	J 1/16W
R73			RK73GB1J133J	CHIP R	13K	J 1/16W
R74			RK73GB1J103J	CHIP R	10K	J 1/16W
R100, 101			RK73GB1J103J	CHIP R	10K	J 1/16W
R102			RK73GB1J1R0J	CHIP R	1	J 1/16W
R103			RK73GB1J104J	CHIP R	100K	J 1/16W
R104, 105		*	RK73GB1J4R3J	CHIP R	4.3	J 1/16W
R106, 107			RK73GB1J622J	CHIP R	6.2K	J 1/16W
R108, 109			RK73GB1J2R2J	CHIP R	2.2	J 1/16W
R110, 111			RK73GB1J335J	CHIP R	3.3M	J 1/16W
R112, 113			RK73GB1J561J	CHIP R	560	J 1/16W
S1		*	S68-0111-05	PUSH SWITCH		
S2			S62-0062-05	SLIDE SWITCH		
S3-8		*	S70-0068-05	TACT SWITCH		
D1			MA111	DIODE		
D2, 3			U2FWJ44N	DIODE		
D4			RB717F	DIODE		

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**HOW TO READ THE PARTS LIST**

Destination column has the abbreviation for the sale country and model. Alphabets mean the country. Numerals do the model.  
 Example: T1 shows DMC-K3 for U.K. market. "T" does all models for U.K.

**ABBREVIATION OF MODEL AND MASS PRODUCTION'S DESTINATIONS**

MODEL	CNT	Australia	Canada	China	England	Europe	Germany	Korea	Malaysia
	ABB.	X	P	C	T	E	G	H	I
DMC-K3(S)	-	-	-	-	T1	E1	-	-	-
DMC-K3(BL)	-	-	-	-	T2	E2	-	-	-
MODEL	CNT	Mexico	PX/AAFES	Russia	Scandinavia	Shanghai	USA	Other area	
	ABB.	R	Y	R	L	V	K	M	
DMC-K3(S)	-	-	-	-	-	-	-	-	-
DMC-K3(BL)	-	-	-	-	-	-	K1	-	-

(S): Silver, (BL): Black

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5

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
D5			U2FWJ44N	DIODE		
D7			MA111	DIODE		
D8			DA204U	DIODE		
D9		*	UDZ10B	ZENER DIODE		
D10, 11			MA111	DIODE		
D12			DA204U	DIODE		
IC1		*	XC6365B103MR	ANALOGUE IC		
IC2		*	XC6383B281MR	ANALOGUE IC		
IC3		*	XC62EP2502MR	ANALOGUE IC		
IC4		*	S-80823ALNP	MOS-IC		
IC5		*	UPD784036GC831	MI-COM IC		
IC6		*	LA4801V	ANALOGUE IC		
IC7		*	CXD2655BR	MOS-IC		
IC8			MN41V4400TT-07	MEMORY IC		
IC8			MN41V4400TT-08	MEMORY IC		
IC9			CXA2523AR	ANALOGUE IC		
IC10			AK93C45AV	MEMORY IC		
IC12		*	BD6601AKVT	ANALOGUE IC		
IC13		*	NJU7011F	MOS-IC		
Q1		*	CPH3106	TRANSISTOR		
Q2			DTC323TK	DIGITAL TRANSISTOR		
Q3			XP161A0390PR	FET		
Q4			DTC114YUA	DIGITAL TRANSISTOR		
Q5			2SA1745(6,7)	TRANSISTOR		
Q6			DTC114YUA	DIGITAL TRANSISTOR		
Q7			2SC4116(Y,GR)	TRANSISTOR		
Q8		*	CPH3209	TRANSISTOR		
Q9			DTC114YUA	DIGITAL TRANSISTOR		
Q10		*	UMX1N	TRANSISTOR		
Q11		*	CPH3106	TRANSISTOR		
Q12			DTC114TUA	DIGITAL TRANSISTOR		
Q13			DTA114EUA	DIGITAL TRANSISTOR		
Q14			2SA1745(6,7)	TRANSISTOR		
Q15		*	CPH3106	TRANSISTOR		
Q16			DTC114TUA	DIGITAL TRANSISTOR		
Q17		*	2SK3018	FET		
<b>MECHANISM (X92-2140-10)</b>						
1		*	A10-3457-03	CHASSIS ASSY		
7		*	D10-3648-14	ARM ASSY		
8		*	D10-3846-04	ROD		
9		*	D13-1908-04	GEAR ASSY		
10		*	D13-1910-03	GEAR		
11		*	D40-1620-01	MECHANISM ASSY		
13			G01-3911-14	EXTENSION SPRING		
14			G01-3912-04	EXTENSION SPRING		
15			G02-1096-04	FLAT SPRING		
16		*	G02-1666-04	FLAT SPRING		
17		*	G16-0926-04	SHEET		
20		*	J19-5699-42	HOLDER ASSY		
23		*	J69-0091-04	ADHESIVE DOUBLE-COATED TAPE		
DM		*	T43-0064-04	MOTOR ASSY		
FM		*	T43-0063-05	DIRECT DRIVE MOTOR		
PU		*	T25-0078-05	OPTICAL PICKUP HEAD		

Δ

L: Scandinavia K: USA P: Canada R: Mexico C: China I: Malaysia  
 Y: PX(Far East, Hawaii) T: Europe E: Europe G: Germany V: China(Shanghai)  
 Y: AAFES(Europe) X: Australia Q: Russia H: Korea M: Other Areas Δ indicates safety critical components.

PARTS LIST

DMC-K3



# DMC-K3

**Note:**

Component and circuit are subject to modification to insure best operation under differing local conditions. This manual is based on Europe (E) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

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