CD RECEIVER

KDC-5019/519/8020
KDC-7021/7021Y/B7021

SERVICE MANUAL

KENWOOD

B51-7868-00 (S) 3420

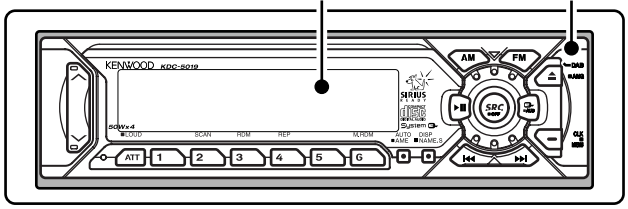
● This service manual does not include information on the CD mechanism assembly (exploded view, parts list, schematic diagram or mechanism operation description).

For such information, please refer to the CD mechanism assembly service manual (X92-4030-0X, X92-4440-0X : B51-7867-00).

KDC-5019

Front glass (B10-4158-01)

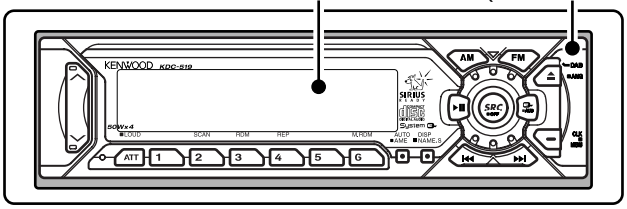
Panel assy (A64-2579-02)



KDC-519

Front glass (B10-4157-01)

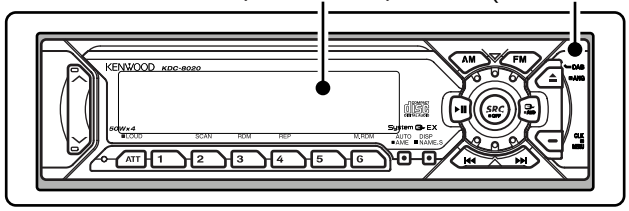
Panel assy (A64-2578-02)



KDC-8020

Front glass (B10-4160-01)

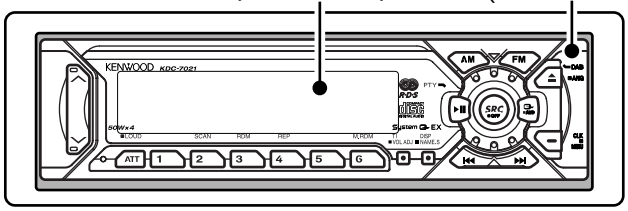
Panel assy (A64-2581-02)



KDC-7021/Y

Front glass (B10-4162-01)

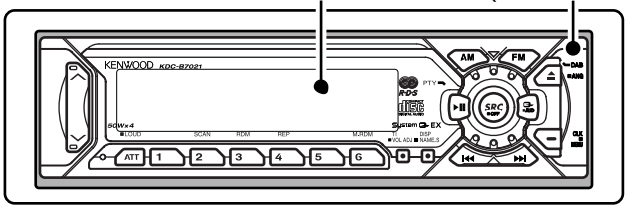
Panel assy (A64-2583-02)



KDC-B7021

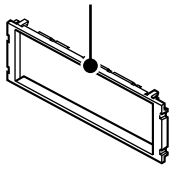
Front glass (B10-4163-01)

Panel assy (A64-2584-02)

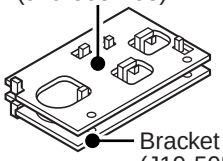


KDC-5019/519/8020 only

Escutcheon (B07-3010-02)

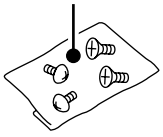


Bracket (L) (J19-5051-03)

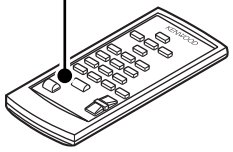


Bracket (R) (J19-5052-03)

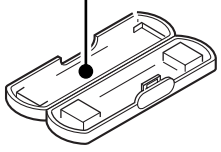
Screw set (N99-1722-05)



Remote controller assy (A70-2025-05)

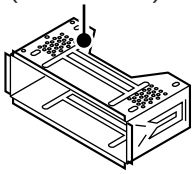


Plastic cabinet assy (A02-1497-13)

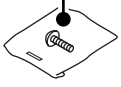


Torsion coil spring (G01-2924-04)

Mounting hardware assy (J21-9716-03)



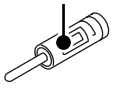
Screw set (N99-1704-05)



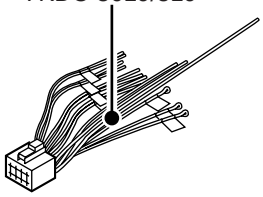
KDC-7021/7021Y/B7021 only

Remote controller assy (A70-0886-15)

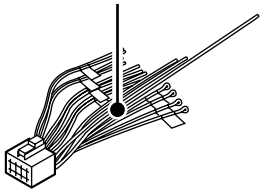
Antenna adaptor (T90-0523/0534-05)



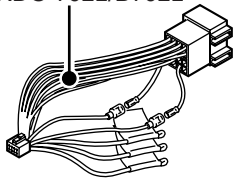
DC cord (E30-4940-05) : KDC-5019/519

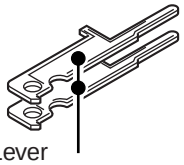


DC cord (E30-4939-05) : KDC-8020



DC cord (E30-4942-05) : KDC-7021Y (E30-4956-05) : KDC-7021/B7021

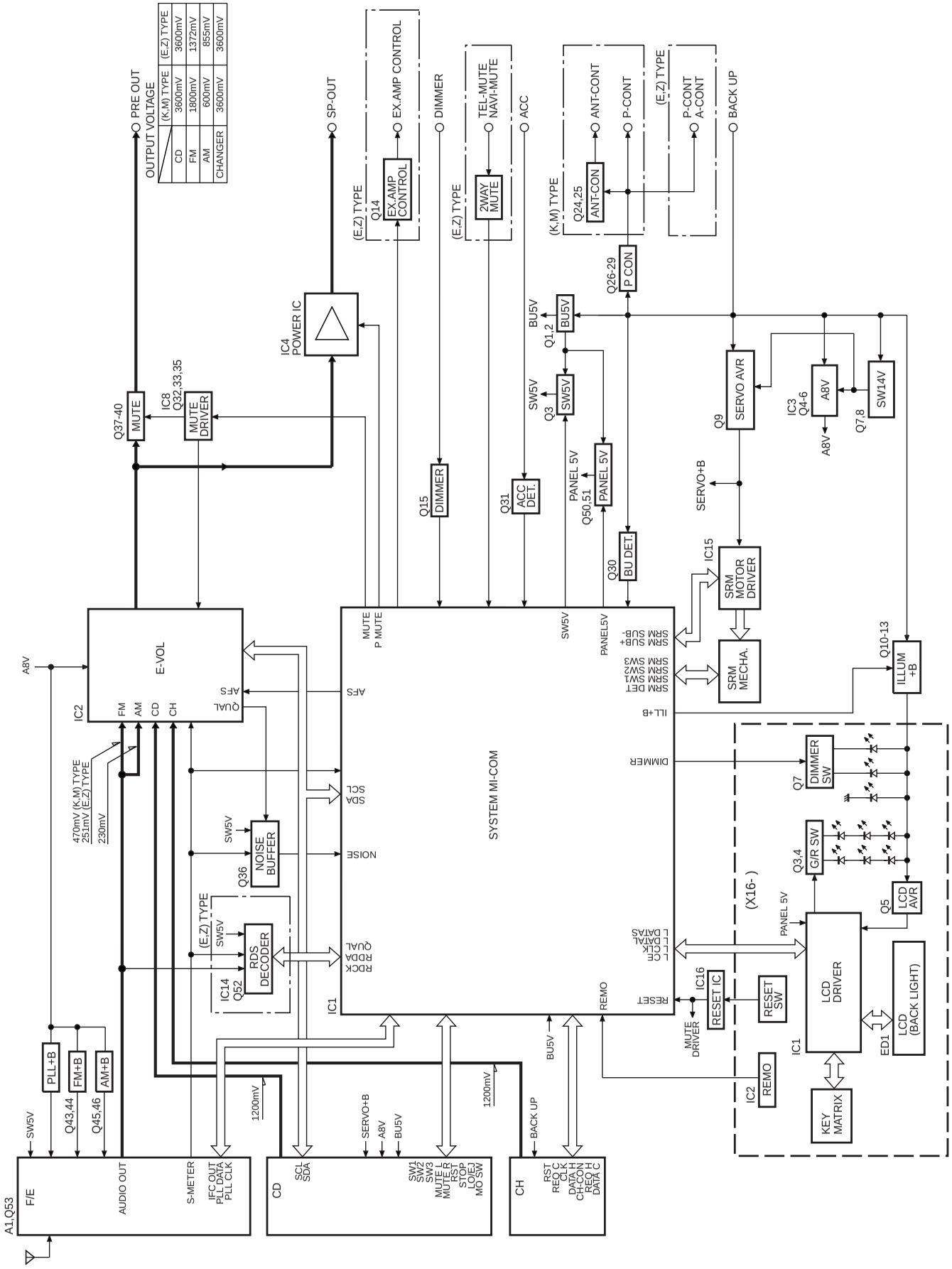




Lever (D10-4562-04)x2 (D10-4621-04)x2: KDC-7021/B7021

40%

BLOCK DIAGRAM



COMPONENT DESCRIPTION

● SWITCH UNIT(X16-154X-XX, X16-1892-7X)

Ref.No.	Component Name	Application/Function	Operation/Condition/Compatibility
IC1	LC75808W	LCD driver with key matrix	
IC2	RS-171	Remote sensor IC	
Q1	DTA114EUA or KRA302	Key permission SW	For the key scanning start and the key detection SW
Q3	2SC4081	Red LED SW	When a base goes Hi, RED LEDs are turned on.
Q4	2SC4081	Green LED SW	When a base goes Hi, GREEN LEDs are turned on.
Q5	2SC4081	VLCD AVR	For LCD driver IC
Q6	DTA114EUA or KRA302	REMO SW	While a base goes Lo, PAN 5V is supplied to the Remote sensor IC.
Q7	DTC143ZK	Dimmer SW	Usually Q7's base goes Hi. When DIMMER mode is selected, pulse wave shape is applied to Q7's base.

● ELECTRIC UNIT(X25-939X-XX, X25-8762-7X)

Ref.No.	Component Name	Application/Function	Operation/Condition/Compatibility
IC1	UPD703033GC139	System MI-COM.	
IC2	TDA7407D	E.VOL & N.C.MPX IC	
IC3	M5237ML	AVR IC	IC is combined with Q4, and it works as the error detection, the driver.
IC4	TA8273H	Power IC	
IC8	HD74HC02FP or TC74HC02AF or 74VHC02SJ	Mute logic	2-input NOR x 4
IC14	TDA7479D	RDS decoder	
IC15	LB1930M	Motor driver IC	
IC16	S-80837ANNP	Reset IC	When BU 5V voltage is less than 3.7V, IC outputs Lo.
Q1	2SB1548(P)	BU 5V AVR	While BACKUP is applied, AVR outputs +5V. Q1 and Q2 are inverted Darlington connection.
Q2	2SC4081 or 2SD1819A		
Q3	2SA1576A or 2SB1218A	SW 5V	While a base goes Lo, SW 5V is supplied to the microprocessor peripheral circuits.
Q4	2SB1548(P)	A8V AVR	Q4 is combined with IC3, and it outputs +8.3V.
Q5	DTC144EUA or UN5213	A8V AVR SW	A8V AVR ON/OFF control While Q5's base goes Hi, Q6 is turned on, and A8V AVR is working.
Q6	DTA124EUA or KRA303		
Q7	DTA124EUA or KRA303	SW14V SW	A8V AVR and SERVO +B AVR ON/OFF control While Q8's base goes Hi, Q7 is turned on, A8V AVR and SERVO +B AVR are working.
Q8	DTC144EUA or UN5213		
Q9	2SD2375	SERVO +B AVR	When Q9's base goes Hi, SERVO +B AVR outputs +7.6V.
Q10	2SB1184	ILL +B AVR	While Q11's base goes Hi, AVR outputs +10.7V. Works during POWER ON mode with a panel attached to the set.
Q11	2SC4081 or 2SD1819A		
Q12	DTC144EUA or UN5213	ILL +B SW	ILL +B AVR ON/OFF control While Q12's base goes Hi, Q13 is turned on, and ILL +B AVR is working.
Q13	DTA124EUA or KRA303		
Q14	DTA123JK or KRA105S	EXT. AMP CON. SW	When a base goes Lo, Q14 is turned on, and control pulse waveform shape is outputted.
Q15	DTC144EUA or UN5213	Small lamp detection SW	When vehicle small lamps turn on, Q15 is turned on .
Q24	DTC114YUA or UN5214	ANT-CON. SW	When Q24's base goes Hi, Q25 is turned on. Works during the tuner reception mode.
Q25	2SB1277(Q,R)		
Q26	2SB1277(Q,R)	P-CON SW	When Q29's base goes Hi, Q26 is turned on . Works during POWER ON mode.
Q29	DTC114YUA or UN5214		
Q27	2SA1576A or 2SB1218A	P-CON. protection SW	Protect Q26 by turning ON when P-CON output is grounded.
Q28	DTA124EUA or KRA303	P-CON. protection inhibit SW	Prevents Q27 tuning ON during start-up after power ON.
Q30	2SC4081 or 2SD1819A	BU detection SW	While BACKUP is applied, a base goes Hi, and Q30 is turned on. When momentary power down has detected, a base goes Lo, and Q30 is turned off.
Q31	2SC4081 or 2SD1819A	ACC detection SW	While ACC is applied, a base goes Hi, and Q31 is turned on.
Q32	DTA124EUA or KRA303	Mute driver for L Ch.	When BU detection SW or System RESET or MI-COM.'s Pre-mute is working, a base goes Lo, and Q32 and Q33 are turned on.
Q33	DTA124EUA or KRA303	Mute driver for R Ch.	
Q35	DTC124EUA or UN5212	E. VOL mute SW	When BU detection SW or MI-COM.'s mute is working, a base goes Hi, and Q35 is turned on.
Q36	2SC4081 or 2SD1819A	Noise buffer	

Ref.No.	Component Name	Application/Function	Operation/Condition/Compatibility
Q37	DTC143TUA or KRC410	Audio mute SW (Front L)	When Q37's base goes Hi, Pre-output is muted.
Q38	DTC143TUA or KRC410	Audio mute SW (Front R)	When Q38's base goes Hi, Pre-output is muted.
Q39	DTC143TUA or KRC410	Audio mute SW (Rear L)	When Q39's base goes Hi, Pre-output is muted.
Q40	DTC143TUA or KRC410	Audio mute SW (Rear R)	When Q40's base goes Hi, Pre-output is muted.
Q43	DTC124EUA or UN5212	FM +B SW	When Q43's base goes Hi, Q44 is turned on, and A8V is supplied to the F/E. Works during FM reception mode.
Q44	2SB1277(Q,R)		
Q45	DTC124EUA or UN5212	AM +B SW	When Q45's base goes Hi, Q46 is turned on, and A8V is supplied to the F/E. Works during AM reception mode.
Q46	2SB1277(Q,R)		
Q50	DTC144EUA or UN5213	PAN 5V SW	While a panel is attached to the set, Q50 and Q51 are turned on, and BU 5V is supplied to the panel.
Q51	2SA1576A or 2SB1218A		
Q52	2SC4081 or 2SD1819A	Composite signal output buffer	
Q53	DTC144EUA or UN5213	IFC buffer	Waveform shaping

MICROCOMPUTER'S TERMINAL DESCRIPTION

● **IC1(ELECTRIC UNIT : X25-939X-XX, X25-8762-7X)**

Pin No.	Pin Name	I/O	Description	Processing Operation
1	AM+B	O	AM+B control	Hi: During AM reception
2	FM+B	O	FM+B control	Hi: During FM reception, Hi: During FM reception if with RDS, RDBS
3	$\overline{\text{AFS}}$	O	Noise detection time constant switching terminal	Hi: During FM reception, Lo: During FM seek or AF search
4	PLL-DATA	I/O	Data input/output with F/E	
5	PLL-CLK	I/O	Clock output to F/E	
6	EVDD	-	Positive power supply connection terminal	Connected to BU 5V lines.
7	EVSS	-	Ground connection terminal	Connected to GND lines.
8	N.C.	O		Not used(N.C.)
9	BEEP	O	BEEP sound output	
10	REMO	I	Data input from the remote control light sensor	
11	$\overline{\text{PRE-MUTE L}}$	O	Pre-out mute control (L)	When M MUTE L input is Lo during CD source selected, PRE MUTE L outputs Lo.
12	$\overline{\text{PRE-MUTE R}}$	O	Pre-out mute control (R)	When M MUTE R input is Lo during CD source selected, PRE MUTE R outputs Lo.
13	$\overline{\text{IC2-SDA}}$	I/O	Data line with IC2,CD mechanism MI-COM.	
14	$\overline{\text{IC2-CLK}}$	O	Clock line with IC2,CD mechanism MI-COM.	
15,16	N.C.	O		Not used(N.C.)
17	DA-SDA / DIM-CON	O	Data output to D/A converter(V-LED model) / Dimmer control output	Data line with D/A converter / Hi: Dimmer OFF, Pulse wave shape: Dimmer ON
18	TEST	-	Test terminal	Not used(Connected to GND lines)
19	$\overline{\text{P-MUTE}}$	O	Power IC mute control output	Lo: Mute (during POWER OFF, ALL OFF, TEL MUTE)
20	P-STBY	O	Power IC standby control output	Lo: Power IC OFF, Hi: Power IC ON, ALL OFF mode
21	MUTE	O	IC2 mute control output	OPEN(Hi): Mute ON, Lo: Mute OFF
22,23	N.C.	O		Not used(N.C.)
24	$\overline{\text{ACC-DET}}$	I	ACC detection terminal	Lo: ACC ON, Hi: ACC OFF
25	$\overline{\text{DIMMER}}$	I	Small lights detection input	Lo: During vehicle small lamps turn on.
26	$\overline{\text{SW5V}}$	O	SW 5V control output	Lo: POWER ON mode
27	EXT-AMP-CONT	O	External amp. control output	Bass boost OFF__Hi: 160msec, Lo: 40msec Bass boost LOW__Hi: 130msec, Lo: 70msec Bass boost HI__ Hi: 100msec, Lo: 100msec
28	P-CON	O	Power control output	Lo: POWER OFF mode, Hi: POWER ON mode
29	ANT-CON	O	Antenna control output	Hi: During TUNER mode or TI reception
30	P-ON	O	SW 14V control output	Hi: POWER ON mode
31	$\overline{\text{RESET}}$	I	Reset input terminal	Lo: System reset
32	XT1	I	Sub clock resonator connection terminal	Clock count during POWER OFF mode
33	XT2	-	Sub clock resonator connection terminal	
34	REGC	-	Capacitor conection terminal for regulator inside microprocessor	
35	X2	-	Main clock resonator connection terminal	Oscillation: POWER ON mode, Oscillation stop: POWER OFF mode or momentary power down detected
36	X1	I	Main clock resonator connection terminal	
37	VSS	-	Ground connection terminal	Connected to GND lines.
38	VDD	-	Positive power supply connection terminal	Connected to BU 5V lines.
39	CLKOUT	O	Internal system clock output	Not used(N.C.)
40,41	N.C.	O		Not used(N.C.)
42	TYPE0	I	Destination type selection terminal 0	
43	TYPE1	I	Destination type selection terminal 1	
44	TYPE2	I	Destination type selection terminal 2	
45	N.C.	O		Not used(N.C.)
46	IC2 TYPE0	I	IC2 setting terminal	Lo: Initial value
47	IC2 TYPE1	I	IC2 setting terminal	Lo: Initial value
48	$\overline{\text{CH-REQH}}$	O	Request output to changers	Lo: Request

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Description	Processing Operation
49	CH-RST	O	Reset output to changers	⎍ : Reset
50	CH-MUTE	I	Mute request from changers	Hi: Mute request
51	CH-CON	O	Changer control	Lo: Standby mode, Hi: Operation mode
52	ILL-ON	O	Illumination AVR on/off control output	Hi: POWER ON mode except panel detached
53	M-MUTE L	I	Mute request (L Ch.) from CD MECHA. MI-COM.	Lo: Mute request
54	M-MUTE R	I	Mute request (R Ch.) from CD MECHA. MI-COM.	Lo: Mute request
55	BVDD	-	Positive power supply connection terminal	Connected to BU 5V lines.
56	BVSS	-	Ground connection terminal	Connected to GND lines.
57	M-RST	O	Reset output to CD mechanism MI-COM.	Lo: Reset
58	M-STOP	O	Stop request to CD mechanism MI-COM.	Lo: Stop mode, Hi: Operation mode
59	N.C.	O		Not used(N.C.)
60	LO/EJ	I/O	CD mechanism loading/Eject switching output	Lo: Loading, Hi: Eject, Hi-Z: Stop or Break
61	MOSW	O	CD mechanism loading motor control output	Hi: CD loading/eject action or Break, Lo: other
62	N.C.	O		Not used(N.C.)
63	CD-SW3	I	Down & limit switch detection input	Hi: Chucking, Lo: Pickup most inner position
64	DA-SDA/NC	O	Clock output to D/A converter (V-LED model)	Lo: Panel detached, momentary power down detected
65	LCE	O	CE output to LCD driver IC	
66-69	N.C.	O		Not used(N.C.)
70	AV CONT	O	A/D converter reference voltage control output	Hi: Active, Connected to AVREF terminal
71	AVDD	-	A/D converter positive power supply connection terminal	Connected to BU 5V lines.
72	AVSS	-	A/D converter ground connection terminal	Connected to GND lines.
73	AVREF	I	A/D converter reference voltage input terminal	
74	PHONE	I	PHONE detection input	1V or less: TEL MUTE, 2.5V or greater: NAVI MUTE
75	SRM-SW3	I	Mask mechanism position SW3 input	Panel: (SW1,SW2,SW3)=(Lo,Lo,Hi) Angle: (SW1,SW2,SW3)=(Hi,Hi,Lo) Eject: (SW1,SW2,SW3)=(Hi,Hi,Hi) Mask : (SW1,SW2,SW3)=(Lo,Lo,Lo)
76	SRM-SW1	I	Mask mechanism position SW1 input	
77	SRM-SW2	I	Mask mechanism position SW2 input	
78	SRM-DET	I	Mask mechanism detection input	Lo: Mechanism detected, Hi: mechanism not detected
79	NOISE	I	FM noise detection input	
80	S-METER	I	S-meter input from F/E	
81	R-DATA	I	Data input from the RDS decoder IC	Except RDS, RBDS model: Not used(pull down to GND lines)
82	R-QUAL	I	Quality input from the RDS decoder IC	Except RDS, RBDS model: Not used(pull down to GND lines)
83	IFC-OUT	I	F/E IFC OUT input terminal	Lo: Station detected, Hi: Not detected
84,85	N.C.	I		Not used(pull down to GND lines)
86	SRM-B	O	SRM mechanism submotor control output	Standby: (SRM+B,SRM-B)=(Lo,Lo) Clock wise: (SRM+B,SRM-B)=(Hi,Lo) Counter clock wise: (SRM+B,SRM-B)=(Lo,Hi) Break: (SRM+B,SRM-B)=(Hi,Hi)
87	R-CLK	I	Clock input from the RDS decoder IC	Except RDS, RBDS model: Not used(pull down to GND lines)
88	CH-REQC	I	Request input from changers	Lo: Request
89	KEY-REQ	I	Communication request from LCD driver IC	
90	CD-SW1	I	Loading SW detection input	Lo: Loading start
91	CD-SW2	I	12cm disc detection SW input	Lo: 12cm disc detected
92	SRM+B	O	SRM mechanism submotor control output	
93	BU-DET	I	Momentary power down detection input	Hi : When momentary power down detected or BU OFF Lo : BU ON
94	CH-DATAC	I	Data input from changers	
95	CH-DATAH	O	Data output to changers	
96	CH-CLK	I/O	Clock input/output with changers	
97	L-DATA L	I	Data input from the LCD driver IC	
98	L-DATA S	O	Data output to the LCD driver IC	
99	L-CLK	I/O	Clock output to the LCD driver IC /Panel detaching detection input(LCD Driver)	Lo: Panel attached
100	PAN5V	O	Panel 5V control	Hi: Panel attached, Lo: Panel detached

TEST MODE

1. How to enter the test mode

While holding the FM and Preset 6 keys, reset the unit.

2. How to exit from the test mode

While holding the Preset 6 key, reset the unit.

(Note) The test mode cannot be terminated by ACC OFF, power OFF or momentary power down.

3. Initial status in the test mode

- Sources : ALL OFF
- Display : All segments are lit.
- Volume : -10 dB (displayed as " 30 ")
- Loudness : OFF
- CRSC : OFF regardless of the presence of switching function.
- SYSTEM Q : Flat

4. Special display in Tuner mode

When any of the following messages is displayed in Tuner mode, the F/E may be abnormal.

- " TNE2P NG ": The EEPROM is set to the default (unstable values) because the F/E was shipped without passing through the adjustment process, etc.
- " TNCON NG ": Communication with the F/E is not possible.

5. Forced switching of K3I

Each press of the Preset 6 key in Tuner mode should switch K3I from AUTO → Forced Wide → Forced Middle → Forced Narrow → AUTO.

The initial status is AUTO and the display shows these modes as follows.

- AUTO : FMA
- Forced Wide : FMW
- Forced Middle : FMM
- Forced Narrow : FMN

6. Test mode specifications of the CD receiver

- Forced ejection is inhibited in the reset start operation. When the unit is reset while a CD is loaded in it, the CD is not recognized by resetting.
- Each press of the Track Up key jumps to the following track numbers:
  No. 9 → No. 15 → No. 10 → No. 11 → No. 12 → No. 13 → No. 14 → No. 9 (The cycle restarts from here.)
- Each press of the Track Down key jumps to the previous track number to the track being played.

7. Audio-related specifications

- A short press of the Q key initiates the audio adjustment mode.
- Pressing the ∗ key on the remote initiates the audio adjustment mode.
- Continuous holding of a remote control key is inhibited.
- Bass, Middle and Treble are adjusted in 3 steps of Min / Center / Max with the Track Up/Down keys.
- Balance is adjusted in 3 steps of Left Max / Center / Right Max with the Track Up/Down keys.
- Fader is adjusted in 3 steps of Rear Max / Center / Front Max with the Track Up/Down keys.
- HPF is adjusted in 2 steps of Through/220Hz with the Track Up/Down keys.
- LPF is adjusted in 2 steps of Through/120Hz with the Track Up/Down keys.
- Bass f, Bass Q, Bass EXT, Middle f, Middle Q and Treble f are not dealt with by the audio adjustment.

8. Menu-related specifications

- A short press of the CLK key initiates the Menu mode.
- Pressing the DNPP/SBF key on the remote initiates the Menu mode.
- Continuous holding of a remote control key is inhibited.
- Contrast is adjusted in 3 steps of 0/5/10 and the default is 5.

9. Backup current measurement

When the unit is reset while ACC is OFF (i.e. by turning Backup ON), the MUTE terminal goes OFF in 2 seconds in place of 15 second. (The panel and CD mechanism are not activated at this time.)

10. Special display when the display is all on

Pressing the Preset keys while the power is ALL OFF displays the following information.

[PRESET 1]	Version display (8 digits, Month/Day/Hour/Minute) (Display) SYS xxxxxxxx System microcomputer
[PRESET 2]	Serial No. display (8 digits) (Note) CD/RK type eXcelon model (Display) S. No. xxxxxxxx
[PRESET 3]	Short press : View power ON time. (The All OFF period is not counted.) Long press/hold : Clear power ON time. (Display) PonTim xxxxx Max. 65535 (hours)
[PRESET 4]	Short press : Display CD operation time. Long press/hold : Clear CD operation time (Display) CDTime xxxxx Max. 65535 (hours)
[PRESET 5]	Short press : Display CD ejection count. Long press/hold : Clear CD ejection count. (Display) EjeTim xxxxx Max. 65535 (times)
[PRESET 6]	Short press : Display Panel open/close count. Long press/hold : Clear Panel open/close count. (Display) PnCnt xxxxx Max. 655350 (times)

11. Other specifications

- Automatic panel closing when a CD is inserted is inhibited. (M&T model)
- Panel operation by turning power OFF/ON is inhibited. (M&T model)
- Messages such as "CODE OFF" are not displayed when power is turned ON.
- Pressing the ATT key opens or closes the panel. (M&T model)
- Pressing the TI (AUTO) key during changer operation turns 2zone ON. 2zone can be turned OFF by pressing the TI (AUTO) key again. The P/S dot lights while 2zone is ON.
- Pressing and holding the CLK key for a second in the ALL OFF status the Mask Key (security) write mode.

KDC-5019/519/7021/7021Y/8020/B7021

TEST MODE / ATTENTION

Security-related information

1. Forced Power ON mode (All models)

Even when the security (Mask key) is approved, resetting the unit while holding the ATT and Preset 4 keys makes it possible to turn the power ON for 30 minutes.

After 30 minutes have elapsed, it is not possible to return to the previous condition unless the unit is reset again.

2. Method of registration of the security code after EEPROM (Tuner Unit Ass'y) replacement (Code security model)

1. Enter the test mode. (See 1. How to enter the test mode)
2. Press the CLK key to enter the security registration mode.
3. Enter the code using the Preset 1/2/3/4 keys.
   Example: To enter " 3510 "
   - Press the Preset 1 key 4 times.
   - Press the Preset 2 key 6 times.
   - Press the Preset 3 key twice.
   - Press the Preset 4 key once.
4. Hold down the DISP key for at least 3 seconds and the message, " RE-ENTER " appears, so once again enter the code according to Step 3 above.
5. Press and hold the DISP key for 3 seconds until " APPROVED " is displayed.
6. Exit from the test mode. (See 2. How to exit from the test mode)

(Note) All Clear is not applicable to the security code of this model.

3. Simplified method of clearing the security code (K Type only)

1. While the code entry is requested, press and hold the VOL UP key for 3 seconds while holding the DISP key pressed. (This should turn "----" off.)
2. Enter " KCAR " from the remote. (Same way as the 00 model)
   - Press the 5 key on the remote twice, then press the Track Up key. (This enters " K ".)
   - Press the 2 key on the remote 3 times, then press the Track Up key. (This enters " C ".)
   - Press the 2 key on the remote once, then press the Track Up key. (This enters " A ".)
   - Press the 7 key on the remote twice, then press the Track Up key. (This enters " R ".)
3. The security code is cleared and the unit enters the ALL OFF mode.
4. If you commit a mistake in the code entry, the unit enters the code request mode again.

4. Method of writing the Mask key while the EEPROM is in the initial status

1. Enter the test mode. (See 1. How to enter the test mode)
2. Press the CLK key to enter the Mask key registration mode. " TRANSMIT1 " should be displayed now. The display at this time should show " < > " in place of " [ ] ".
3. Point the Mask key remote toward the light sensor, and press and hold its key for more than 0.5 second.
4. When " TRANSMIT2 " is displayed, press and hold the key on the Mask key remote for more than 0.5 second again. The first and second counter codes are not compared at this time.
5. When " APPROVED " is displayed, the write operation is complete. Now the demonstration mode is initiated and the test mode is terminated.

(Note) In the same way as previous models, if 30 minutes have elapsed with no code written, an error occurs and the power is turned OFF.

5. Method of initializing the Mask key (How to reset the unit from the Mask key approved condition to the factory condition)

1. Enter the test mode. (See 1. How to enter the test mode)
2. " TRANSMIT1 " is displayed and the Mask key entry request mode is initiated. The display at this time should show " ∗∗ " in place of " [ ] ".
3. Press and hold the key on the Master key remote for more than 3 seconds.
4. When " TRANSMIT2 " is displayed, press and hold the key on the Master key remote for more than 3 seconds again.
5. When " APPROVED " is displayed, the Mask key is cleared, the demonstration mode is initiated, the test mode is terminated and the unit returns to the factory condition.

6. Method of clearing all Mask key-related data

1. Enter the test mode. (See 1. How to enter the test mode)
2. Press the CLK key to enter the Mask key registration mode. " TRANSMIT1 " should be displayed now.
3. Point the Master key remote toward the light sensor, and press and hold its key for more than 3 seconds (until the level display shows the full condition).
4. When " TRANSMIT2 " is displayed, hold the key on the Mask key remote for more than 3 seconds again. If " TRANSMIT1 " is displayed in place of " TRANSMIT2 ", restart the procedure from step 3.
5. When " APPROVED " is displayed, all security data is cleared and the unit returns to the condition before Mask key writing with the EEPROM in the initial status.

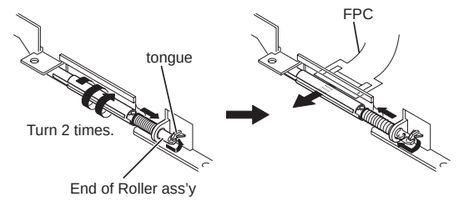
ATTENTION

Assembly of FPC(Flexible PC board) onto Roller ass'y

Turn Roller ass'y by 2 times.

Hook the end of Roller ass'y to the tongue.

Insert the FPC into the slit of Roller ass'y then release the end of Roller ass'y and the tongue.



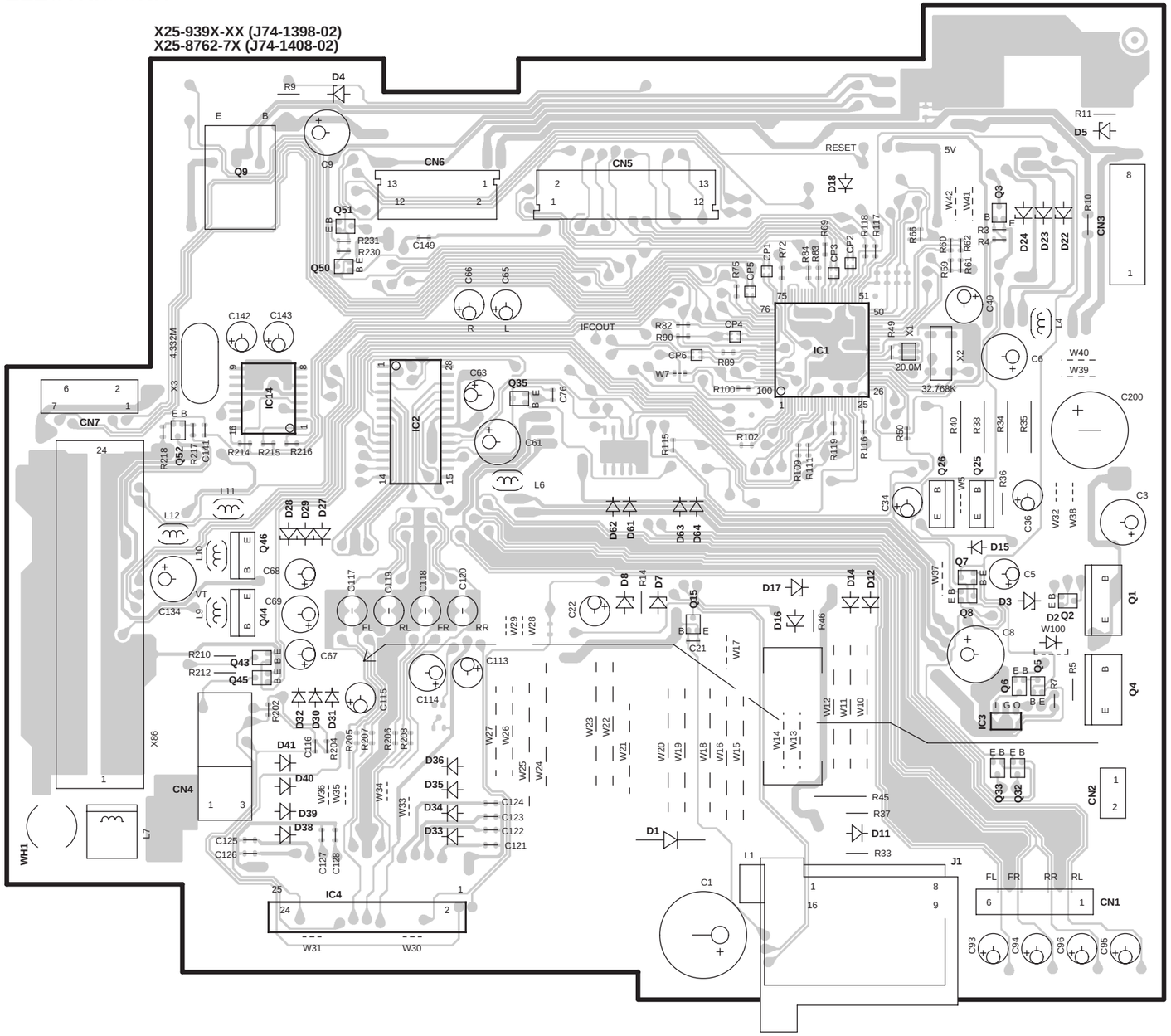
PC BOARD (Component Side View)

ELECTRIC UNIT

ELECTRIC UNIT
(X25-939X-XX/8672-7X)

Ref. NO.		Address
IC	Q	
1		3E
2		3C
3		5F
4		6C
14		3C
	1	4G
	2	4F
	3	2F
	4	5G
	5	4F
	6	4F
	7	4F
	8	4F
	9	2C
	15	4E
	25	3F
	26	3F
	32	5F
	33	5F
	35	3D
	43	4C
	44	4C
	45	4C
	46	4C
	50	2C
	51	2C
	52	3B

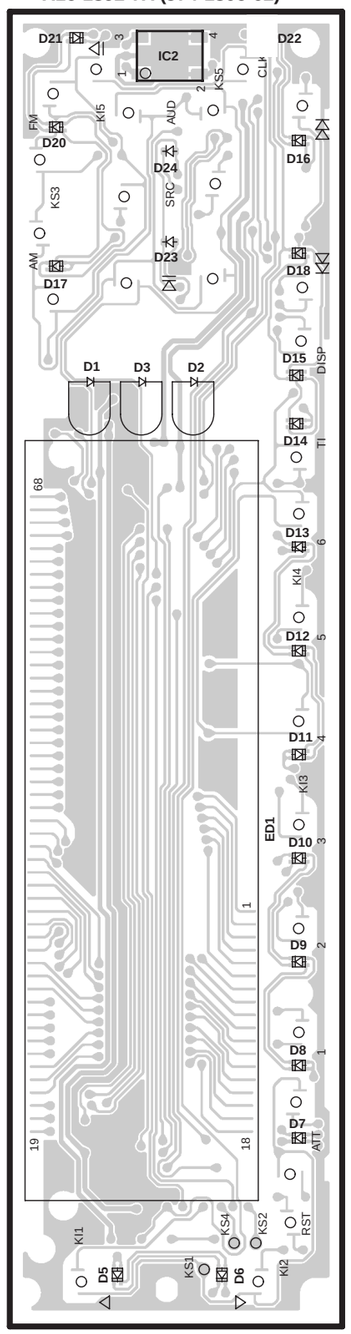
X25-939X-XX (J74-1398-02)
X25-8762-7X (J74-1408-02)



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

SWITCH UNIT

X16-154X-XX (J74-1306-02)
X16-1892-7X (J74-1306-02)



SWITCH UNIT
(X16-154X-XX/1892-7X)

Ref. NO.		Address
IC	Q	
2		2H

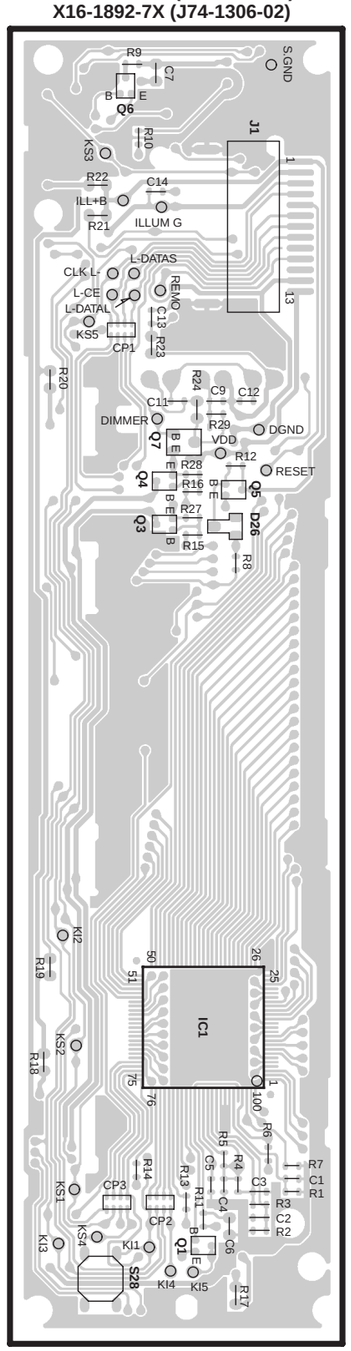
PC BOARD (Foil Side View)

SWITCH UNIT

SWITCH UNIT
(X16-154X-XX/1892-7X)

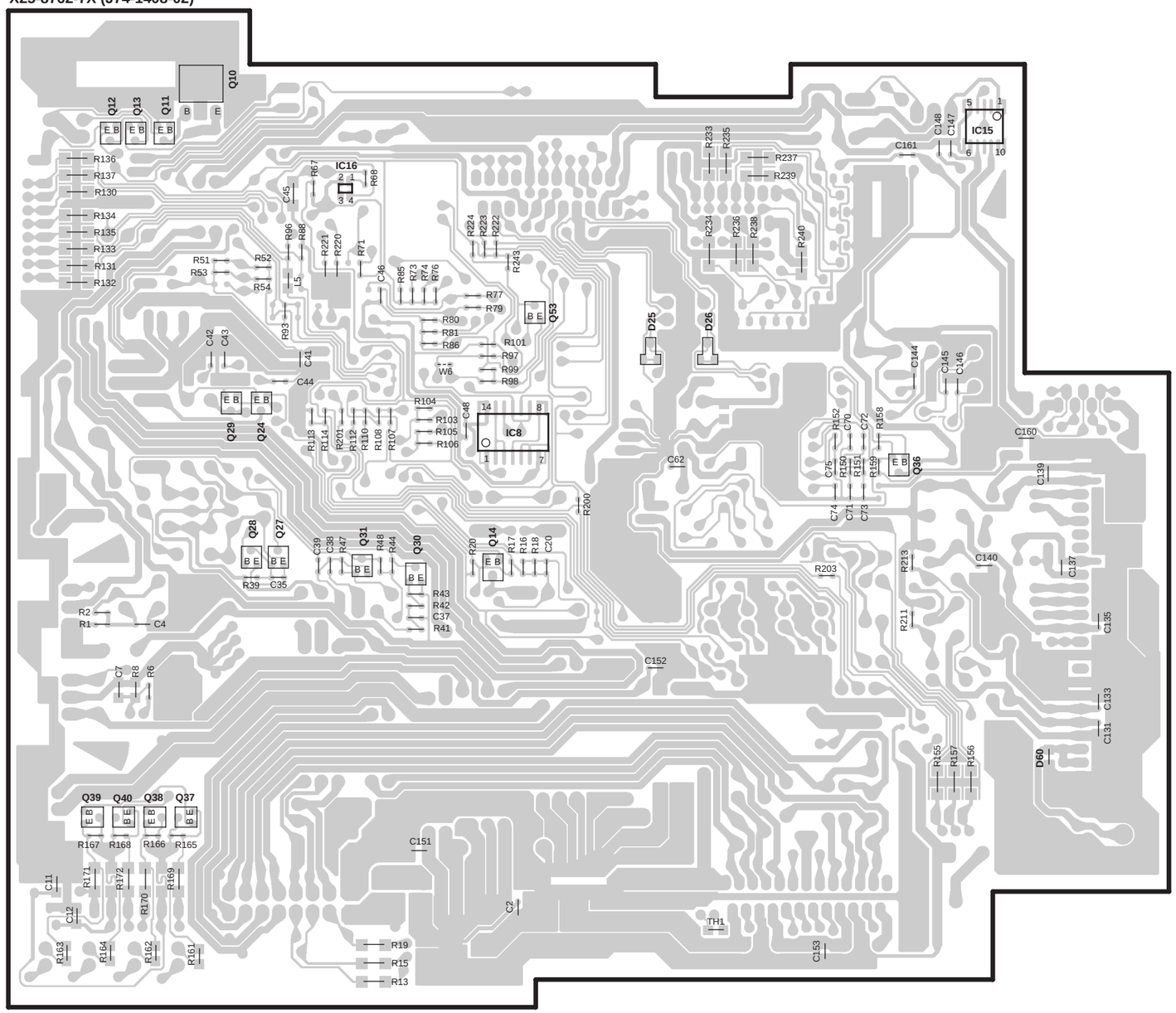
Ref. NO.		Address
IC	Q	
1		5K
	1	6K
	3	3K
	4	3K
	5	3K
	6	2K
	7	3K

X16-154X-XX (J74-1306-02)
X16-1892-7X (J74-1306-02)



ELECTRIC UNIT

X25-939X-XX (J74-1398-02)
X25-8762-7X (J74-1408-02)

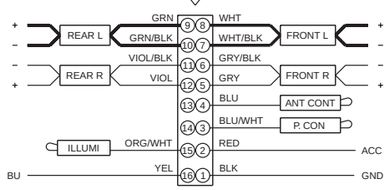


ELECTRIC UNIT
(X25-939X-XX/8762-7X)

Ref. NO.		Address
IC	Q	
8		4N
15		2Q
16		2N
	10	2M
	11	2M
	12	2M
	13	2M
	14	4N
	24	3M
	27	4M
	28	4M
	29	3M
	30	4N
	31	4N
	36	4P
	37	5M
	38	5M
	39	5L
	40	5M
	53	3O

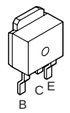
Refer to the schematic diagram for the values of resistors and capacitors.

DTA123JK
DTC114YUA
DTC143TUA
DTC143ZK
UN5213
UN5214
2SA1576A
2SB1218A
2SD1819A



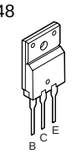
DC CORD
(E30-4939-05)
KDC-8020

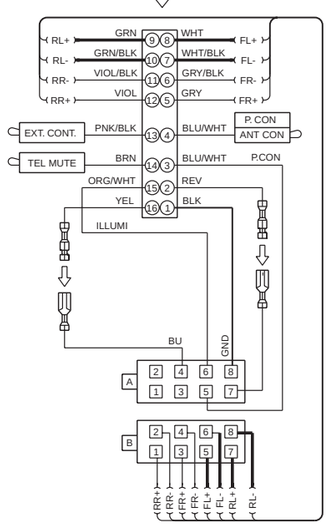
2SB1184



DC CORD
(E30-4940-05)
KDC-519/5019

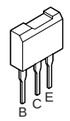
2SB1548



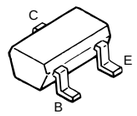


DC CORD
(E30-4942-05) : KDC-7021Y
(E30-4956-05) : KDC-7021/B7021

2SB1277



2SC4081



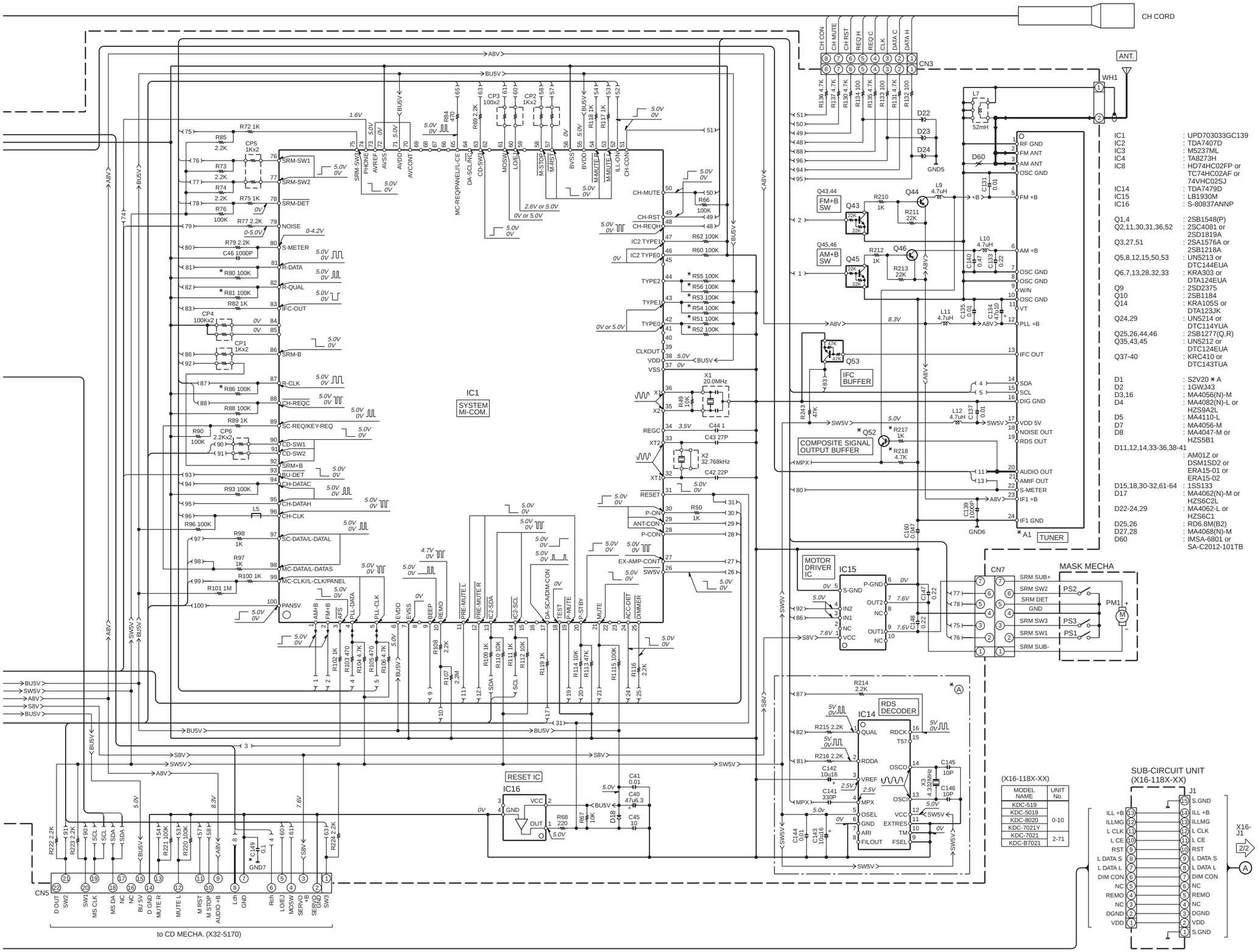
CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to, parts list). ⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably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

(X25-939X-XX/8762-7X)

MODEL NAME	UNIT No.	Ⓐ	A1	C20	C149	D7	D8	Q14	Q24, 25	Q52	R13, 14	R15-17, 217,218	R18,34-36, 80,81,86	R51	R52	R53	R54	R55	R56	W5
KDC-519	X25-9390-11	NO	X86-3240-11	NO	YES	NO	NO	NO	YES	NO	NO	NO	YES	YES	NO	NO	YES	NO	YES	NO
KDC-5019	X25-9390-12	NO	X86-3240-11	NO	YES	NO	NO	NO	YES	NO	NO	NO	YES	YES	NO	YES	NO	NO	YES	NO
KDC-8020	X25-9390-21	NO	X86-3240-11	NO	YES	YES	NO	YES	YES	NO	YES	NO	YES	NO	YES	NO	YES	YES	NO	NO
KDC-7021	X25-9392-72/8762-73	YES	X86-3242-70/3342-71	YES	NO	YES	YES	YES	NO	YES	YES	YES	NO	NO	YES	YES	NO	NO	YES	YES
KDC-7021Y	X25-9392-73	YES	X86-3242-70	YES	NO	YES	YES	YES	NO	YES	YES	YES	NO	NO	YES	YES	NO	NO	YES	YES
KDC-B7021	X25-9392-74/8762-74	YES	X86-3242-70/3342-71	YES	NO	YES	YES	YES	NO	YES	YES	YES	NO	YES	NO	NO	YES	YES	YES	YES

SIGNAL LINE
GND LINE
+B LINE



(X16-118X-XX)

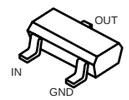
MODEL NAME	UNIT No.
KDC-519	
KDC-5019	
KDC-8020	0-10
KDC-7021Y	
KDC-7021	2-71
KDC-B7021	

IC1 : UPD703033GC139
IC2 : TDA7407D
IC3 : M5237ML
IC4 : TA8273H
IC8 : HD74HC02FP or TC74HC02AF or 74VHC02SJ
IC14 : TDA7479D
IC15 : LB1930M
IC16 : S-80837ANNP

Q1,4 : 2SB1548(P)
Q2,11,30,31,36,52 : 2SC4081 or 2SD1819A
Q3,27,51 : 2SA1576A or 2SB1218A
Q5,8,12,15,50,53 : UN5213 or DTC144EUA
Q6,7,13,28,32,33 : KRA303 or DTA124EUA
Q9 : 2SD2375
Q10 : 2SB1184
Q14 : KRA105S or DTA123JK
Q24,29 : UN5214 or DTC114YUA
Q25,26,44,46 : 2SB1277(Q,R)
Q35,43,45 : UN5212 or DTC124EUA
Q37-40 : KRC410 or DTC143TUA

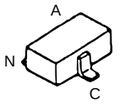
D1 : S2V20 ✱ A
D2 : 1GWJ43
D3,16 : MA4056(N)-M
D4 : MA4082(N)-L or HZS9A2L
D5 : MA4110-L
D7 : MA4056-M
D8 : MA4047-M or HZS5B1
D11,12,14,33-36,38-41 : AM01Z or DSM1SD2 or ERA15-01 or ERA15-02
D15,18,30-32,61-64 : 1SS133
D17 : MA4062(N)-M or HZS6C2L
D22-24,29 : MA4062-L or HZS6C1
D25,26 : RD6.8M(B2)
D27,28 : MA4068(N)-M
D60 : IMSA-6801 or SA-C2012-101TB

DTA114EUA
DTA124EUA
DTC124EUA
DTC144EUA

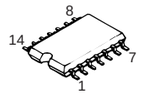


UN5212

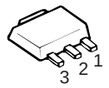
RD6.8M



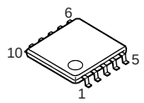
TC74HC02AF



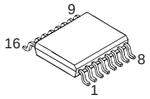
M5237ML



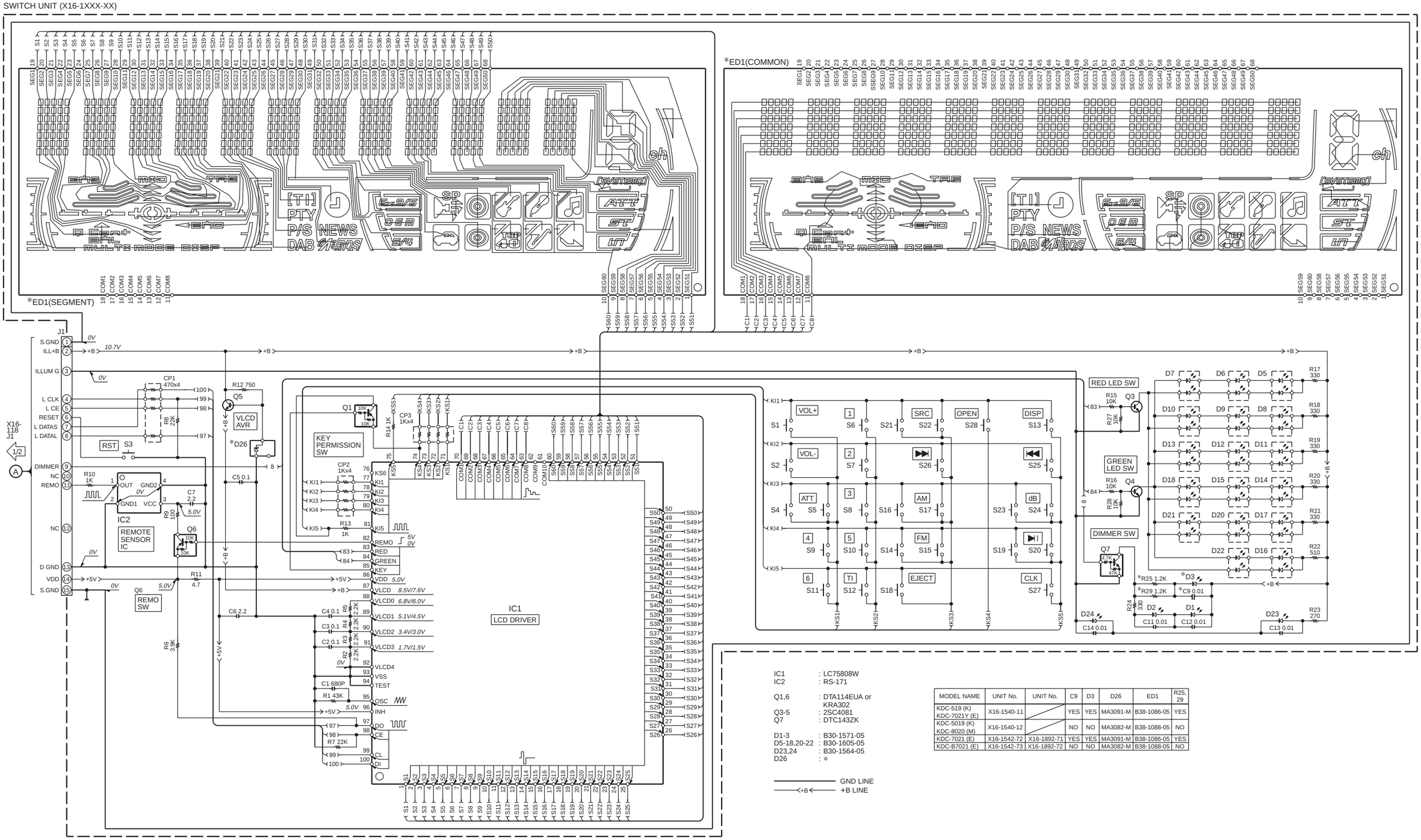
LB1930M



TDA7479D



SWITCH UNIT (X16-1XXX-XX)



IC1 : LC75808W
IC2 : RS-171

Q1,6 : DTA114EUA or KRA302
Q3-5 : 2SC4081
Q7 : DTC143ZK

D1-3 : B30-1571-05
D5-18,20-22 : B30-1605-05
D23,24 : B30-1564-05
D26 : *

MODEL NAME	UNIT No.	UNIT No.	C9	D3	D26	ED1	R25, 29
KDC-519 (K) KDC-7021Y (E)	X16-1540-11		YES	YES	MA3091-M	B38-1086-05	YES
KDC-5019 (K) KDC-8020 (M)	X16-1540-12		NO	NO	MA3082-M	B38-1088-05	NO
KDC-7021 (E)	X16-1542-72	X16-1892-71	YES	YES	MA3091-M	B38-1086-05	YES
KDC-B7021 (E)	X16-1542-73	X16-1892-72	NO	NO	MA3082-M	B38-1088-05	NO

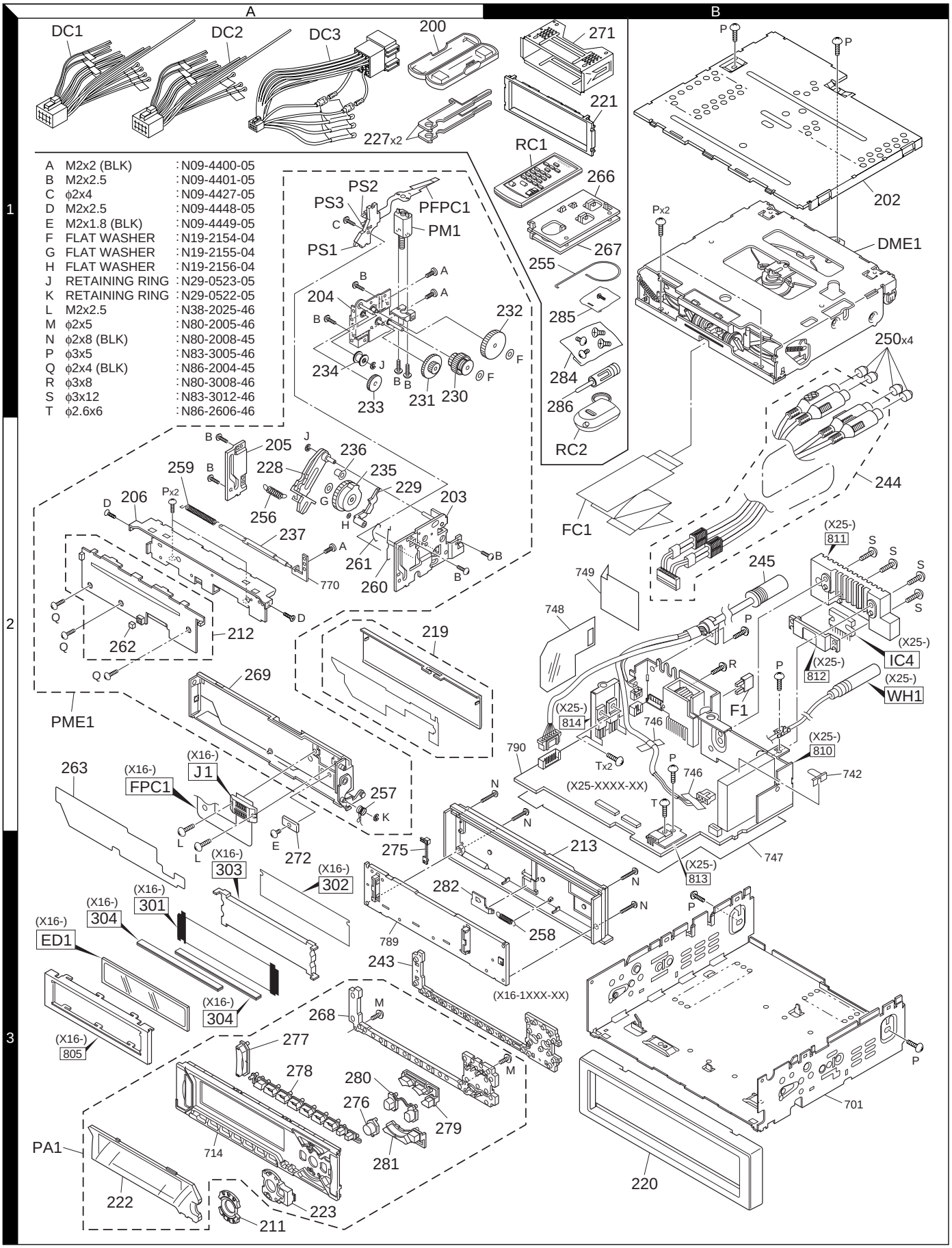
CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to, parts list). ⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably 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-5019/519/7021/7021Y/8020/B7021

KENWOOD

EXPLODED VIEW



A	M2x2 (BLK)	: N09-4400-05
B	M2x2.5	: N09-4401-05
C	ϕ2x4	: N09-4427-05
D	M2x2.5	: N09-4448-05
E	M2x1.8 (BLK)	: N09-4449-05
F	FLAT WASHER	: N19-2154-04
G	FLAT WASHER	: N19-2155-04
H	FLAT WASHER	: N19-2156-04
J	RETAINING RING	: N29-0523-05
K	RETAINING RING	: N29-0522-05
L	M2x2.5	: N38-2025-46
M	ϕ2x5	: N80-2005-46
N	ϕ2x8 (BLK)	: N80-2008-45
P	ϕ3x5	: N83-3005-46
Q	ϕ2x4 (BLK)	: N86-2004-45
R	ϕ3x8	: N80-3008-46
S	ϕ3x12	: N83-3012-46
T	ϕ2.6x6	: N86-2606-46

Parts with exploded numbers larger than 700 are not suppied.

PARTS LIST

∗ New Parts
Parts without Parts No. are not supplied.
Les articles non mentionnes dans le Parts No. ne sont pas fournis.
Teile ohane Parts No. werden nicht geliefert.

Ref.No.	Add	New	Parts No.	Description	Destination
KDC-5019/519/7021/7021Y/8020/B7021					
200	1A		A02-1497-13	PLASTIC CABINET ASSY	
202	1B	∗	A52-0808-02	TOP PLATE	
203	2A		A10-4807-13	CHASSIS CALKING ASSY	
204	1A		A10-4810-13	CHASSIS CALKING ASSY	
205	2A		A10-4893-04	CHASSIS CALKING ASSY	
206	2A	∗	A10-4924-02	CHASSIS	
211	3A	∗	A21-4171-03	DRESSING PANEL	
212	2A		A22-2865-03	SUB PANEL ASSY	
213	3B	∗	A46-1753-01	REAR COVER	
PA1	3A	∗	A64-2578-02	PANEL ASSY	K
PA1	3A	∗	A64-2579-02	PANEL ASSY	K1
PA1	3A	∗	A64-2581-02	PANEL ASSY	M1
PA1	3A	∗	A64-2583-02	PANEL ASSY	E2,Z1
PA1	3A	∗	A64-2584-02	PANEL ASSY	Z2
PME1	2A	∗	A10-4921-02	CHASSIS ASSY	
RC1	1B	∗	A70-2025-05	REMOTE CONTROLLER ASSY (RC-410)	
RC2	2B		A70-0886-15	REMOTE CONTROLLER ASSY	E2,Z1,Z2
219	2A		B03-3073-12	DRESSING PLATE	
220	3B		B07-3007-03	ESCUTCHEON ASSY (BLK)	
221	1B		B07-3010-02	ESCUTCHEON (J CAR)	K,K1,M1
222	3A	∗	B10-4157-01	FRONT GLASS	K
222	3A	∗	B10-4158-01	FRONT GLASS	K1
222	3A	∗	B10-4160-01	FRONT GLASS	M1
222	3A	∗	B10-4162-01	FRONT GLASS	E2,Z1
222	3A	∗	B10-4163-01	FRONT GLASS	Z2
223	3A	∗	B10-4222-03	FRONT GLASS	
-			B46-0100-50	WARRANTY CARD	K,K1,M1
-			B46-0100-50	WARRANTY CARD	Z1,Z2
-			B46-0606-04	ID CARD	K,K1
-			B46-0612-14	ID CARD	M1
-			B46-0632-04	ID CARD	E2,Z1,Z2
-			B46-0645-03	USER CARD	K,K1
-		∗	B64-2145-00	INST. MANUAL (ENG,RUS)	E2
-		∗	B64-2146-00	INST. MANUAL (POL,CZE,HUN)	E2
-		∗	B64-2147-00	INST. MANUAL (CRO,SWE,FIN)	E2
-		∗	B64-2148-00	INST. MANUAL (ENG,FRE,SPA)	K,K1
-		∗	B64-2149-00	INST. MANUAL (ENG,T-CHI)	M1
-		∗	B64-2150-00	INST. MANUAL (ARABIC)	M1
-		∗	B64-2151-00	INST. MANUAL (ENGLISH)	Z1,Z2
-		∗	B64-2152-00	INST. MANUAL (FRE,GER,DUT)	Z1,Z2
-		∗	B64-2153-00	INST. MANUAL (ITA,SPA,POR)	Z1,Z2
227	1A		D10-4562-04	LEVER	
227	1A		D10-4621-04	LEVER	Z1,Z2
228	2A		D10-4563-04	ARM ASSY	
229	2A		D10-4590-04	ARM	
230	1A		D13-2135-04	GEAR ASSY	
231	1A		D13-2138-04	GEAR	
232	1B		D13-2139-04	GEAR	
233	1A		D13-2140-04	GEAR	
234	1A		D13-2141-14	GEAR ASSY	
235	2A		D13-2165-03	GEAR ASSY	
236	2A		D14-0754-04	ROLLER	
237	2A		D14-0760-03	ROLLER	
243	3A	∗	E29-1879-02	CONDUCTIVE RUBBER	
244	2B		E30-4935-05	CORD WITH PINPLUG	E2
244	2B		E30-4935-05	CORD WITH PINPLUG	K,K1,M1
244	2B		E30-4979-05	CORD WITH PINPLUG	Z1,Z2
245	2B		E30-4946-05	CORD WITH DIN CONNECTOR	E2
245	2B		E30-4946-05	CORD WITH DIN CONNECTOR	K,K1,M1
245	2B		E30-4947-05	CORD WITH DIN CONNECTOR	
⚠ DC1	1A		E30-4940-05	DC CORD	K,K1
⚠ DC2	1A		E30-4939-05	DC CORD	M1
⚠ DC3	1A		E30-4942-05	DC CORD	E2
⚠ DC3	1A		E30-4956-05	DC CORD	Z1,Z2
FC1	1B	∗	E39-0462-05	FLAT CABLE (22P)	
250	1B		F29-0049-05	INSULATING COVER	
⚠ F1	2B		F52-0006-05	FUSE (MINI BLADE TYPE) (10A)	
⚠ F1	2B		F52-0011-05	FUSE (MINI BLADE TYPE) (10A)	E2
⚠ F1	2B		F52-0011-05	FUSE (MINI BLADE TYPE) (10A)	K,K1,M1
255	1B		G01-2924-04	TORSION COIL SPRING	
256	2A		G01-3065-04	EXTENSION SPRING	
257	2A		G01-3066-14	TORSION COIL SPRING	
258	3B		G01-3069-04	EXTENSION SPRING	
259	2A		G01-3080-04	TORSION COIL SPRING	
260	2A		G09-2038-04	FORMED WIRE	
261	2A		G09-2042-04	FORMED WIRE	
262	2A		G11-1927-04	CUSHION	
263	2A		G16-1177-04	SHEET	
-			H10-4762-12	POLYSTYRENE FOAMED FIXTURE	Z1,Z2
-			H10-4763-12	POLYSTYRENE FOAMED FIXTURE	E2
-			H10-4764-12	POLYSTYRENE FOAMED FIXTURE	K,K1,M1
-			H25-0329-04	PROTECTION BAG (280X450X0.03)	E2
-			H25-0329-04	PROTECTION BAG (280X450X0.03)	K,K1,M1
-			H25-0337-04	PROTECTION BAG (180X300X0.03)	
-			H25-1108-04	PROTECTION BAG (100X300X0.03)	
-			H25-1111-04	PROTECTION BAG (280X450X0.03)	Z1,Z2
-		∗	H54-2339-03	ITEM CARTON CASE	K1
-		∗	H54-2340-03	ITEM CARTON CASE	M1
-		∗	H54-2341-03	ITEM CARTON CASE	Z2
-		∗	H54-2345-03	ITEM CARTON CASE	K
-		∗	H54-2346-03	ITEM CARTON CASE	Z1
-		∗	H54-2347-03	ITEM CARTON CASE	E2
266	1B		J19-5051-03	BRACKET (L)	K,K1,M1
267	1B		J19-5052-03	BRACKET (R)	K,K1,M1
268	3A	∗	J19-5136-02	HOLDER	
269	2A		J21-9651-13	MOUNTING HARDWARE ASSY	
271	1B		J21-9716-03	MOUNTING HARDWARE ASSY	
272	3A		J90-0999-04	GUIDE	
PFPC1	1A		J84-0122-04	FLEXIBLE PRINTED WIRING BOARD	
275	3A		K24-3646-04	KNOB (OPEN)	
276	3A	∗	K24-3835-04	KNOB (SRC)	
277	3A	∗	K25-1404-03	KNOB (VOL)	
278	3A	∗	K25-1405-02	KNOB (PRESET)	
279	3A	∗	K25-1406-03	KNOB (FM,AM)	

K: KDC-519 **K1:** KDC-5019 **M1:** KDC-8020
E2: KDC-7021Y **Z1:** KDC-7021 **Z2:** KDC-B7021

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PARTS LIST

∗ New Parts
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Ref.No.	Add	New	Parts No.	Description	Destination
280	3A	∗	K25-1407-03	KNOB (PROG)	
281	3A	∗	K25-1408-03	KNOB (UP,DOWN)	
282	3A		K29-7017-03	KNOB (LOCK)	
284	1B	∗	N99-1722-05	SCREW SET	K,K1,M1
285	1B		N99-1704-05	SCREW SET	
A	1A		N09-4400-05	MACHINE SCREW (M2X2)	
B	1A		N09-4401-05	MACHINE SCREW (M2X2.5)	
C	1A		N09-4427-05	TAPTITE SCREW (S2X4)	
D	2A		N09-4448-05	MACHINE SCREW (M2X2.5)	
E	3A		N09-4449-05	MACHINE SCREW (M2X1.8 BLK)	
F	1B		N19-2154-04	FLAT WASHER (1.6X5X0.25 LUMI)	
G	2A		N19-2155-04	FLAT WASHER (1.6X5X0.35 LUMI)	
H	2A		N19-2156-04	FLAT WASHER (1.2X3X0.25 POLY)	
J	1A		N29-0523-05	RETAINING RING (2X5X0.4)	
K	2A		N29-0522-05	RETAINING RING (1.5X4X0.4)	
L	3A		N38-2025-46	PAN HEAD MACHIN SCREW	
M	3A		N80-2005-46	PAN HEAD TAPTITE SCREW	
N	2B		N80-2008-45	PAN HEAD TAPTITE SCREW	
P	1B		N83-3005-46	PAN HEAD TAPTITE SCREW	
Q	2A		N86-2004-45	BINDING HEAD TAPTITE SCREW	
PS1-3	1A		S68-0856-05	PUSH SWITCH	
286	1B		T90-0523-05	ANTENNA ADAPTOR	E2,Z1,Z2
286	1B		T90-0534-05	ANTENNA ADAPTOR	E2,Z1,Z2
PM1	1A		T42-1034-04	MOTOR ASSY	
DME1	1B		X92-4030-00	MECHANISM ASSY (DXM-6000W)	
SUB-CIRCUIT UNIT (X16-118X-XX)					
J1	2A		E58-0903-05	RECTANGULAR RECEPTACLE (15P)	
FPC1	2A	∗	J84-0121-12	FLEXIBLE PRINTED WIRING BOARD	
SWITCH UNIT (X16-1XXX-XX)					
301	3A		B11-1324-04	OPTICAL DIFFUSER	K,E2,Z1
301	3A	∗	B11-1382-04	OPTICAL DIFFUSER	K1,M1,Z2
302	3A		B11-1322-04	REFLECTION SHEET	
303	3A	∗	B19-2134-03	LIGHTING BOARD	
D1-3			B30-1571-05	LED(WHITE)	K,E2,Z1
D1,2			B30-1571-05	LED(WHITE)	K1,M1,Z2
D5-18			B30-1605-05	LED(2COLOR PG/RED)	
D20-22			B30-1605-05	LED(2COLOR PG/RED)	
D23,24			B30-1564-05	LED(1608,BLUE)	
ED1	3A	∗	B38-1086-05	LIQUID CRYSTAL	K,E2,Z1
ED1	3A	∗	B38-1088-05	LIQUID CRYSTAL	K1,M1,Z2
C1			CC73GCH1H681J	CHIP C 680PF J	
C2-5			CK73GB1C104K	CHIP C 0.10UF K	
C2-5			CK73GB1H104K	CHIP C 0.10UF K	
C6,7			CK73FB1A225K	CHIP C 2.2UF K	
C9			CK73GB1H103K	CHIP C 0.010UF K	K,E2,Z1
C11-14			CK73GB1H103K	CHIP C 0.010UF K	
304	3A		E29-1885-04	CONDUCTIVE RUBBER	
J1			E59-0835-05	RECTANGULAR PLUG (15P)	
CP1			R90-1016-05	MULTI-COMP 470 X4	

Ref.No.	Add	New	Parts No.	Description	Destination
CP2,3			R90-0724-05	MULTI-COMP 1K X4	
R1			RK73GB2A433J	CHIP R 43K J 1/10W	
R2-5			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R6			RK73GB2A392J	CHIP R 3.9K J 1/10W	
R7,8			RK73GB2A223J	CHIP R 22K J 1/10W	
R9			RK73GB2A101J	CHIP R 100 J 1/10W	
R10			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R11			RK73GB2A4R7J	CHIP R 4.7 J 1/10W	
R12			RK73GB2A361J	CHIP R 360 J 1/10W	
R13,14			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R15,16			RK73GB2A103J	CHIP R 10K J 1/10W	
R17-21			RK73FB2B331J	CHIP R 330 J 1/8W	
R22			RK73FB2B511J	CHIP R 510 J 1/8W	
R23			RK73FB2B271J	CHIP R 270 J 1/8W	
R24			RK73FB2B331J	CHIP R 330 J 1/8W	
R25		∗	RK73GB2A122J	CHIP R 1.2K J 1/10W	K,E2,Z1
R27,28			RK73GB2A103J	CHIP R 10K J 1/10W	
R29		∗	RK73GB2A122J	CHIP R 1.2K J 1/10W	K,E2,Z1
S28			S70-0864-05	TACT SWITCH	
D26			MA3082-M	ZENER DIODE	K1,M1,Z2
D26			MA3091-M	ZENER DIODE	K,E2,Z1
IC1			LC75808W	MOS-IC	
IC2			RS-171	ANALOGUE IC	
Q1			DTA114EUA	DIGITAL TRANSISTOR	
Q1			KRA302	DIGITAL TRANSISTOR	
Q3-5			2SC4081	TRANSISTOR	
Q6			DTA114EUA	DIGITAL TRANSISTOR	
Q6			KRA302	DIGITAL TRANSISTOR	
Q7			DTC143ZK	DIGITAL TRANSISTOR	
ELECTRIC UNIT (X25-XXXX-XX)					
C1			C90-5242-05	ELECTRO 3300UF 16WV	
C2			CK73GB1H222K	CHIP C 2200PF K	
C3			C90-2866-05	ELECTRO 220UF 16WV	
C4			CK73GB1H103K	CHIP C 0.010UF K	
C5			CE04NW1C100M	ELECTRO 10UF 16WV	
C6			CE04NW0J101M	ELECTRO 100UF 6.3WV	
C7			CK73FB1C105K	CHIP C 1.0UF K	
C8			CE04CW1A221M	ELECTRO 220UF 10WV	
C9			CE04NW1A101M	ELECTRO 100UF 10WV	
C11,12			CK73FB1H104K	CHIP C 0.10UF K	
C20			CK73GB1H103K	CHIP C 0.010UF K	E2,Z1,Z2
C21			CK73GB1E223K	CHIP C 0.022UF K	
C21			CK73GB1H223K	CHIP C 0.022UF K	
C22			CE04NW1H010M	ELECTRO 1.0UF 50WV	
C34			CE04NW1V3R3M	ELECTRO 3.3UF 35WV	
C35			CK73GB1C683K	CHIP C 0.068UF K	
C36			CE04NW1H0R1M	ELECTRO 0.1UF 50WV	
C37			CK73GB1H102K	CHIP C 1000PF K	
C38,39			CK73GB1H103K	CHIP C 0.010UF K	
C40			CE04NW0J470M	ELECTRO 47UF 6.3WV	
C41			CK73GB1H103K	CHIP C 0.010UF K	
C42			CC73GCH1H220J	CHIP C 22PF J	
C43			CC73GCH1H270J	CHIP C 27PF J	
C44			CK73GB0J105K	CHIP C 1.0UF K	

K: KDC-519 **K1:** KDC-5019 **M1:** KDC-8020
E2: KDC-7021Y **Z1:** KDC-7021 **Z2:** KDC-B7021

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PARTS LIST

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ELECTRIC UNIT (X25-XXXX-XX)

Ref.No.	Add	New	Parts No.	Description			Destination
C45			CK73EB0J106K	CHIP C	10UF	K	
C46			CK73GB1H102K	CHIP C	1000PF	K	
C48			CK73GB1H103K	CHIP C	0.010UF	K	
C61			CE04NW1A470M	ELECTRO	47UF	10WV	
C62			CK73GB1H103K	CHIP C	0.010UF	K	
C63			CE04NW1H2R2M	ELECTRO	2.2UF	50WV	
C65-68			CE04NW1HR47M	ELECTRO	0.47UF	50WV	
C69			CE04NW0J470M	ELECTRO	47UF	6.3WV	
C70			CK73GB1A474K	CHIP C	0.47UF	K	
C71			CC73GCH1H151J	CHIP C	150PF	J	
C72			CK73GB1E333K	CHIP C	0.033UF	K	
C72			CK73GB1H333K	CHIP C	0.033UF	K	
C73			CK73GB1H103K	CHIP C	0.010UF	K	
C74,75			CK73GB1C104K	CHIP C	0.10UF	K	
C74,75			CK73GB1H104K	CHIP C	0.10UF	K	
C93-96			C90-2597-05	ELECTRO	10UF	16WV	
C113			CE04NW1HR47M	ELECTRO	0.47UF	50WV	
C114			CE04NW1C220M	ELECTRO	22UF	16WV	
C115			CE04NW1H010M	ELECTRO	1.0UF	50WV	
C116			CK73GB1C104K	CHIP C	0.10UF	K	
C116			CK73GB1H104K	CHIP C	0.10UF	K	
C117-120			C90-5296-05	NP-ELECT	0.22UF	50WV	
C131			CK73GB1H103K	CHIP C	0.010UF	K	
C133			CK73GB1A224K	CHIP C	0.22UF	K	
C134			CE04CW1A470M	ELECTRO	47UF	10WV	
C135			CK73GB1H103K	CHIP C	0.010UF	K	
C137			CK73GB1H103K	CHIP C	0.010UF	K	
C139			CK73GB1H102K	CHIP C	1000PF	K	
C140			CK73GB1A474K	CHIP C	0.47UF	K	
C141			CC73GCH1H331J	CHIP C	330PF	J	E2,Z1,Z2
C142,143			CE04NW1C100M	ELECTRO	10UF	16WV	E2,Z1,Z2
C144			CK73GB1H103K	CHIP C	0.010UF	K	E2,Z1,Z2
C145,146			CC73GCH1H100D	CHIP C	10PF	D	E2,Z1,Z2
C147,148			CK73GB1A224K	CHIP C	0.22UF	K	
C149			CK73GB1C104K	CHIP C	0.10UF	K	K,K1,M1
C149			CK73GB1H104K	CHIP C	0.10UF	K	K,K1,M1
C151,152			CK73GB1H222K	CHIP C	2200PF	K	
C153			CK73GB1E223K	CHIP C	0.022UF	K	
C153			CK73GB1H223K	CHIP C	0.022UF	K	
C160,161			CK73GB1E473K	CHIP C	0.047UF	K	
C160,161			CK73GB1H473K	CHIP C	0.047UF	K	
CN1			E40-3241-05	PIN ASSY (6P)			
CN2			E40-3237-05	PIN ASSY (2P)			
CN3			E40-3252-05	PIN ASSY (8P)			
CN4			E40-3261-05	PIN ASSY (3P)			
CN5			E40-9550-05	FLAT CABLE CONNECTOR (22P)			
CN6			E40-9557-05	FLAT CABLE CONNECTOR (13P)			
CN7			E40-5031-05	FLAT CABLE CONNECTOR (7P)			
⚠ J1			E58-0863-15	RECTANGULAR RECEPTACLE (16P)			
WH1	2B		E30-4804-05	CORD WITH PLUG			
WH1	2B		E30-4932-05	CORD WITH PLUG			
L1			L33-1170-05	CHOKE COIL ASSY (140UH)			
L4			L40-4795-91	SMALL FIXED INDUCTOR (4.7UH,J)			
L5			L92-0075-05	CHIP FERRITE			

Ref.No.	Add	New	Parts No.	Description			Destination
L6			L40-4795-91	SMALL FIXED INDUCTOR (4.7UH,J)			
L7			L33-1039-05	LINE FILTER COIL (52mH)			
L9-12			L40-4795-91	SMALL FIXED INDUCTOR (4.7UH,J)			
X1			L78-0821-05	RESONATOR (20.0MHz)			
X2			L77-2738-05	CRYSTAL RESONATOR (32.768kHz)			
X3			L77-2002-05	CRYSTAL RESONATOR (4.332MHz)			E2,Z1,Z2
P	2B		N83-3005-46	PAN HEAD TAPTITE SCREW			
R	2B		N80-3008-46	PAN HEAD TAPTITE SCREW			
S	2B		N83-3012-46	PAN HEAD TAPTITE SCREW			
T	2B		N86-2606-46	BINDING HEAD TAPTITE SCREW			
CP1,2			R90-0725-05	MULTI-COMP	1K	X2	
CP3			R90-1019-05	MULTI-COMP	100	X2	
CP4			R90-0737-05	MULTI-COMP	100K	X2	
CP5			R90-0725-05	MULTI-COMP	1K	X2	
CP6			R90-1013-05	MULTI-COMP	2.2K	X2	
R1			RK73GB2A223J	CHIP R	22K	J 1/10W	
R2			RK73GB2A101J	CHIP R	100	J 1/10W	
R3			RK73GB2A223J	CHIP R	22K	J 1/10W	
R4			RK73GB2A222J	CHIP R	2.2K	J 1/10W	
R5			RD14BB2C221J	RD	220	J 1/6W	
R6			RK73GB2A153J	CHIP R	15K	J 1/10W	
R7			R92-3032-05	CHIP R	4.3K	D 1/10W	
R8			R92-3047-05	CHIP R	24K	D 1/10W	
R9			RD14BB2C152J	RD	1.5K	J 1/6W	
R10		∗	RK73EB2E2R2J	CHIP R	2.2	J 1/4W	
R11			RD14BB2C102J	RD	1.0K	J 1/6W	
R13			RK73EB2E102J	CHIP R	1.0K	J 1/4W	M1,E2,Z1
R13			RK73EB2E102J	CHIP R	1.0K	J 1/4W	Z2
R14			RD14BB2C561J	RD	560	J 1/6W	M1,E2,Z1
R14			RD14BB2C561J	RD	560	J 1/6W	Z2
R15			RK73EB2E103J	CHIP R	10K	J 1/4W	E2,Z1,Z2
R16			RK73GB2A223J	CHIP R	22K	J 1/10W	E2,Z1,Z2
R17			RK73GB2A473J	CHIP R	47K	J 1/10W	E2,Z1,Z2
R18			RK73GB2A104J	CHIP R	100K	J 1/10W	K,K1,M1
R19			RK73EB2E103J	CHIP R	10K	J 1/4W	
R20			RK73GB2A104J	CHIP R	100K	J 1/10W	
R33			RD14BB2C472J	RD	4.7K	J 1/6W	
R34,35			RD14DB2H102J	SMALL-RD	1.0K	J 1/2W	K,K1,M1
R36			RD14BB2C223J	RD	22K	J 1/6W	K,K1,M1
R37			RD14BB2C472J	RD	4.7K	J 1/6W	
R38			RD14DB2H102J	SMALL-RD	1.0K	J 1/2W	
R39			RK73GB2A223J	CHIP R	22K	J 1/10W	
R40			RD14DB2H102J	SMALL-RD	1.0K	J 1/2W	
R41,42			RK73GB2A123J	CHIP R	12K	J 1/10W	
R43			RK73GB2A562J	CHIP R	5.6K	J 1/10W	
R44			RK73GB2A223J	CHIP R	22K	J 1/10W	
R45			RD14DB2H332J	SMALL-RD	3.3K	J 1/2W	
R46			RD14BB2C473J	RD	47K	J 1/6W	
R47			RK73GB2A183J	CHIP R	18K	J 1/10W	
R48			RK73GB2A104J	CHIP R	100K	J 1/10W	
R49			RK73GB2A103J	CHIP R	10K	J 1/10W	
R50			RK73GB2A102J	CHIP R	1.0K	J 1/10W	
R51			RK73GB2A104J	CHIP R	100K	J 1/10W	K,K1,Z2
R52			RK73GB2A104J	CHIP R	100K	J 1/10W	M1

K: KDC-519 **K1:** KDC-5019 **M1:** KDC-8020
E2: KDC-7021Y **Z1:** KDC-7021 **Z2:** KDC-B7021

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ELECTRIC UNIT (X25-XXXX-XX)

Ref.No.	Add	New	Parts No.	Description				Destination
R52,53			RK73GB2A104J	CHIP R	100K	J	1/10W	E2,Z1
R53			RK73GB2A104J	CHIP R	100K	J	1/10W	K1
R54			RK73GB2A104J	CHIP R	100K	J	1/10W	K
R54,55			RK73GB2A104J	CHIP R	100K	J	1/10W	M1,Z2
R56			RK73GB2A104J	CHIP R	100K	J	1/10W	K,K1,E2
R56			RK73GB2A104J	CHIP R	100K	J	1/10W	Z1
R60			RK73GB2A104J	CHIP R	100K	J	1/10W	
R62			RK73GB2A104J	CHIP R	100K	J	1/10W	
R66			RK73GB2A104J	CHIP R	100K	J	1/10W	
R67			RK73GB2A103J	CHIP R	10K	J	1/10W	
R68		∗	RK73GB2A221J	CHIP R	220	J	1/10W	
R69			RK73GB2A222J	CHIP R	2.2K	J	1/10W	
R72			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R73,74			RK73GB2A222J	CHIP R	2.2K	J	1/10W	
R75			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R76			RK73GB2A104J	CHIP R	100K	J	1/10W	
R77			RK73GB2A222J	CHIP R	2.2K	J	1/10W	
R79			RK73GB2A222J	CHIP R	2.2K	J	1/10W	
R80,81			RK73GB2A104J	CHIP R	100K	J	1/10W	K,K1,M1
R82			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R84			RK73GB2A471J	CHIP R	470	J	1/10W	
R85			RK73GB2A222J	CHIP R	2.2K	J	1/10W	
R86			RK73GB2A104J	CHIP R	100K	J	1/10W	K,K1,M1
R88			RK73GB2A104J	CHIP R	100K	J	1/10W	
R89			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R90			RK73GB2A104J	CHIP R	100K	J	1/10W	
R93			RK73GB2A104J	CHIP R	100K	J	1/10W	
R96			RK73GB2A104J	CHIP R	100K	J	1/10W	
R97,98			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R100			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R101		∗	RK73GB2A105J	CHIP R	1.0M	J	1/10W	
R102			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R103			RK73GB2A471J	CHIP R	470	J	1/10W	
R104			RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R105			RK73GB2A471J	CHIP R	470	J	1/10W	
R106			RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R107			RK73GB2A225J	CHIP R	2.2M	J	1/10W	
R108			RK73GB2A222J	CHIP R	2.2K	J	1/10W	
R109			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R110			RK73GB2A103J	CHIP R	10K	J	1/10W	
R111			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R112			RK73GB2A103J	CHIP R	10K	J	1/10W	
R113			RK73GB2A473J	CHIP R	47K	J	1/10W	
R114			RK73GB2A103J	CHIP R	10K	J	1/10W	
R115			RK73GB2A104J	CHIP R	100K	J	1/10W	
R116			RK73GB2A222J	CHIP R	2.2K	J	1/10W	
R117-119			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R130,131			RK73EB2E472J	CHIP R	4.7K	J	1/4W	
R132-134			RK73EB2E101J	CHIP R	100	J	1/4W	
R135-137			RK73EB2E472J	CHIP R	4.7K	J	1/4W	
R150			RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R151			RK73GB2A103J	CHIP R	10K	J	1/10W	
R152			RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R155,156			RK73EB2E100J	CHIP R	10	J	1/4W	
R157			RK73EB2E4R7J	CHIP R	4.7	J	1/4W	

Ref.No.	Add	New	Parts No.	Description				Destination
R158			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R159			RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R161-164			RK73FB2B361J	CHIP R	360	J	1/8W	
R165-168			RK73GB2A223J	CHIP R	22K	J	1/10W	
R169-172		∗	RK73EB2E181J	CHIP R	180	J	1/4W	
R200			RK73GB2A101J	CHIP R	100	J	1/10W	
R201			RK73GB2A103J	CHIP R	10K	J	1/10W	
R202			RK73GB2A822J	CHIP R	8.2K	J	1/10W	
R203			RK73GB2A473J	CHIP R	47K	J	1/10W	
R204		∗	RK73GB2A152J	CHIP R	1.5K	J	1/10W	
R205-208			RK73GB2A223J	CHIP R	22K	J	1/10W	
R210			RD14BB2C102J	RD	1.0K	J	1/6W	
R211			RK73GB2A223J	CHIP R	22K	J	1/10W	
R212			RD14BB2C102J	RD	1.0K	J	1/6W	
R213			RK73GB2A223J	CHIP R	22K	J	1/10W	
R214-216			RK73GB2A222J	CHIP R	2.2K	J	1/10W	E2,Z1,Z2
R217			RK73GB2A102J	CHIP R	1.0K	J	1/10W	E2,Z1,Z2
R218			RK73GB2A472J	CHIP R	4.7K	J	1/10W	E2,Z1,Z2
R220,221			RK73GB2A104J	CHIP R	100K	J	1/10W	
R222-224			RK73GB2A222J	CHIP R	2.2K	J	1/10W	
R230			RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R231			RK73GB2A473J	CHIP R	47K	J	1/10W	
R233			RK73EB2E471J	CHIP R	470	J	1/4W	
R234			RK73EB2E102J	CHIP R	1.0K	J	1/4W	
R235			RK73EB2E472J	CHIP R	4.7K	J	1/4W	
R236			RK73EB2E471J	CHIP R	470	J	1/4W	
R237,238			RK73EB2E102J	CHIP R	1.0K	J	1/4W	
R240			RK73EB2E102J	CHIP R	1.0K	J	1/4W	
R243			RK73GB2A473J	CHIP R	47K	J	1/10W	
D1			S2V20∗A	DIODE				
D2			1GWJ43	DIODE				
D3			MA4056(N)-M	ZENER DIODE				
D4			HZS9A2L	ZENER DIODE				
D4			MA4082(N)-L	ZENER DIODE				
D5			MA4110-L	ZENER DIODE				
D7			MA4056-M	ZENER DIODE				M1,E2,Z1
D7			MA4056-M	ZENER DIODE				Z2
D8			HZS5B1	ZENER DIODE				E2,Z1,Z2
D8			MA4047-M	ZENER DIODE				E2,Z1,Z2
D11,12			AM01Z	DIODE				
D11,12			DSM1SD2	DIODE				
D11,12			ERA15-01	DIODE				Z1,Z2
D11,12			ERA15-02	DIODE				
D14			AM01Z	DIODE				
D14			DSM1SD2	DIODE				
D14			ERA15-01	DIODE				Z1,Z2
D14			ERA15-02	DIODE				
D15			1SS133	DIODE				
D16			MA4056(N)-M	ZENER DIODE				
D17			HZS6C2L	ZENER DIODE				
D17			MA4062(N)-M	ZENER DIODE				
D18			1SS133	DIODE				
D22-24			HZS6C1	ZENER DIODE				
D22-24			MA4062-L	ZENER DIODE				

K: KDC-519 **K1:** KDC-5019 **M1:** KDC-8020
E2: KDC-7021Y **Z1:** KDC-7021 **Z2:** KDC-B7021

⚠ indicates safety critical components.

PARTS LIST

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

ELECTRIC UNIT (X25-XXXX-XX)

Ref.No.	Add	New	Parts No.	Description	Destination
D25,26			RD6.8M (B2)	ZENER DIODE	
D27,28			MA4068 (N)-M	ZENER DIODE	
D29			HZS6C1	ZENER DIODE	
D29			MA4062-L	ZENER DIODE	
D30-32			1SS133	DIODE	
D33-36			AM01Z	DIODE	
D33-36			DSM1SD2	DIODE	
D33-36			ERA15-01	DIODE	Z1,Z2
D33-36			ERA15-02	DIODE	
D38-41			AM01Z	DIODE	
D38-41			DSM1SD2	DIODE	
D38-41			ERA15-01	DIODE	Z1,Z2
D38-41			ERA15-02	DIODE	
D60			IMSA-6801	SURGE ABSORBER	
D60			SA-C2102-101TB	SURGE ABSORBER	Z1,Z2
D61-64			1SS133	DIODE	
IC1		*	UPD703033GC139	MI-COM IC	
IC2			TDA7407D	ANALOGUE IC	
IC3			M5237ML	IC (VOLTAGE REGULATOR)	
IC4	2B		TA8273H	ANALOGUE IC	
IC8			HD74HC02FP	MOS-IC	
IC8			TC74HC02AF	MOS-IC	
IC8			74VHC02SJ	MOS-IC	Z1,Z2
IC14			TDA7479D	ANALOGUE IC	E2,Z1,Z2
IC15			LB1930M	ANALOGUE IC	
IC16			S-80837ANNP	MOS-IC	
Q1			2SB1548(P)	TRANSISTOR	
Q2			2SC4081	TRANSISTOR	
Q2			2SD1819A	TRANSISTOR	
Q3			2SA1576A	TRANSISTOR	
Q3			2SB1218A	TRANSISTOR	
Q4			2SB1548(P)	TRANSISTOR	
Q5			DTC144EUA	DIGITAL TRANSISTOR	
Q5			UN5213	DIGITAL TRANSISTOR	
Q6,7			DTA124EUA	DIGITAL TRANSISTOR	
Q6,7			KRA303	DIGITAL TRANSISTOR	
Q8			DTC144EUA	DIGITAL TRANSISTOR	
Q8			UN5213	DIGITAL TRANSISTOR	
Q9			2SD2375	TRANSISTOR	
Q10			2SB1184	TRANSISTOR	
Q11			2SC4081	TRANSISTOR	
Q11			2SD1819A	TRANSISTOR	
Q12			DTC144EUA	DIGITAL TRANSISTOR	
Q12			UN5213	DIGITAL TRANSISTOR	
Q13			DTA124EUA	DIGITAL TRANSISTOR	
Q13			KRA303	DIGITAL TRANSISTOR	
Q14			DTA123JK	DIGITAL TRANSISTOR	M1,E2,Z1
Q14			DTA123JK	DIGITAL TRANSISTOR	Z2
Q14			KRA105S	DIGITAL TRANSISTOR	M1,E2,Z1
Q14			KRA105S	DIGITAL TRANSISTOR	Z2
Q15			DTC144EUA	DIGITAL TRANSISTOR	
Q15			UN5213	DIGITAL TRANSISTOR	
Q24			DTC114YUA	DIGITAL TRANSISTOR	K,K1,M1
Q24			UN5214	DIGITAL TRANSISTOR	K,K1,M1
Q25,26			2SB1277 (Q,R)	TRANSISTOR	K,K1,M1
Q26			2SB1277 (Q,R)	TRANSISTOR	E2,Z1,Z2
Q27			2SA1576A	TRANSISTOR	
Q27			2SB1218A	TRANSISTOR	
Q28			DTA124EUA	DIGITAL TRANSISTOR	
Q28			KRA303	DIGITAL TRANSISTOR	
Q29			DTC114YUA	DIGITAL TRANSISTOR	
Q29			UN5214	DIGITAL TRANSISTOR	
Q30,31			2SC4081	TRANSISTOR	
Q30,31			2SD1819A	TRANSISTOR	
Q32,33			DTA124EUA	DIGITAL TRANSISTOR	
Q32,33			KRA303	DIGITAL TRANSISTOR	
Q35			DTC124EUA	DIGITAL TRANSISTOR	
Q35			UN5212	DIGITAL TRANSISTOR	
Q36			2SC4081	TRANSISTOR	
Q36			2SD1819A	TRANSISTOR	
Q37-40			DTC143TUA	DIGITAL TRANSISTOR	
Q37-40			KRC410	DIGITAL TRANSISTOR	
Q43			DTC124EUA	DIGITAL TRANSISTOR	
Q43			UN5212	DIGITAL TRANSISTOR	
Q44			2SB1277(Q,R)	TRANSISTOR	
Q45			DTC124EUA	DIGITAL TRANSISTOR	
Q45			UN5212	DIGITAL TRANSISTOR	
Q46			2SB1277(Q,R)	TRANSISTOR	
Q50			DTC144EUA	DIGITAL TRANSISTOR	
Q50			UN5213	DIGITAL TRANSISTOR	
Q51			2SA1576A	TRANSISTOR	
Q51			2SB1218A	TRANSISTOR	
Q52			2SC4081	TRANSISTOR	E2,Z1,Z2
Q52			2SD1819A	TRANSISTOR	E2,Z1,Z2
Q53			DTC144EUA	DIGITAL TRANSISTOR	
Q53			UN5213	DIGITAL TRANSISTOR	
TH1			PTH9C42BD471Q	POSITIVE RESISTOR	
A1			X86-3240-11	TUNER UNIT	K,K1,M1
A1			X86-3242-70	TUNER UNIT	E2,Z1,Z2
A1			X86-3342-71	TUNER UNIT	Z1,Z2

K: KDC-519 **K1:** KDC-5019 **M1:** KDC-8020
E2: KDC-7021Y **Z1:** KDC-7021 **Z2:** KDC-B7021

⚠ indicates safety critical components.

SPECIFICATIONS

● KDC-5019/519

FM Section

Frequency Range	87.9MHz - 107.9MHz
Frequency Step	200kHz
Channel Space Selection	50kHz/200kHz
Usable Sensitivity (S/N:30dB)	9.3dBf (0.8μV/75Ω)
Quieting Sensitivity (S/N:50dB)	15.2dBf (1.6μV/75Ω)
Frequency Response (±3.0dB)	30Hz - 15kHz
S/N Ratio	70dB (MONO)
Selectivity	≧80dB (±400kHz)
Stereo Separation	40dB (1kHz)

AM Section

Frequency Range	530kHz - 1700kHz
Frequency Step	10kHz
Channel Space Selection	9kHz/10kHz
Usable Sensitivity (S/N:20dB)	28dBμ (25μV)

CD Section

Laser Diode	GaAlAs (λ=780nm)
Digital Filter (D/A)	8 Times Over Sampling
D/A Converter	1 Bit
Spindle Speed	500 - 200rpm (CLV)
Wow & Flutter	Below Measurable Limit
Frequency Response	10Hz - 20kHz (±1dB)
Total Harmonic Distortion	0.01% (1kHz)
S/N Ratio	105dB (1kHz)
Dynamic Range	93dB
Channel Separation	85dB

AMPLIFIER Section

Preout Level/Load (Unbalanced)	1800mV/10kΩ (CD/CD-CH)
Preout Impedance	≦600Ω
Maximum Power	50W×4
Full Bandwidth Power (at less than 1%THD)	22W×4

TONE Section

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

General

Operating Voltage (11V - 16V allowable)	14.4V
Current Consumption	10A
Installation Size (W)	182(mm) 7-3/16(in.)
(H)	53(mm) 2-1/16(in.)
(D)	162(mm) 6-3/8 (in.)
Weight	1.4kg (3.0lbs.)

● KDC-8020

FM Section

Frequency Range	87.9MHz - 107.9MHz
Frequency Step	200kHz
Frequency Range	87.5MHz - 108.0MHz
Frequency Step	50kHz
Channel Space Selection	50kHz/200kHz
Usable Sensitivity (S/N:30dB)	9.3dBf (0.8μV/75Ω)
Quieting Sensitivity (S/N:50dB)	15.2dBf (1.6μV/75Ω)
Frequency Response (±3.0dB)	30Hz - 15kHz
S/N Ratio	70dB (MONO)
Selectivity	≧80dB (±400kHz)
Stereo Separation	40dB (1kHz)

MW (AM) Section

Frequency Range	531kHz - 1611kHz
Frequency Step	9kHz
Frequency Range	530kHz - 1700kHz
Frequency Step	10kHz
Channel Space Selection	9kHz/10kHz
Usable Sensitivity (S/N:20dB)	28dBμ (25μV)

CD Section

Laser Diode	GaAlAs (λ=780nm)
Digital Filter (D/A)	8 Times Over Sampling
D/A Converter	1 Bit
Spindle Speed	500 - 200rpm (CLV)
Wow & Flutter	Below Measurable Limit
Frequency Response	10Hz - 20kHz (±1dB)
Total Harmonic Distortion	0.01% (1kHz)
S/N Ratio	105dB (1kHz)
Dynamic Range	93dB
Channel Separation	85dB

AMPLIFIER Section

Preout Level/Load (Unbalanced)	1800mV/10kΩ (CD/CD-CH)
Preout Impedance	≦600Ω
Maximum Power	50W×4
Full Bandwidth Power (at less than 1%THD)	22W×4

TONE Section

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

General

Operating Voltage (11V - 16V allowable)	14.4V
Current Consumption	10A
Installation Size (W)	182(mm)
(H)	53(mm)
(D)	162(mm)
Weight	1.4kg

KDC-5019/519/7021/7021Y/8020/B7021

SPECIFICATIONS

● **KDC-7021/Y,B7021**

FM Section

Frequency Range ..... 87.5MHz - 108.0MHz
Frequency Step 50kHz
Usable Sensitivity (S/N:26dB) 0.7μV/75Ω
Quieting Sensitivity (S/N:46dB) 1.6μV/75Ω
Frequency Response (±3.0dB) .... 30Hz - 15kHz
S/N Ratio ..... 65dB (MONO)
Selectivity (DIN) ..... ≧80dB (±400kHz)
Stereo Separation 35dB (1kHz)

MW (AM) Section

Frequency Range ..... 531kHz - 1611kHz
Frequency Step 9kHz
Usable Sensitivity (S/N:20dB) 25μV

LW Section

Frequency Range ..... 153kHz - 281kHz
Usable Sensitivity (S/N:20dB) 45μV

CD Section

Laser Diode ..... GaAlAs (λ=780nm)
Digital Filter (D/A) ..... 8 Times Over Sampling
D/A Converter ..... 1 Bit
Spindle Speed ..... 500 - 200rpm (CLV)
Wow & Flutter ..... Below Measurable Limit
Frequency Response ..... 10Hz - 20kHz (±1dB)
Total Harmonic Distortion 0.01% (1kHz)
S/N Ratio 105dB (1kHz)
Dynamic Range 93dB
Channel Separation 85dB

AMPLIFIER Section

Preout Level/Load ..... 1800mV/10kΩ (CD/CD-CH)
(Unbalanced)
Preout Impedance ..... ≦600Ω
Maximum Power ..... 50W×4
Power DIN45324, +B=14.4V ..... 30W×4

TONE Section

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

General

Operating Voltage 14.4V
(11V - 16V allowable)
Current Consumption 10A
Installation Size (W) 182mm
(H) 53mm
(D) 161mm
Weight 1.4kg

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