

SWITCHING UNIT

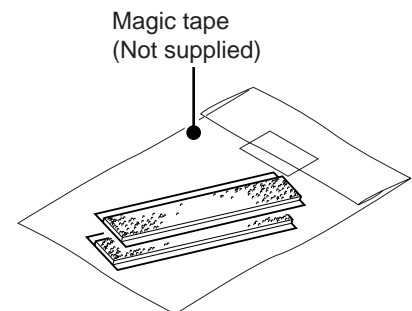
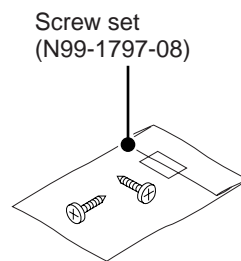
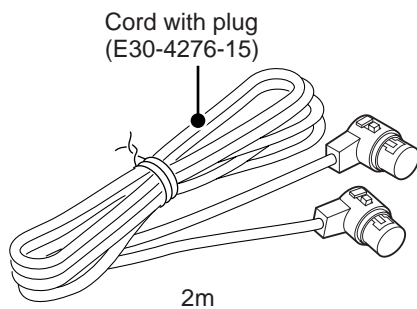
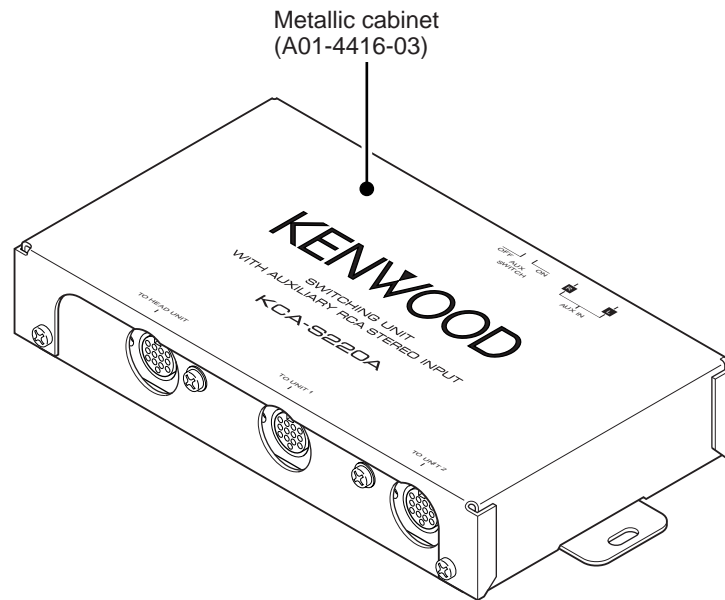
KCA-S220A

SERVICE MANUAL

KENWOOD

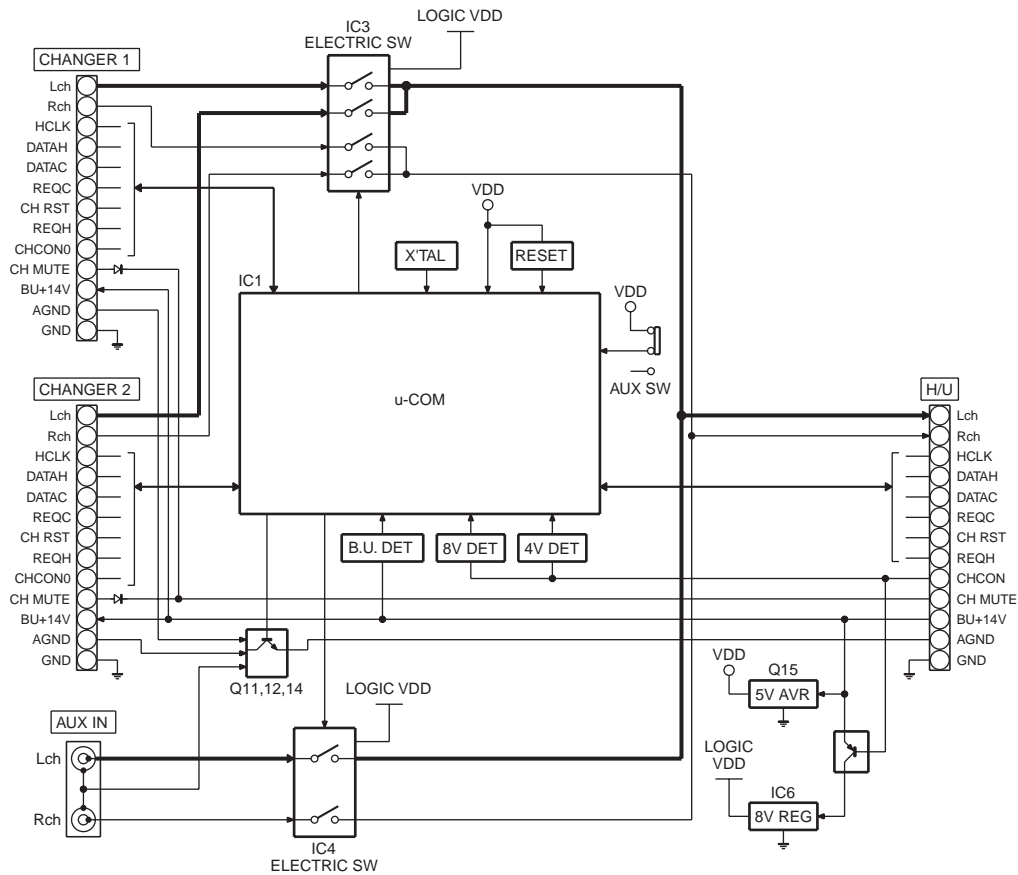
Kenwood Corporation

© 2006-6 CREATED IN JAPAN
B53-0433-00 (N) 0



KCA-S220A

BLOCK DIAGRAM

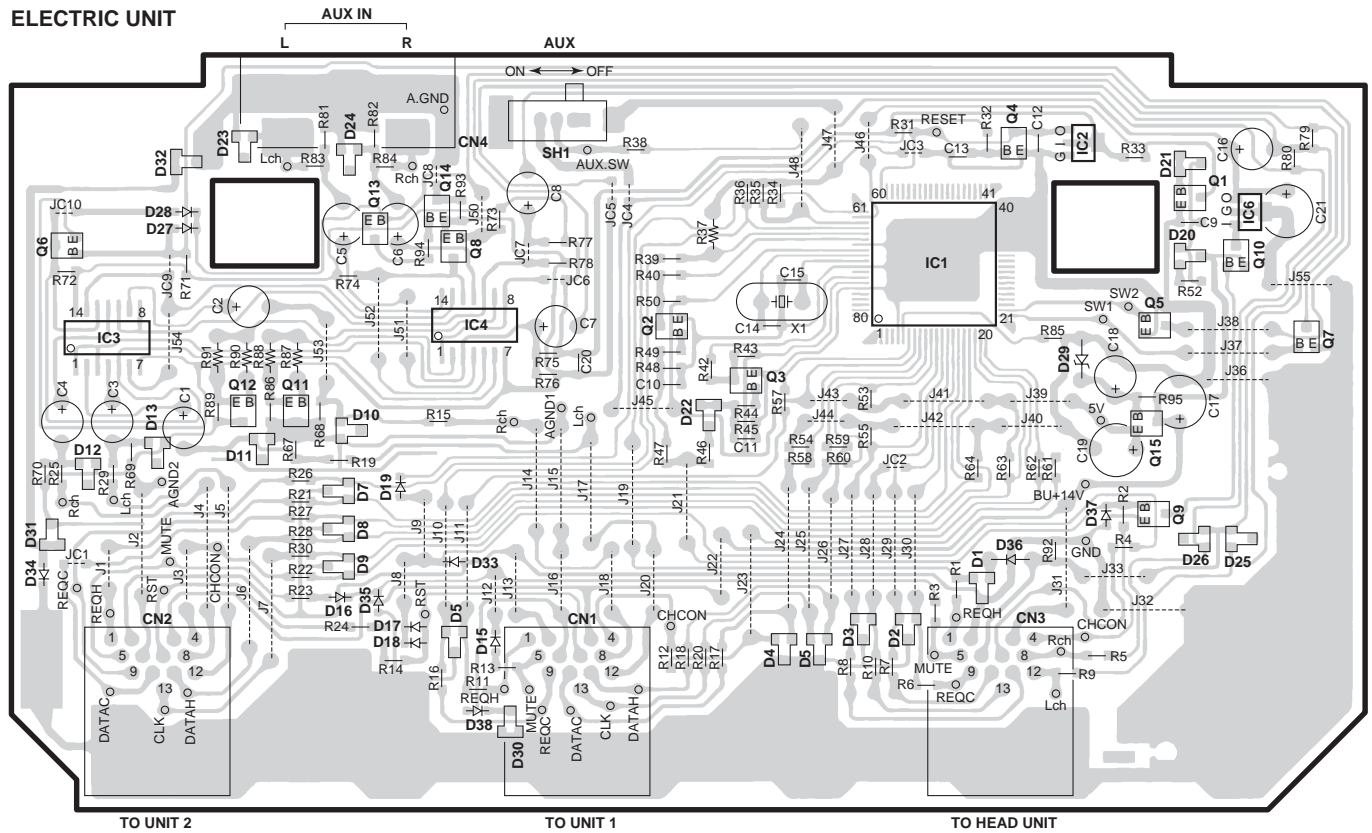


COMPONENTS DESCRIPTION

● ELECTRIC UNIT

Ref. No.	Name	Function
IC1	μ -com	For product control
IC2	Reset IC	For when the μ -com voltage 5V goes down to 3.7V or less, monitors the power supply voltage to prevent the μ -com malfunctioning.
IC3,4	Analog switch	Receive the control signal from the μ -com and switch the changer 1, changer 2, and RCA sound input.
Around Q15		Power supply circuit for the μ -com power supply 5V
IC6	Regulator IC	IC for analog switch IC power supply (8V)

PC BOARD (FOIL SIDE VIEW)

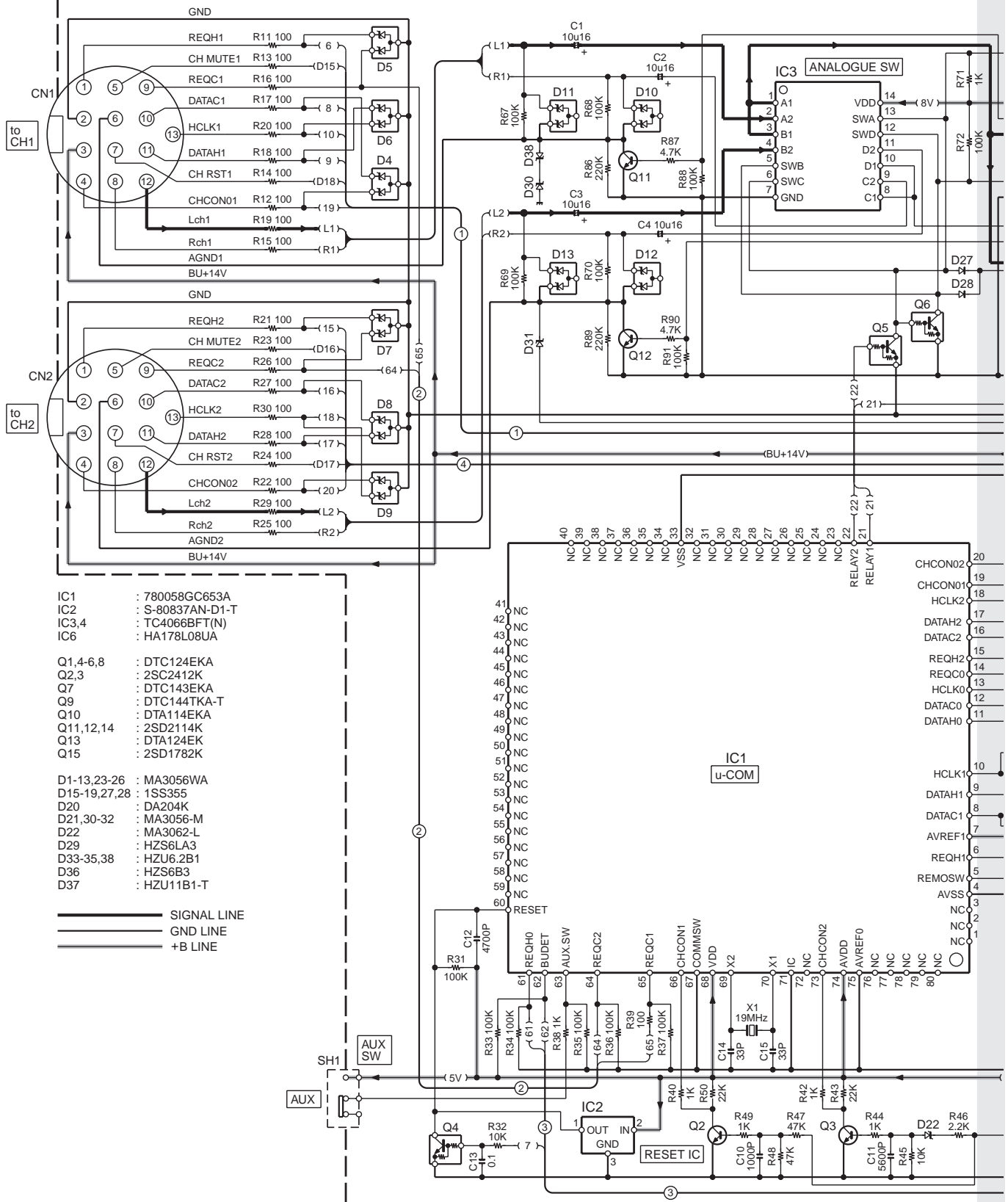
**ELECTRIC UNIT**

Ref. No.	Address	Ref. No.	Address
IC1	2D	Q6	2A
IC2	2D	Q7	2E
IC3	2A	Q8	2B
IC4	2B	Q9	3D
IC6	2E	Q10	2E
Q1	2E	Q11	3A
Q2	2C	Q12	3A
Q3	2C	Q13	2B
Q4	2D	Q14	2B
Q5	2D	Q15	3D

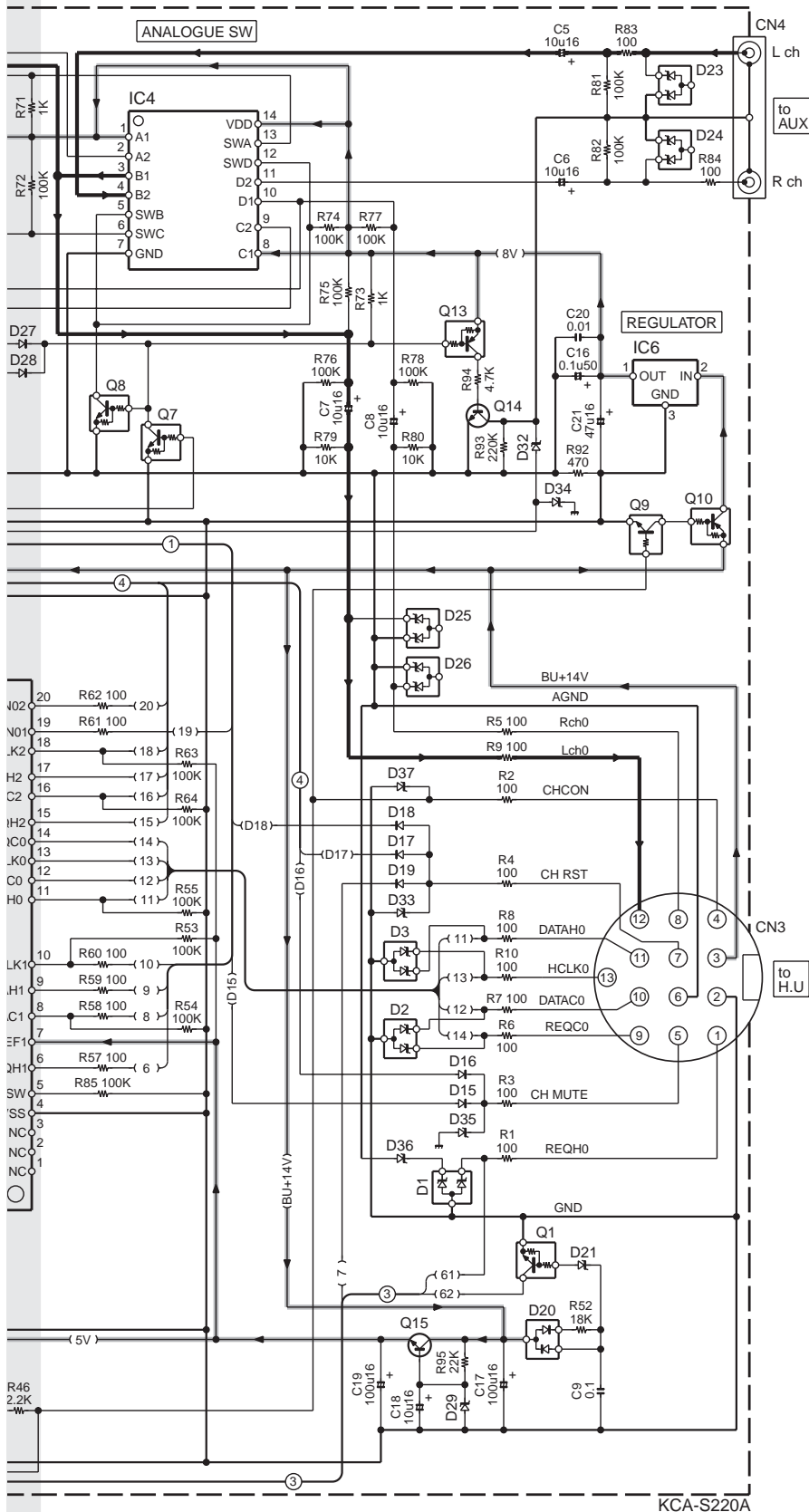
Refer to the schematic diagram for the values of resistors and capacitors.

KCA-S220A

ELECTRIC UNIT



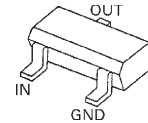
KCA-S220A



DTA114EK
 DTA124EK
 DTC124EK
 2SC2412K
 2SD2114K



DTC143EKA



DA204K



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.

PARTS LIST

* New parts

Parts without **Parts No.** are not supplied.

Les articles non mentionnés dans le **Parts No.** ne sont pas fournis.

Teile ohne **Parts No.** werden nicht geliefert.

Ref. No.	Add	New	Parts No.	Description	Destination
KCA-S220A					
1	1B	*	A01-4416-03	METALLIC CABINET	
-		*	B64-3452-00	INSTRUCTION MANUAL (ENG.FRE.GER.DUT.ITA.SPA.POR.)	
4	1A	*	E30-4276-15	CORD WITH PLUG	
-			H12-2590-14	PACKING FIXTURE	
-			H25-0328-04	PROTECTION BAG	
-		*	H54-3869-08	ITEM CARTON CASE	
8	1A	*	N99-1797-08	SCREW SET	
A	3B	*	N09-6434-08	TAPPING SCREW (3X6)	
B	1B	*	N09-6438-08	BINDING HEAD TAPTITE SCREW	
C	2B	*	N86-3005-48	BINDING HEAD TAPTITE SCREW	
D	1B	*	N09-6437-08	BINDING HEAD TAPTITE SCREW	
ELECTRIC UNIT					
C1-8		*	C90-5252-18	ELECTRO 10UF 16WV	
C9			CK73FF1H104Z	CHIP C 0.10UF Z	
C10			CK73FB1H102K	CHIP C 1000PF K	
C11			CK73FB1H562K	CHIP C 5600PF K	
C12			CK73FB1H472K	CHIP C 4700PF K	
C13			CK73FF1H104Z	CHIP C 0.10UF Z	
C14,15			CC73FCH1H330J	CHIP C 33PF J	
C16		*	C90-6821-08	ELECTRO 0.1UF 50WV	
C17		*	C90-5253-18	ELECTRO 100UF 15WV	
C18		*	C90-5252-18	ELECTRO 10UF 16WV	
C19		*	C90-5253-18	ELECTRO 100UF 15WV	
C20			CK73FB1H103K	CHIP C 0.010UF K	
C21		*	C90-5260-18	ELECTRO 47UF 15WV	
CN1-3		*	E56-0832-18	CYLINDRICAL RECEPTACLE	
CN4		*	E63-0859-18	PIN JACK	
X1		*	L77-2717-18	CRYSTAL RESONATOR	
JC1-10			R92-2052-05	CHIP R 0 OHM J 1/10W	
R1-30			RK73FB2B101J	CHIP R 100 J 1/8W	
R31			RK73FB2B104J	CHIP R 100K J 1/8W	
R32			RK73FB2B103J	CHIP R 10K J 1/8W	
R33-36			RK73FB2B104J	CHIP R 100K J 1/8W	
R37			RD14BB2C104J	RD 100K J 1/6W	
R38			RK73FB2B102J	CHIP R 1.0K J 1/8W	
R39			RK73FB2B101J	CHIP R 100 J 1/8W	
R40			RK73FB2B102J	CHIP R 1.0K J 1/8W	
R42			RK73FB2B102J	CHIP R 1.0K J 1/8W	
R43			RK73FB2B223J	CHIP R 22K J 1/8W	
R44			RK73FB2B102J	CHIP R 1.0K J 1/8W	
R45			RK73FB2B103J	CHIP R 10K J 1/8W	
R46			RK73FB2B222J	CHIP R 2.2K J 1/8W	
R47,48			RK73FB2B473J	CHIP R 47K J 1/8W	
R49			RK73FB2B102J	CHIP R 1.0K J 1/8W	
R50			RK73FB2B223J	CHIP R 22K J 1/8W	
R52			RK73FB2B183J	CHIP R 18K J 1/8W	
R53-55			RK73FB2B104J	CHIP R 100K J 1/8W	
R57-62			RK73FB2B101J	CHIP R 100 J 1/8W	
R63,64			RK73FB2B104J	CHIP R 100K J 1/8W	

Ref. No.	Add	New	Parts No.	Description	Destination
R67			RK73FB2B104J	CHIP R 100K J 1/8W	
R69,70			RK73FB2B104J	CHIP R 100K J 1/8W	
R71			RK73FB2B102J	CHIP R 1.0K J 1/8W	
R72			RK73FB2B104J	CHIP R 100K J 1/8W	
R73			RK73FB2B102J	CHIP R 1.0K J 1/8W	
R74-78			RK73FB2B104J	CHIP R 100K J 1/8W	
R79,80			RK73FB2B103J	CHIP R 10K J 1/8W	
R81,82			RK73FB2B104J	CHIP R 100K J 1/8W	
R83,84			RK73FB2B101J	CHIP R 100 J 1/8W	
R85			RK73FB2B104J	CHIP R 100K J 1/8W	
R86			RK73FB2B224J	CHIP R 220K J 1/8W	
R87			RD14BB2C472J	RD 4.7K J 1/6W	
R88			RD14BB2C104J	RD 100K J 1/6W	
R89			RK73FB2B224J	CHIP R 220K J 1/8W	
R90			RD14BB2C472J	RD 4.7K J 1/6W	
R91			RD14BB2C104J	RD 100K J 1/6W	
R92			RK73FB2B471J	CHIP R 470 J 1/8W	
R92			RK73FB2B472J	CHIP R 4.7K J 1/8W	
R93			RK73FB2B224J	CHIP R 220K J 1/8W	
R95			RK73FB2B223J	CHIP R 22K J 1/8W	
SH1		*	S62-0864-18	SLIDE SWITCH	
D1-13			MA3056WA	ZENER DIODE	
D15-19			1SS355	DIODE	
D20			DA204K	DIODE	
D21			MA3056-M	ZENER DIODE	
D22			MA3062-L	ZENER DIODE	
D23-26			MA3056WA	ZENER DIODE	
D27,28			1SS355	DIODE	
D29			HZS6LA3	ZENER DIODE	
D30-32			MA3056-M	ZENER DIODE	
D33-35		*	HZU6.2B1	ZENER DIODE	
D36			HZS6B3	ZENER DIODE	
D37		*	HZU11B1-T	ZENER DIODE	
D38		*	HZU6.2B1	ZENER DIODE	
IC1		*	780058GC653A	MICROCONTROLLER IC	
IC2		*	S-80837AN-D1-T	IC	
IC3,4			TC4066BFT(N)	MOS-IC	
IC6			HA178L08UA	ANALOGUE IC	
Q1			DTC124EK	DIGITAL TRANSISTOR	
Q2,3			2SC2412K	TRANSISTOR	
Q4-6			DTC124EK	DIGITAL TRANSISTOR	
Q7			DTC143EKA	DIGITAL TRANSISTOR	
Q8			DTC124EK	DIGITAL TRANSISTOR	
Q9		*	DTC144TKA-T	DIGITAL TRANSISTOR	
Q10			DTA114EK	DIGITAL TRANSISTOR	
Q11,12			2SD2114K	TRANSISTOR	
Q13			DTA124EK	DIGITAL TRANSISTOR	
Q14			2SD2114K	TRANSISTOR	
Q15			2SD1782K	TRANSISTOR	

E : Europe K : North America M : Other Areas W : Without Europe

△ Indicates safety critical components.

KCA-S220A

MEMO