EXTERNAL MEDIA CONTROLLER WITH RDS ENCODER

KOS-A200

SERVICE MANUAL

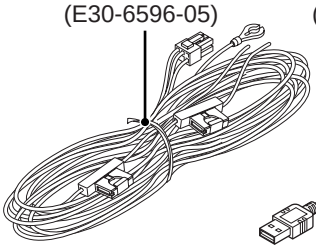
KENWOOD

Kenwood Corporation

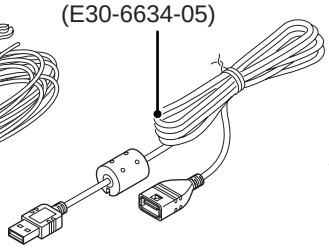
B53-0448-00 (N) 825

Metallic cabinet
(A01-4415-02): (K type)
(A01-4418-02): (E type)

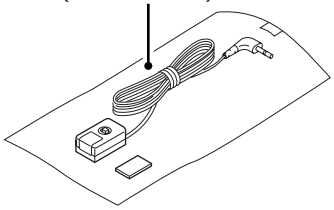
DC cord (2.5m)
(E30-6596-05)



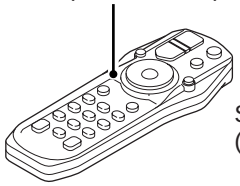
Cord with connector (1.5m)
(E30-6634-05)



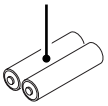
Remote control sensor assy
(T95-0270-05)



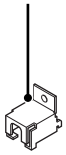
Remote controller assy (RC-537)
(A70-2078-05)



Size AA Battery
(Not Supplied)

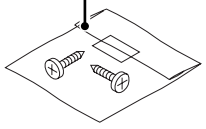


Mounting hardware
(J22-0517-04)

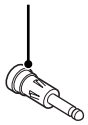


SEMS
(N09-6427-05)

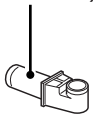
Screw set
(N99-1789-05)



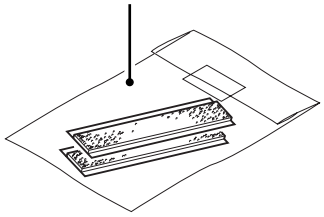
Antenna adaptor
(E type only)
(T90-0523-05)



Antenna adaptor
(E type only)
(T90-0578-05)

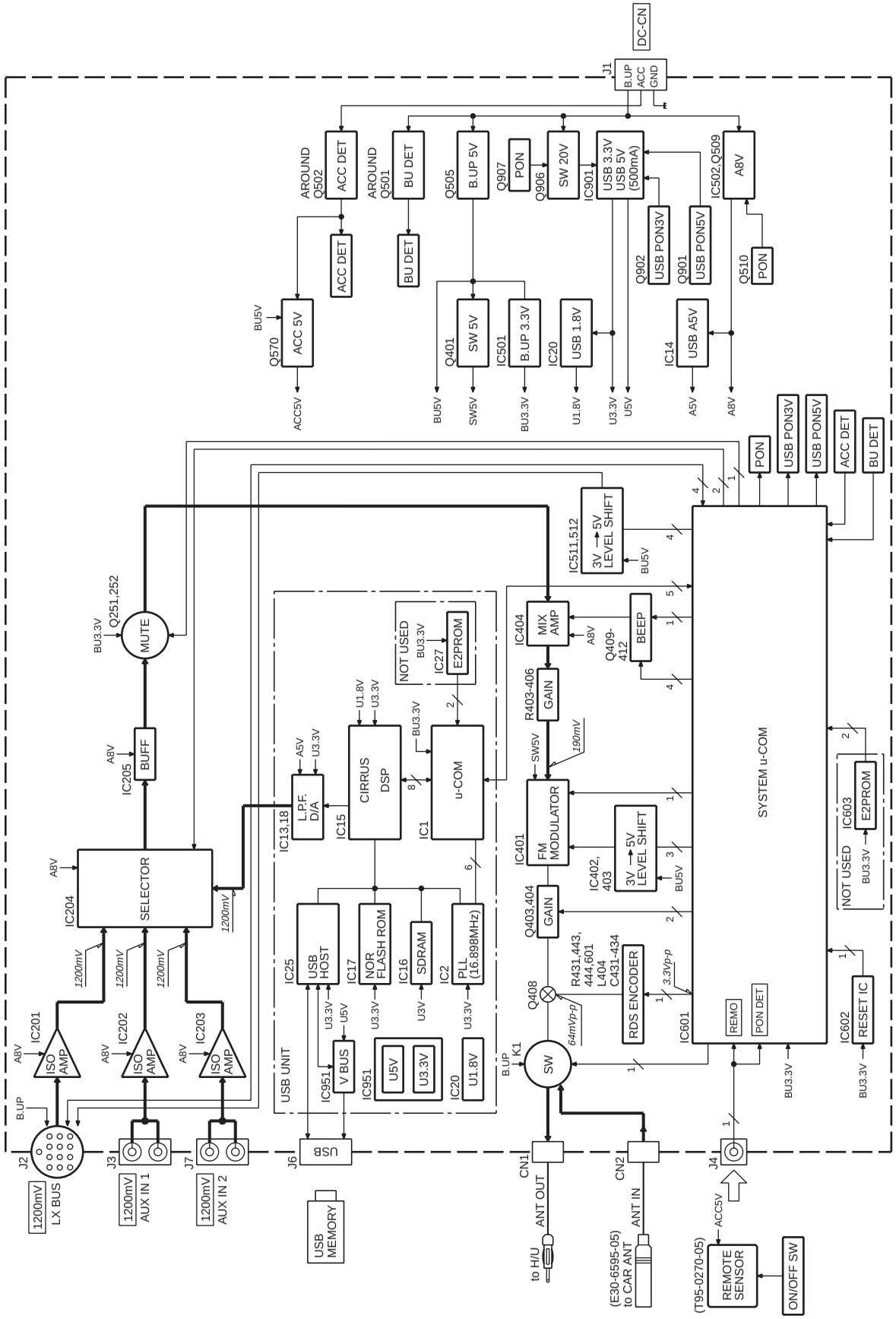


Magic tape
(Not supplied)



This product uses Lead Free solder.
This product complies with the **RoHS** directive for the European market.

BLOCK DIAGRAM



COMPONENTS DESCRIPTION

● MODULAR UNIT (X14-9790-10/2-71)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC1	USB Main μ-com	
IC2	PLL (16.898MHz)	For IC15
IC13	OPAMP	Low Pass Filter
IC14	A5V Reg.	For IC18
IC15	DSP	For compression audio decoding
IC16	SDRAM	For compression audio deployment
IC17	Flash ROM	Decoder software storing
IC18	24 bit D/A converter	
IC20	1.8V Reg.	For IC15
IC25	USB Host Controller	
IC26	Logic IC (NAND)	The change of IC15, and IC16/IC17/IC25
IC28	Dual bus buffer	The change of the clock supplied to IC16
IC201	ISO AMP	Audio input isolation amplifier (5L)
IC202	ISO AMP	Audio input isolation amplifier (AUX1/RCA)
IC203	ISO AMP	Audio input isolation amplifier (AUX2/Mini Jack)
IC204	Switch OPAMP	4 inputs (USB, 5L, AUX1, AUX2), 1 output
IC205	OPAMP	Buffer
IC401	FM-TX IC	FM-Transmiter
IC402,403	Level shift	3.3V → 5V
IC404	OPAMP	Mix Amp
IC501	BU3.3V Reg.	For IC1, IC601
IC502	Audio8V Ref Power Supply	Output 1.27V
IC511,512	Level shift	3.3V → 5V
IC601	System μ-com	
IC602	Reset IC	“L” when detection voltage goes below 3.0V or less
IC901	Switching Regulator Controller	Power Supply for USB3.3V & USB 5V. CH1: USB3.3V, CH2: USB5V
IC951	Power control IC	USB power control switches with over current detection and protection
Q16	Infinite zero detect SW	When a base gose Lo, SW turns on
Q17	SW of “USB Hi-Side SW”	When a base gose Lo, SW turns on
Q18	DAC MUTE SW	When a base gose Hi, DAC MUTE turns on
Q250~252	MUTE 0 SW	When Q250’s base goes Lo, MUTE 0 turns on
Q401,402	PLL+B AVR	When Q402’s base goes Hi, AVR outputs 5V
Q403,404	Switching FM-TX frequency polarization	Switches FM-TX freqency polarization in three level at Q403, 404 and their peripherals
Q405,406	For FM-TX PLL	Composes PLL of FM-TX with Q405, 406 and their peripherals
Q407	RELAY SW	When a base gose Hi, the output from IC401 is chosen
Q408	Buffer	For RDS signals
Q409~412	BEEP LEVEL SW	Switches BEEP VOLUME in five level
Q413	PLL MUTE SW	When a base gose Hi, PLL MUTE turns off
Q501	B.U Detect SW	When a base gose Hi, B.U voltage is detected

COMPONENTS DESCRIPTION

Ref. No.	Application / Function	Operation / Condition / Compatibility
Q502	ACC Detect SW	When a base gose Hi, ACC voltage is detected
Q505,506	B.U.5V AVR	While BU is applied, BU5V AVR outputs 5V
Q509,510	Audio8V AVR	When Q510's base goes Hi, A8V AVR outputs 8.0V
Q570~572	REMO.5V AVR	When Q572's base goes Lo, REMO.5V AVR outputs 5V
Q901	USB5V AVR SW	When base goes Hi, USB5V AVR turns off
Q902	USB3.3V AVR SW	When base goes Hi, USB3.3V AVR turns off
Q905~908	SW16V (Surge Protection)	When Q907's base goes Hi, SW16V outputs (BU–0.6)V

MICROCOMPUTER'S TERMINAL DESCRIPTION

● **SYSTEM MICROCOMPUTER: 703260YGC306A (X14: IC601)**

Pin No.	Pin Name	I/O	Application	Truth Value Table	Processing Operation Description
1	AVREF0	-	VDD		
2	AVSS	-	VSS		Connect to VSS
3	NC		Not used		Not used
4	RDS_DATA	O	RDS DATA output terminal		
5	AVREF1	-	VDD		Connect to VDD
6,7	NC		Not used		Output L fixed
8	FLMD0	-	Terminal for writing FLASH		
9	VDD	-	VDD		Connect to VDD
10	REGC	-			4.7μ
11	VSS	-	VSS		Connect to VSS
12	X1	-	4.332MHz		
13	X2	-	4.332MHz		
14	RESET	-	RESET		
15	XT1	-	Not used		Connect to VSS
16	XT2	-	Not used		OPEN
17,18	NC		Not used		Output L fixed
19	BU_DET	I	Momentary power down detection		L: BU found H: BU not found, at momentary power down

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Truth Value Table	Processing Operation Description
20	NC		Not used		Output L fixed
21	LX_REQ_S	I	Communication request from slave unit		
22	LX_DATA_S	I	Data from slave unit		
23	LX_DATA_M	O	Data to slave unit		
24	LX_CLK	O	LX BUS clock		
25	NC		Not used		Output L fixed
26	TEST MODE_DET	I	TEST mode detection		H: Normal, L: TEST MODE
27,28	NC		Not used		Output L fixed
29	LX_CON	O	Start-up request to slave unit		H: Slave unit ON, L: Slave unit OFF
30	LX_REQ_M	O	Communication request to the slave unit		
31	LX_MUTE	I	MUTE request from slave unit		H: Mute ON, L: Mute OFF
32	LX_RST	O	Hardware-reset to slave unit		OPEN: At RESET, L: Normally
33	EVSS	-	VSS		Connect to VSS
34	EVDD	-	VDD		Connect to VDD
35	USB_SDA	I/O	For communication with USB system I2C data input/output terminal		
36	USB_CLK	I/O	For communication with USB system I2C clock output terminal		
37~42	NC		Not used		Output L fixed
43	ROM_SDA	I/O	E2PROM I2C data input/output terminal for ROM correction		
44	ROM_CLK	O	E2PROM I2C clock output terminal for ROM correction		
45	LCD_CE	O	LCD driver control request terminal		[Reserved]
46	BEEP	O	BEEP output		PWM output
47	PRIM_REMO	I	Attached remote control signal input		Detect pulse width
48	LCD_BLK	O	LCD data blanking output (RESET)		[Reserved]
49	ROM_DET	I	E2PROM writing-in request		L: Writing-in
50	LCD_DI	I	LCD data input terminal		[Reserved] Output L fixed
51	LCD_DO	O	LCD data output terminal		[Reserved] Output L fixed
52	LCD_CLK	O	LCD clock output terminal		[Reserved] Output L fixed
53	NC		Not used		Output L fixed
54	NC		E-VOL data output terminal		Output L fixed
55	NC		E-VOL clock output terminal		Output L fixed
56	POWER_ON_DET	I	Power ON/OFF switching		H: Power ON (Detect 30msec chartering) L: Power OFF (Detect 1sec chartering)
57	KEY_REQ	I	Communication request from LCD driver		[Reserved] Connect to LCD_DI, Output L fixed
58	ACC_DET	I	ACC power supply detection		L: ACC found, H: ACC not found
59,60	NC	O	SW-Reg frequency switching	⑦	[Reserved] Refer to the truth value table
61	PLL_CE	O	Chip-enable output terminal for PLL communication		H: Data found, L: Data not found

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Truth Value Table	Processing Operation Description
62	PLL_DO	O	Data output terminal for PLL communication		
63	PLL_CLK	O	Clock terminal for PLL communication		
64	PLL_MUTE	I/O	MUTE terminal for PLL communication		MUTE when SW is OFF. Hi-z: Mute ON, H: Mute OFF
65~68	NC		Not used		Output L fixed
69	BVSS	-	VSS		
70	BVDD	-	VDD		
71	GAIN_0	O	Modulation output switching	①	Refer to the truth value table
72	GAIN_1	O	Modulation output switching	①	Refer to the truth value table
73	GAIN_2	O	Modulation output switching	①	Refer to the truth value table
74	SEP_ATT	O	"Hi" when GAIN_2 output found	①	Refer to the truth value table
75	RELAY	O	Antenna relay control output terminal		H: Power ON (MOD ANT) L: Power OFF (CAR ANT)
76	FLMD1		Terminal for writing FLASH		
77,78	NC		Not used		Output L fixed
79	SRC_SW_0	O	Input source switching	②	Refer to the truth value table
80	SRC_SW_1	O	Input source switching	②	Refer to the truth value table
81,82	NC		Not used		Output L fixed
83	TYPE_0	I	Destination switching	④	Refer to the truth value table
84	TYPE_1	I	Destination switching	④	Refer to the truth value table
85	BEEP_LEVEL_3	I/O	BEEP level switching	③	Refer to the truth value table
86	BEEP_LEVEL_4	I/O	BEEP level switching	③	Refer to the truth value table
87	MUTE_0	I/O	MUTE terminal		Normal MUTE, Hi-z: Mute OFF, L: Mute ON
88	NC		Not used		Output L fixed
89	BEEP_LEVEL_1	I/O	BEEP level switching	③	Refer to the truth value table
90	BEEP_LEVEL_2	I/O	BEEP level switching	③	Refer to the truth value table
91,92	NC	O	Not used		Output L fixed
93	PON	I/O	Power supply control	②	H: Power ON, Hi-z: At power OFF and momentary power down detection
94	USB_PON5	I/O	Power supply control terminal for USB 5V	②	Refer to the truth value table, ON: Hi-z
95	USB_PON3	I/O	Power supply control terminal for USB 3.3V	②	Refer to the truth value table, ON: Hi-z
96	PLL_PON	I/O	PLL power supply	②	Refer to the truth value table POWER ON: H, POWER OFF: Hi-z
97	NC		Extra terminal for USB		Output L fixed
98	USB_MUTE_L	I	USB MUTE (Lch) request terminal		H: Normal L: Lch mute request (Valid only when USB)
99	USB_MRST	O	Mechanism μ-com RST terminal		H: Normal, L: RESET
100	USB_MSTOP	O	Mechanism μ-com stop terminal		H: Mechanism μ-com in operation L: Mechanism μ-com stop

MICROCOMPUTER'S TERMINAL DESCRIPTION

Truth value table

① GAIN switching output

GAIN output according to the level as shown in the table below.

LEVEL	GAIN0	GAIN1	GAIN2	SEP-ATT	
1	H	H	L	L	Low ↑
2	H	L	H	L	↓
3	H	L	L	L	High

② Input switching and power supply

Input source	SRC_SW_0	SRC_SW_1	PON	PLL_PON	USB_PON3	USB_PON5
AUX1	L	L	H	H	H	H
AUX2	H	L	H	H	H	H
USB	L	H	H	H	Hi-z	Hi-z
LX-BUS	H	H	H	H	H	H
While STANDBY	L	H	H	H	H	H

Re-send PLL (MONO) data

③ BEEP level

		BEEP_L1	BEEP_L2	BEEP_L3	BEEP_L4	
LV1	Lower	Hi-z	Hi-z	Hi-z	H	
LV2	↓	Hi-z	Hi-z	H	Hi-z	
LV3		Hi-z	H	Hi-z	Hi-z	Default setting
LV4		H	Hi-z	Hi-z	Hi-z	
LV5	Louder	Hi-z	Hi-z	Hi-z	Hi-z	

④ Destination setting

	TYPE_0	TYPE_1
K	L	L
E	H	L

⑦ Frequency transition

K-Type

FSEL1	FSEL2	Reception frequency
L	L	530~690, All status excluding AM source
H	L	700~1020, 1390~1530
L	H	1540~1700
H	H	1030~1380

E-Type

FSEL1	FSEL2	Reception frequency
L	L	522~675, All status excluding MW
H	L	684~1017, 1386~1530
L	H	1539~1629
H	H	1026~1377

MICROCOMPUTER'S TERMINAL DESCRIPTION

● USB MAIN MICROCOMPUTER: M30620MCPA28GP (X14: IC1)

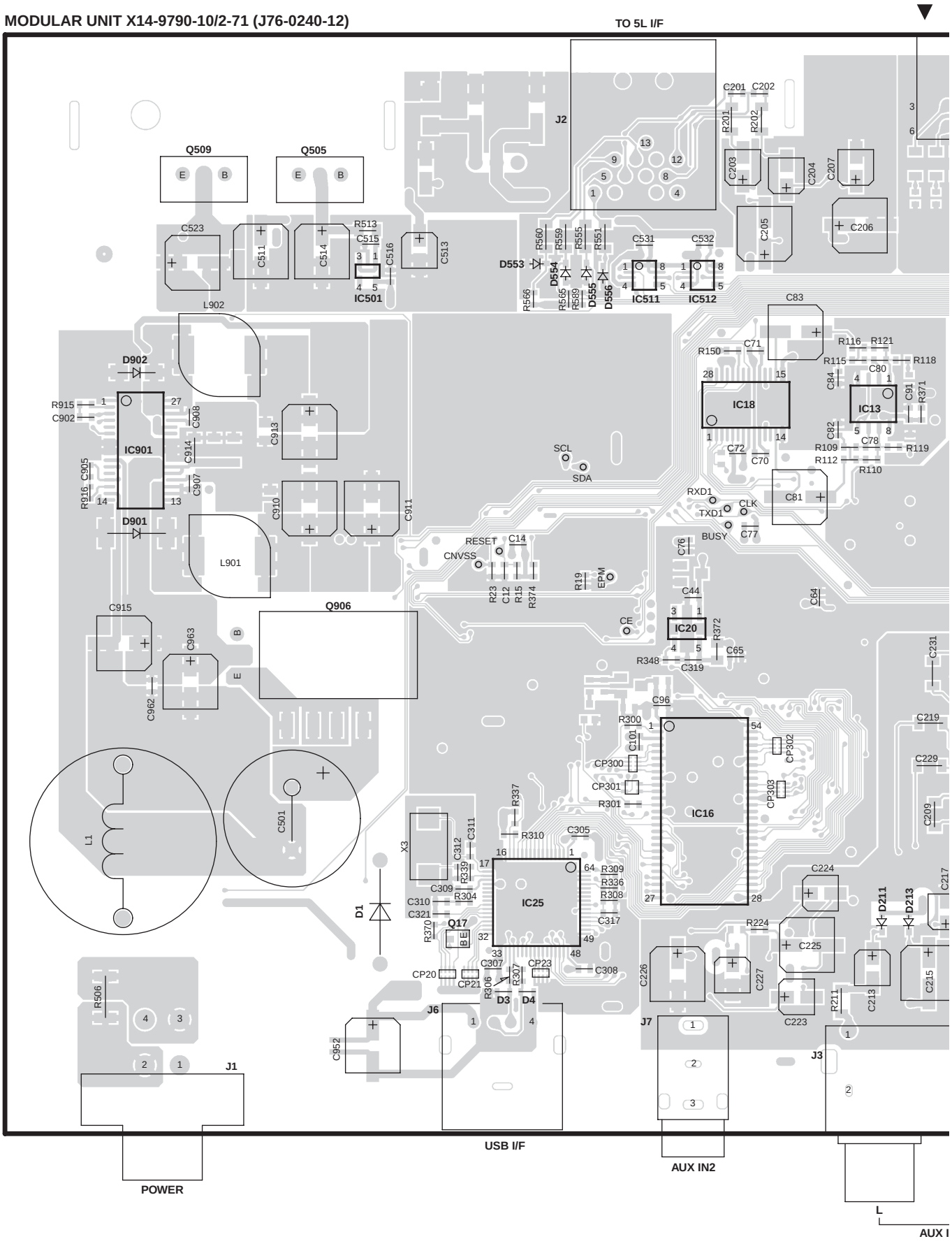
Pin No.	Pin Name	I/O	Application	Processing Operation Description
1~5	NC	O	Not used	Open output L fixed
6	BYTE	I	External data bus switching input	GND connection, fixed to "L" at single chip mode
7	CNVSS	I	Processor mode switching	L: PullDown connection, single chip mode (H: Micro processor mode)
8	_MUTE	O	Audio MUTE control	L: MUTE ON, H: MUTE OFF
9	NC	O	Not used	Open output L fixed
10	_RESET	I	Reset detection	L: RESET, H: NORMAL
11	XOUT	O	Main clock output	X'tal connection
12	VSS	-	Power supply input	GND connection
13	XIN	I	Main clock input	X'tal connection
14	VCC1	-	Power supply input	BU3.3V connection
15	_NMI	I	_NMI interrupt input	Input H (PullUp) fixed
16	_MSTOP	I	Standby return interrupt	L: STOP, H: STOP cancel (Hi edge)
17	NC	O	Not used	Open output L fixed
18	DSP INT	I	(DSP) Interruption signal input	H: Interruption (Hi edge)
19~22	NC	O	Not used	Open output L fixed
23	E2P SCL	I/O	(E2P) I2C clock output	
24	E2P SDA	I/O	(E2P) I2C data input/output	
25,26	NC	O	Not used	Open output L fixed
27	SCL	I	(System μ-com) I2C clock input	
28	SDA	I/O	(System μ-com) I2C data input/output	
29	DSP TXD	O	(DSP) Data output for serial data	Not used
30	DSP RXD	I	(DSP) Data input for serial data	Not used
31	DSP CLK	O	(DSP) Clock output for serial data	Not used
32	DSP STB (BUSY)	O	(DSP) Data strobe signal output (FLASH: BUSY)	Not used
33	CS SDATA	O	(Decoder) Data output for serial data	Not used
34	CS BDATA	I	(Decoder) Data input for serial data	Not used
35	CS CLK	O	(Decoder) Clock output for serial data	Not used
36~38	NC	O	Not used	Open output L fixed
39	_EPM	O	Not used (FLASH: _EPM)	Open output L fixed
40	PON D3.3	O	D3.3V POWER ON control terminal	H: POW ON, L: POW OFF
41	PON A5	O	A5.0V POWER ON control terminal	H: POW ON, L: POW OFF
42	PON CS1	O	CS7410 series 3.3V POWER ON control terminal	H: POW ON, L: POW OFF
43	PON CS2	O	CS7410 series 1.8V POWER ON control terminal	H: POW ON, L: POW OFF
44	_CE	O	Not used (FLASH: _CE)	Open output L fixed
45	_DRV MUTE	O	Driver MUTE	L: STOP, H: MUTE OFF
46,47	NC	O	Not used	Open output L fixed
48	ZERO_M	I	0bit MUTE detection	H: MUTE ON, L: MUTE OFF
49	DE-EMPHASIS	O	(DAC) De-emphasis control	H: De-emphasis ON, L: OFF

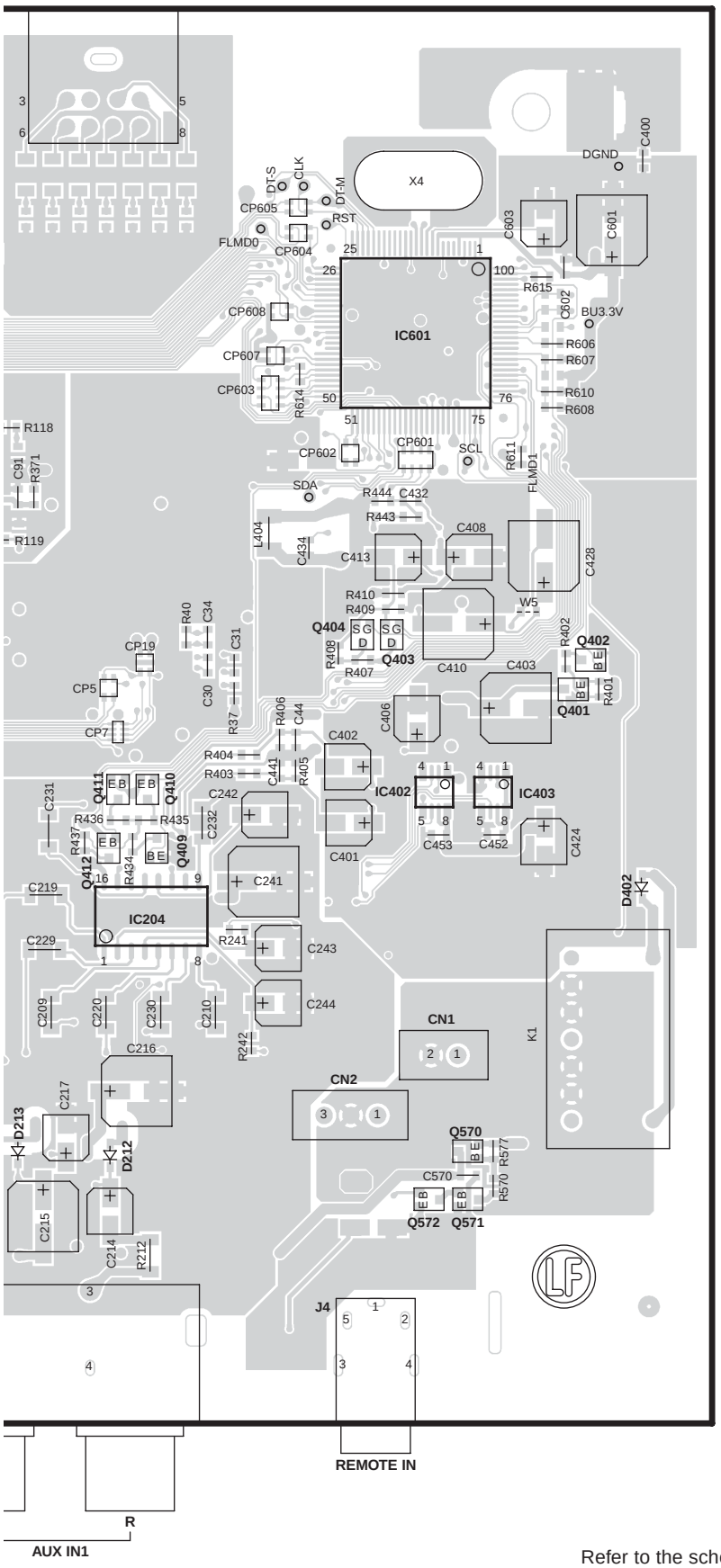
MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Processing Operation Description
50,51	NC	O	Not used	Open output L fixed
52	LIM SW	I	PU inner circumference detection SW signal input	H: Inner circumference, L: Other
53	DISC_NORMAL	O	Media detection result (normal DISC detected) output	H: Normal DISC, L: Other
54	DISC_H_RW	O	Media detection result (high-reflection RW detected) output	H: Hi-reflection RW DISC, L: Other
55	DISC_RW	O	Media detection result (normal RW detected) output	H: Normal RW DISC, L: Other
56	TEST OUT4	O	Output 4 terminal for TEST	Open output L fixed
57	TEST OUT3	O	Output 3 terminal for TEST	Open output L fixed
58	TEST OUT2	O	Output 2 terminal for TEST	Open output L fixed
59	TEST OUT1	O	Output 1 terminal for TEST	Open output L fixed
60	VCC2	-	Power supply input	BU3.3V connection
61	TEST OUT0	O	Output 0 terminal for TEST	Open output L fixed
62	VSS	-	Power supply input	GND connection
63~66	NC	O	Not used	Open output L fixed
67	TEST IN3	I	TEST IN3	PullDown connection, L: Normal, H: When TEST
68	MODEL_SEL	I	MODEL detection terminal	L: 6810, H: 6820
69	E2P WRITE	I	TEST IN1: E2P writing-in permission	PullDown connection, L: Normal, H: When writing
70	UNIQ ID	I	TESTINO: Unique ID writing permission	PullDown connection, L: Normal, H: When writing
71~73	NC	O	Not used	Open output L fixed
74	SEARCH	O	Search condition output	H: Searching, L: Normal (x2 is fixed to L)
75,76	NC	O	Not used	Open output L fixed
77	_DSP RST	O	(DSP) Reset control	L: RESET, H: NORMAL
78	DSP A0	O	(DSP) Command/parameter detection signal output	H: Parameter being sent, L: Command being sent
79	DA EMPHASIS	I	(DSP) DA emphasis input	H: EMPHASIS ON, L: EMPHASIS OFF
80	ROM EMPHASIS	I	(Decoder) ROM emphasis input	H: EMPHASIS ON, L: EMPHASIS OFF
81	_DATA MUTE	O	Data output status	L: DATA output MUTE, H: DATA being output
82	_CS RST	O	(Decoder) Reset control	L: RESET, H: NORMAL
83	NC	O	Not used	Open output L fixed
84	SREQ	O	(Decoder) SREQ signal output	
85	BREQ	I	(Decoder) BREQ signal input	
86~93	NC	O	Not used	Open output L fixed
94	AVSS	-	Analog power supply input	GND connection
95	NC	O	Not used	Open output L fixed
96	VREF	-	Reference voltage input	Not used, GND connection
97	AVCC	-	Analog power supply input	BU3.3V connection
98~100	NC	O	Not used	Open output L fixed

KOS-A200

PC BOARD (COMPONENT SIDE VIEW)





X14-9790-10/2-71

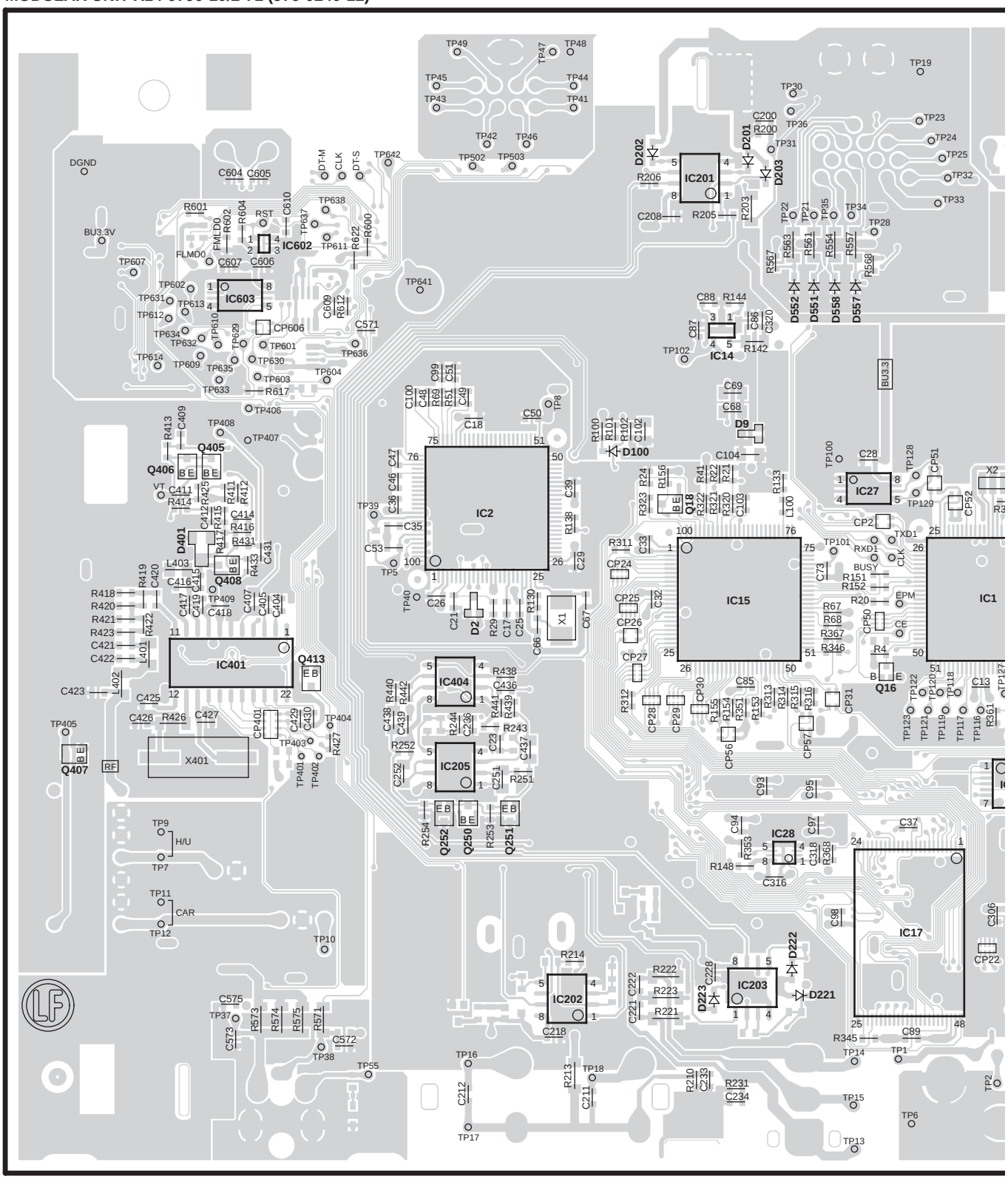
Ref. No.	Address
IC13	3E
IC16	5D
IC18	3D
IC20	4D
IC25	5C
IC204	5F
IC402	4G
IC403	4G
IC501	3C
IC511	3D
IC512	3D
IC601	3G
IC901	3B
Q17	6C
Q401	4H
Q402	4H
Q403	4G
Q404	4G
Q409	4F
Q410	4F
Q411	4F
Q412	5F
Q505	2B
Q509	2B
Q570	6G
Q571	6G
Q572	6G
Q906	4C

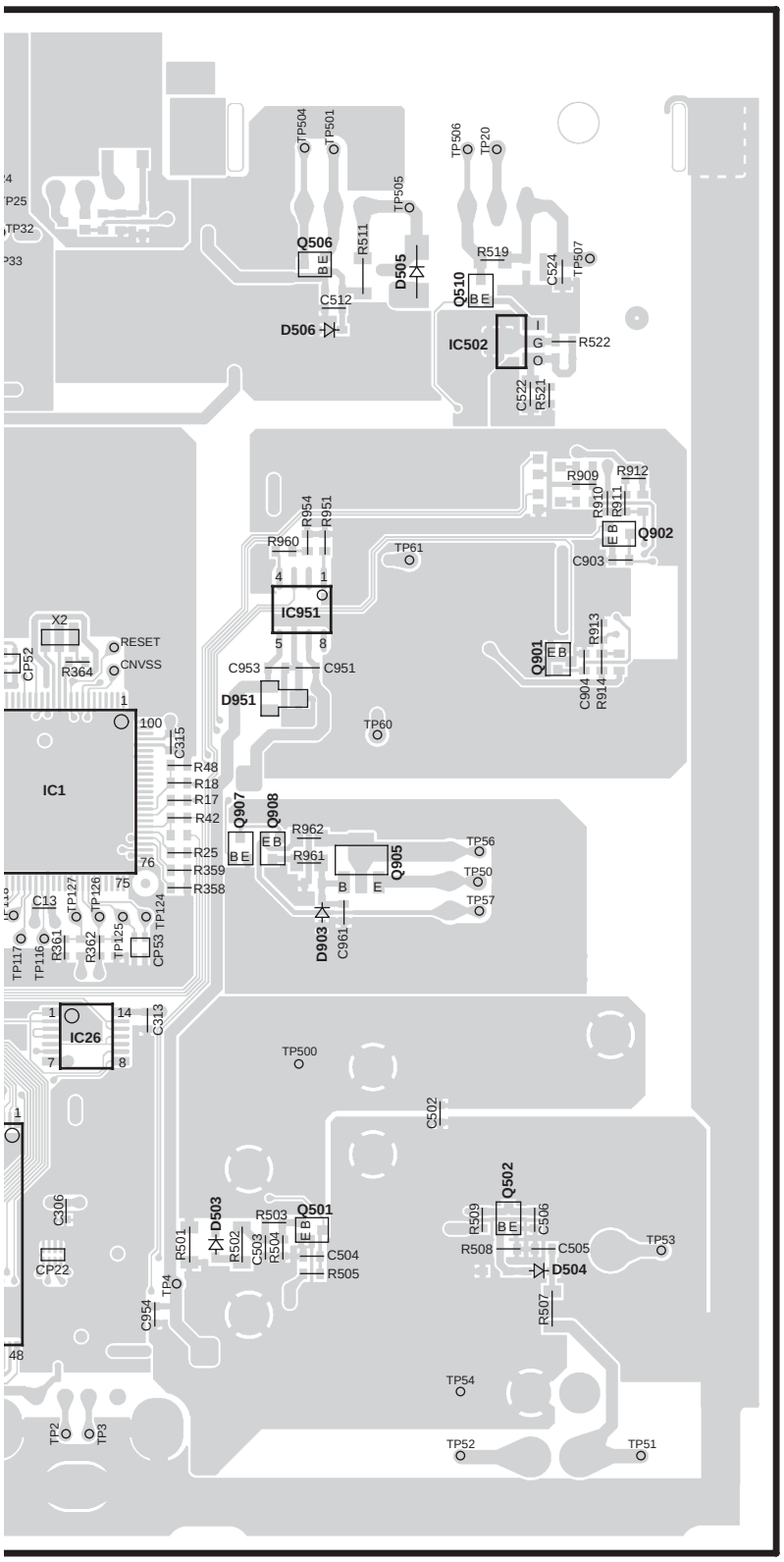
Refer to the schematic diagram for the values of resistors and capacitors.

KOS-A200

PC BOARD (FOIL SIDE VIEW)

MODULAR UNIT X14-9790-10/2-71 (J76-0240-12)



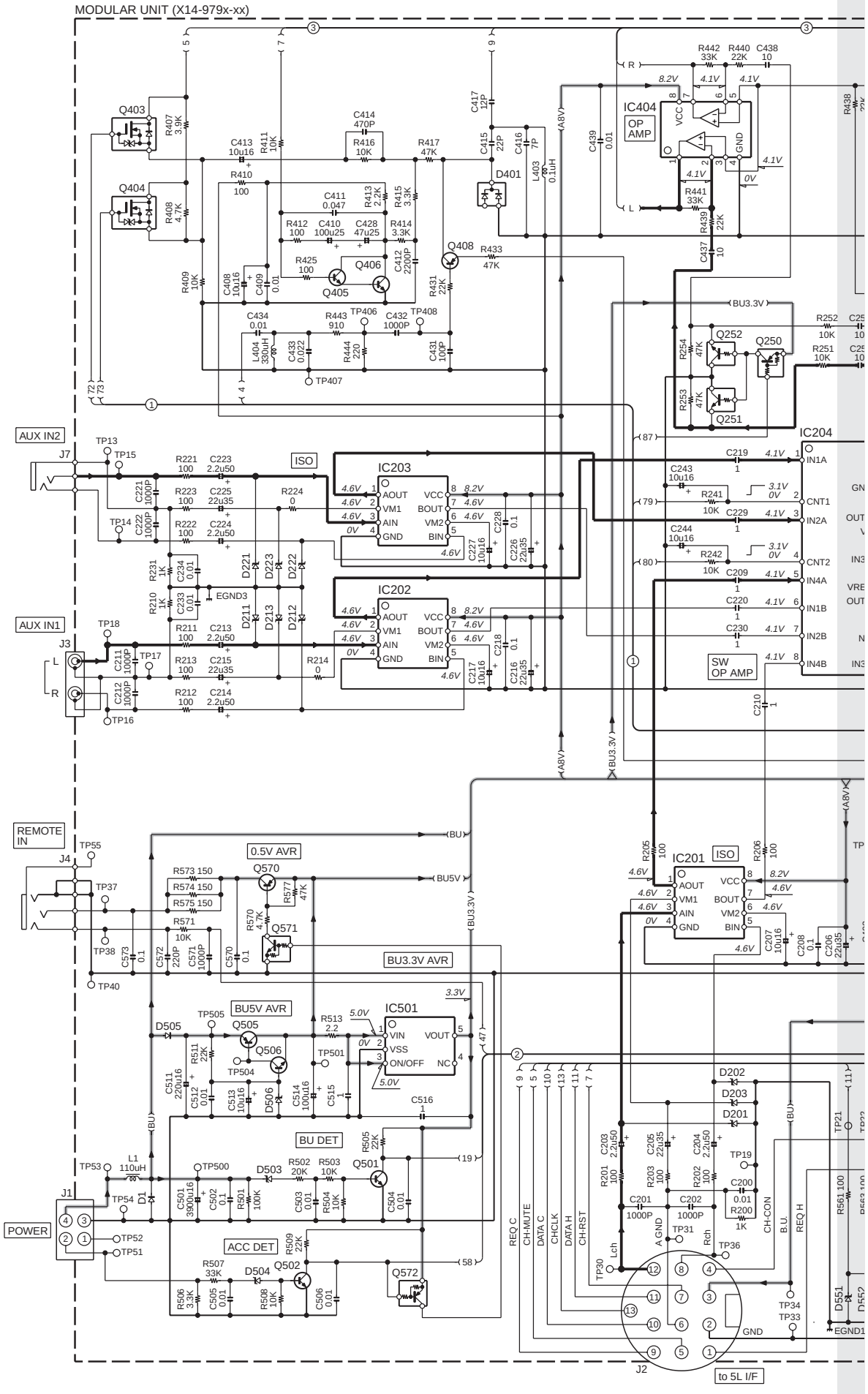


X14-9790-10/2-71

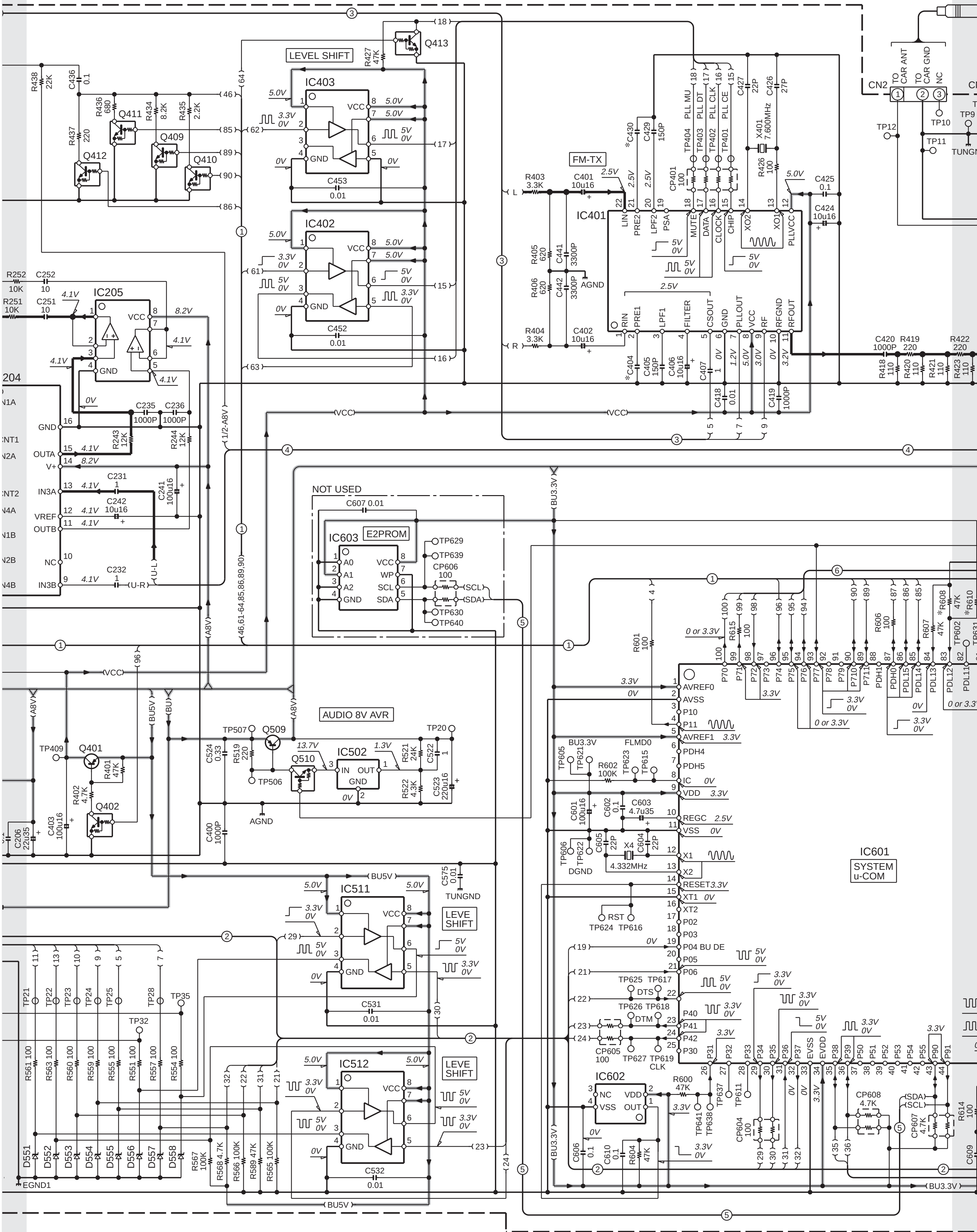
Ref. No.	Address
IC1	4P
IC2	4M
IC14	3N
IC15	4N
IC17	6O
IC26	5P
IC28	5N
IC201	2N
IC202	6M
IC203	6N
IC205	5M
IC401	4L
IC404	4M
IC502	2Q
IC602	2L
IC951	3Q
Q16	4O
Q18	4N
Q250	5M
Q251	5M
Q252	5M
Q405	3L
Q406	3L
Q407	5K
Q408	4L
Q413	4L
Q501	5Q
Q502	5Q
Q506	2Q
Q510	2Q
Q901	4Q
Q902	3R
Q905	4Q
Q907	4P
Q908	4P

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

KOS-A200

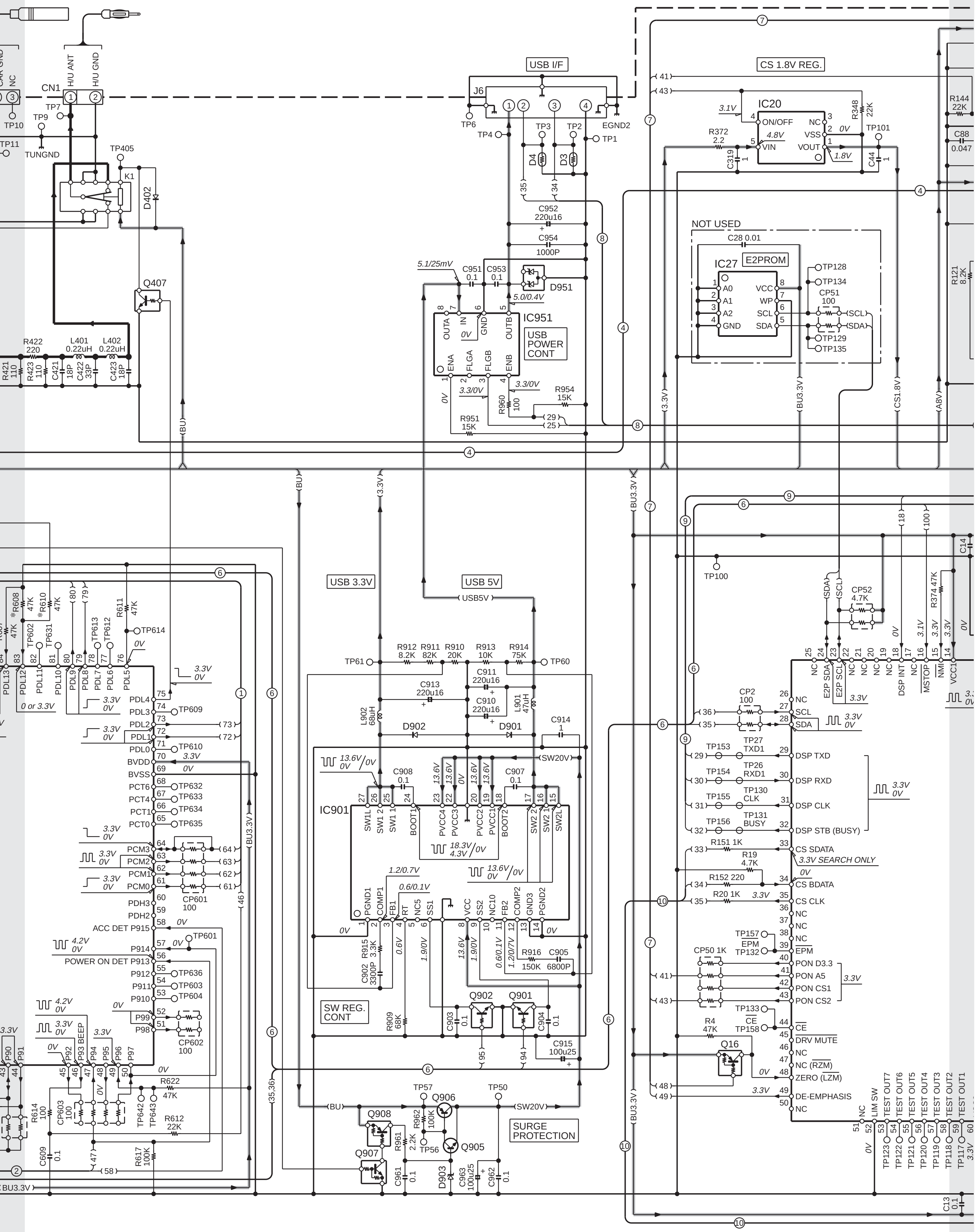

MODULAR UNIT (X14-979x-xx)
IC404 OP AMP
IC204
IC203
IC202
IC201 ISO
IC501
SW OP AMP
AUX IN2
AUX IN1
REMOTE IN
POWER
ISO
0.5V AVR
BU3.3V AVR
BU5V AVR
BU DET
ACC DET
EGND3
J1
J2
J3
J4
J7
to 5L I/F

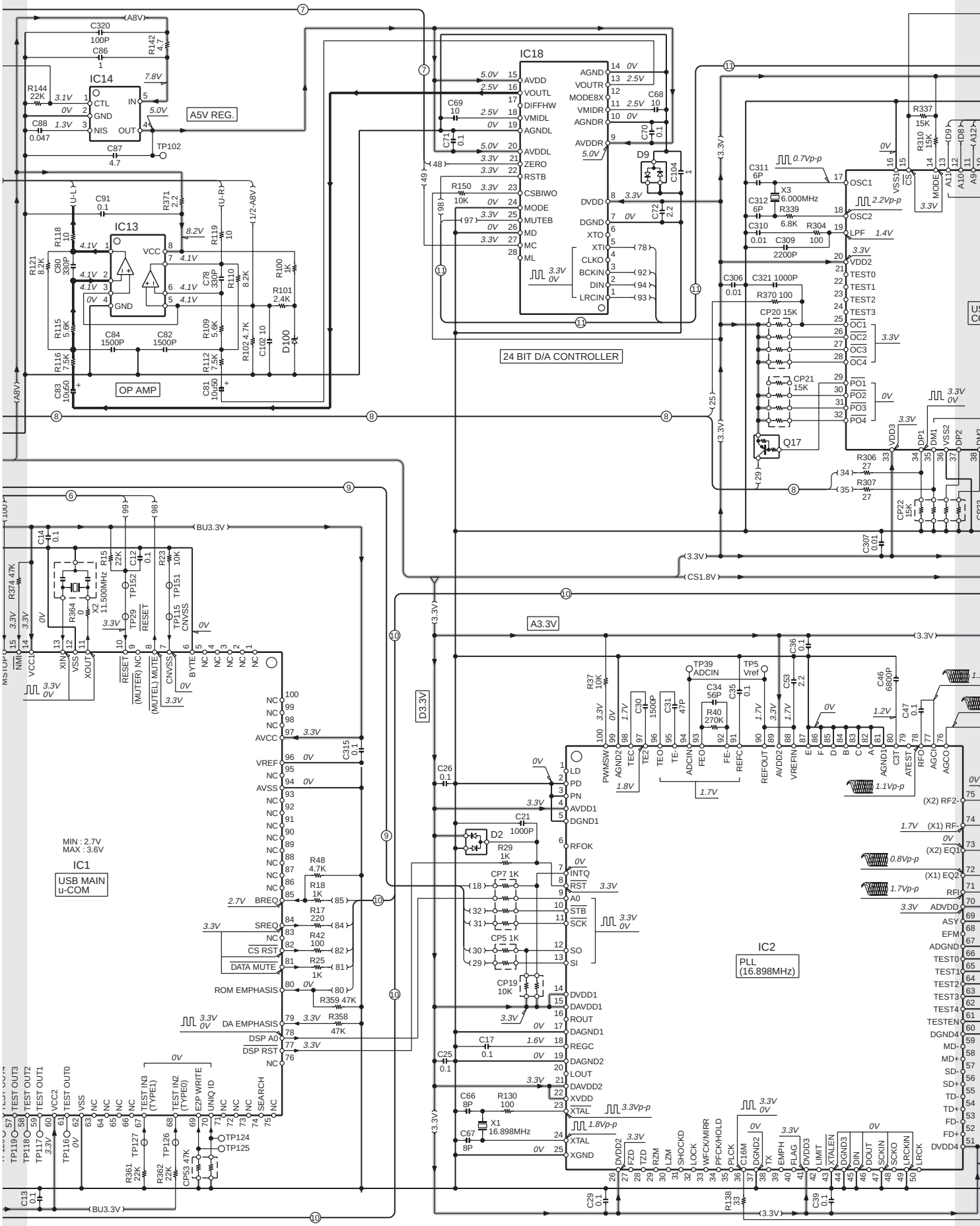
KOS-A200



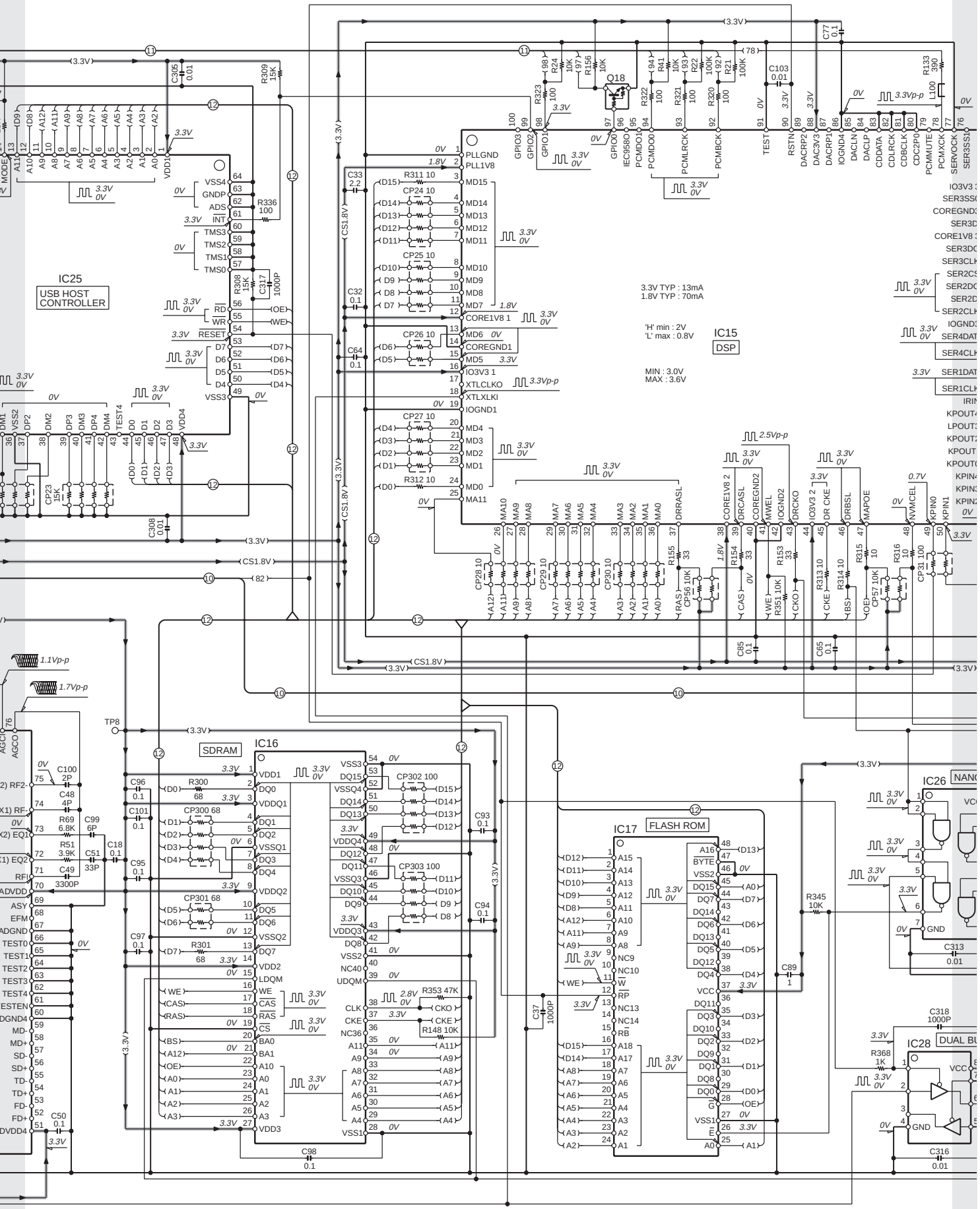
LEVEL SHIFT
IC403
IC402
Q413
Q411
Q409
Q410
Q412
IC205
FM-TX
IC401
CN2
TO CAR ANT
TO CAR GND
NC
X401 7.600MHz
NOT USED
IC603
E2PROM
AUDIO 8V AVR
Q509
Q510
IC502
Q401
Q402
IC511
LEVE SHIFT
IC512
LEVE SHIFT
IC601
SYSTEM u-COM
IC602
X4 4.332MHz
AGND
DGND
TUNGND
EGND1
BU3.3V
BU5V
A8V
VCC

KOS-A200

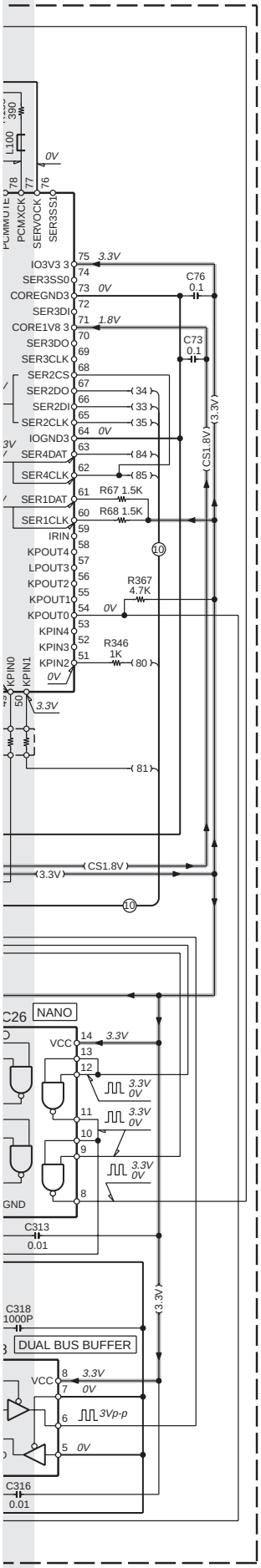

USB I/F
CS 1.8V REG.
NOT USED
IC27 E2PROM
IC20
IC951
USB POWER CONT
USB 3.3V
USB 5V
IC901
SW REG. CONT
SURGE PROTECTION
CN1
J6
Q407
Q902
Q901
Q906
Q905
Q908
Q907
Q16
D951
D902
D901
D903
K1
D402


A5V REG.
IC14
IC13
OP AMP
IC18
24 BIT D/A CONTROLLER
A3.3V
IC1
USB MAIN
u-COM
IC2
PLL
(16.898MHz)
MIN : 2.7V
MAX : 3.6V

KOS-A200


IC25
USB HOST CONTROLLER
IC15
DSP
IC16
SDRAM
IC17
FLASH ROM
IC26
IC28
Q18
3.3V TYP : 13mA
1.8V TYP : 70mA
'H' min : 2V
'L' max : 0.8V
MIN : 3.0V
MAX : 3.6V

KOS-A200



KOS-A200

IC1 : M30620MCPA28GP
IC2 : UPD63712GC
IC13,205,404 : BA4560RF
IC14 : TAR5S50-F
IC15 : CS7410-IQZ
IC16 : IC42S164007TIG
IC17 : 29LV800CBTI3W7
IC18 : WM8716SEDS/R
IC20 : S-1132B18U5T1G
IC25 : TDUHC1240F0C00
IC26 : TC74LCX00FT-F
IC27,603 : NOT USED
IC28 : TC7WH125FK-F
IC201-203 : BA3121F
IC204 : NJM2750M-ZB
IC401 : BH1415F
IC402,403,511,512 : TC7WT126FU-F
IC501 : S-1112B33MCG
IC502 : M5237ML-CF0J
IC601 : 703260YGC306A
IC602 : S-80830CNNB-G
IC901 : BD9302FP
IC951 : MIC2026-1YM

Q16 : DTA143ZE
Q17 : DTA143XUA
Q18,402,409-413,510,571,907 : DTC114YUA
Q250,572,908 : DTA124EUA
Q251,252,407,901,902 : DTC143TUA
Q401,570 : 2SA1577
Q403,404 : 2SK3018
Q405,406,501,502,506 : 2SC4081
Q408 : 2SB1689
Q505,509,906 : 2SB1565
Q905 : 2SC2873-F

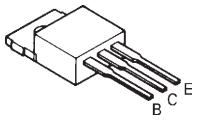
D1 : S2V60-5009F46
D2,9 : DA204U
D3,4 : IMSA-6802-E
D100 : UDZS6.2B
D201-203,211-213,221-223 : 02DZ6.8F-Y
D401 : 1SV228-F
D402 : 1SS355
D503,504 : UDZS6.8B
D505 : RB160L-40
D506 : UDZS5.6B
D551-558 : 02DZ6.2F-Y
D901 : NSQ03A04G
D902 : SFPB-54VNF
D903 : UDZS20B
D951 : STZ6.8N

(X14-979x-xx)

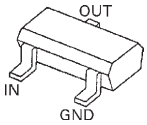
DESTINATION		UNIT	C404,	R608	R610
COUNTRY	ABB.	No.	430		
U.S.A.	K	0-10	3300P	YES	—
EUROPE	E	2-71	2200P	—	YES

SIGNAL LINE
GND LINE
+B LINE

2SB1565



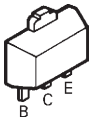
DTA124EUA



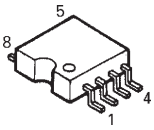
DTA143ZE
DTC114YUA
DTC143TUA

DA204U

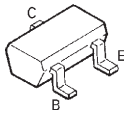
2SC2873-F



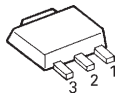
BA3121F



2SC4081



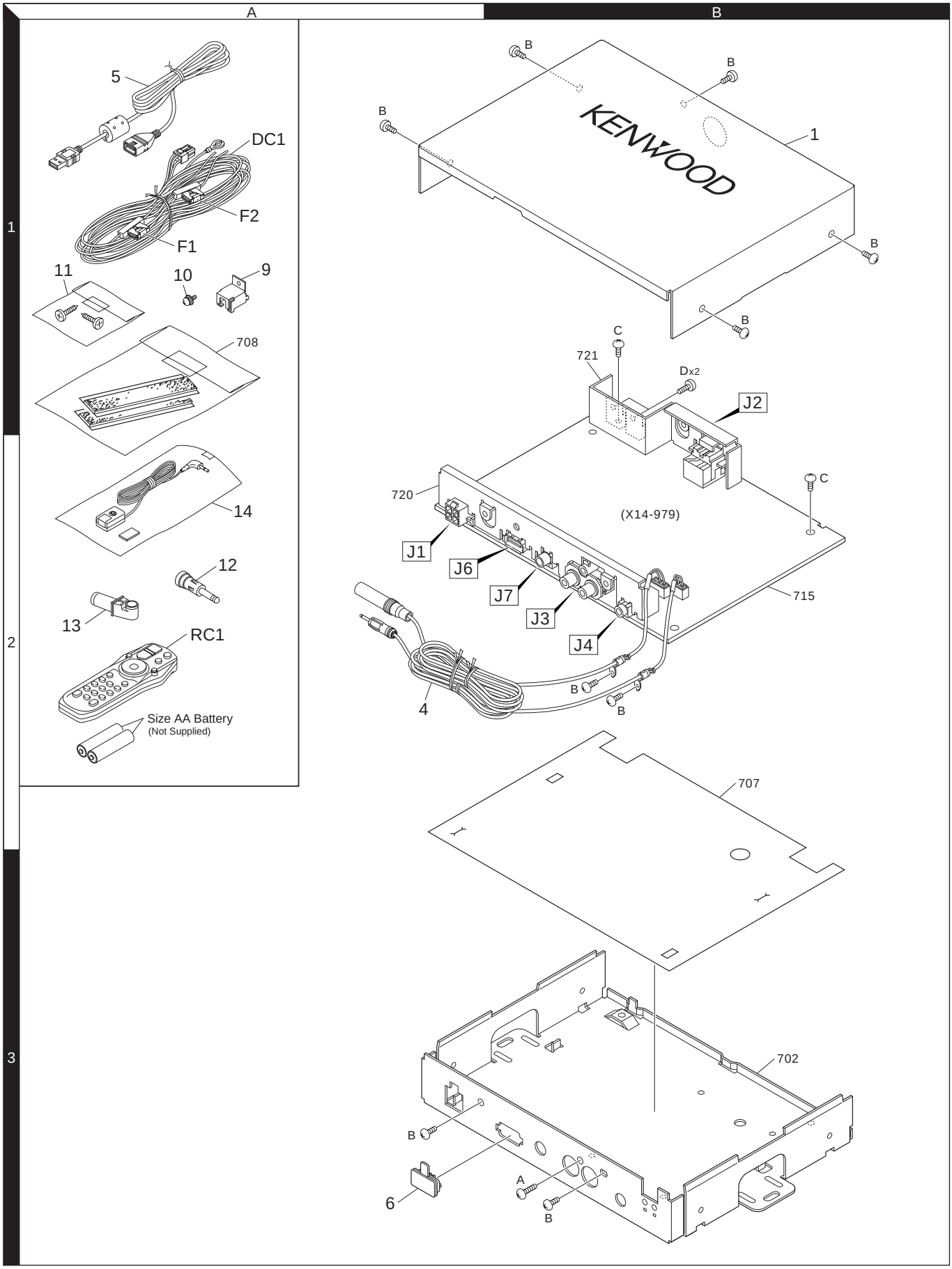
M5237ML-CF0J



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

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

EXPLODED VIEW



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

PARTS LIST

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

Ref. No.	Add	New	Parts No.	Description	Destination
KOS-A200					
1	1B	✻	A01-4415-02	METALLIC CABINET	K
1	1B	✻	A01-4418-02	METALLIC CABINET	E1
RC1	2A	✻	A70-2078-05	REMOTE CONTROLLER ASSY (RC-537)	
-			B46-0682-00	WARRANTY CARD	
-		✻	B59-1864-00	SUB-INSTRUCTION MANUAL	K
-		✻	B59-1865-00	SUB-INSTRUCTION MANUAL	E1
-		✻	B64-3419-00	INSTRUCTION MANUAL (ENG.FRE.SPA	K
-		✻	B64-3422-00	INSTRUCTION MA (ENG.FRE.GER.DUT	E1
-		✻	B64-3423-00	INSTRUCTION MANUAL (ITA.SPA.POR	E1
4	2A	✻	E30-6595-05	CORD WITH PLUG (ANT IN/OUT) 2.5M	
5	1A	✻	E30-6634-05	CORD WITH CONNECTOR (USB 1.5M)	
DC1	1A	✻	E30-6596-05	DC CORD (2.5M)	
6	3A	✻	F07-1180-04	COVER (USB)	
F1	1A		F52-0002-05	FUSE MINI BLADE 3A ACC	
F2	1A		F52-0004-05	FUSE MINI BLADE 5A BU	
-		✻	H12-2815-04	PACKING FIXTURE	
-			H25-0337-04	PROTECTION BAG (180X300X0.03)	
-			H25-1111-04	PROTECTION BAG (280X450X0.03)	
-		✻	H25-1141-04	PROTECTION BAG	
-		✻	H54-3793-03	ITEM CARTON CASE	K
-		✻	H54-3836-03	ITEM CARTON CASE	E1
9	1A	✻	J22-0517-04	MOUNTING HARDWARE	
10	1A	✻	N09-6427-05	SEMS (MACHINE SCREW)	
11	1A	✻	N99-1789-05	SCREW SET	
A	3B		N80-3010-43	PAN HEAD TAPTITE SCREW	
B	1B		N89-3006-43	BINDING HEAD TAPTITE SCREW	
C	1B		N89-3006-48	BINDING HEAD TAPTITE SCREW	
12	2A		T90-0523-05	ANTENNA ADAPTOR	E1
13	2A	✻	T90-0578-05	ANTENNA ADAPTOR	E1
14	2A	✻	T95-0270-05	REMOTE CONTROL SENSOR ASSY	
MODULAR UNIT (X14-9790-10/2-71)					
C12-14			CK73GB1H104K	CHIP C 0.10UF K	
C17,18			CK73GB1H104K	CHIP C 0.10UF K	
C21			CK73GB1H102K	CHIP C 1000PF K	
C25,26			CK73GB1H104K	CHIP C 0.10UF K	
C29			CK73GB1H104K	CHIP C 0.10UF K	
C30			CK73GB1H152K	CHIP C 1500PF K	
C31			CC73GCH1H470J	CHIP C 47PF J	
C32			CK73GB1H104K	CHIP C 0.10UF K	
C33			CK73GB0J225K	CHIP C 2.2UF K	
C34			CC73GCH1H560J	CHIP C 56PF J	
C35,36			CK73GB1H104K	CHIP C 0.10UF K	
C37			CK73GB1H102K	CHIP C 1000PF K	
C39			CK73GB1H104K	CHIP C 0.10UF K	
C44			CK73GB1A105K	CHIP C 1.0UF K	
C46			CK73GB1H682K	CHIP C 6800PF K	
C47			CK73GB1H104K	CHIP C 0.10UF K	
C48			CC73GCH1H040C	CHIP C 4.0PF C	
C49			CK73GB1H332K	CHIP C 3300PF K	
C50			CK73GB1H104K	CHIP C 0.10UF K	

Ref. No.	Add	New	Parts No.	Description	Destination
C51			CC73GCH1H330J	CHIP C 33PF J	
C53			CK73GB0J225K	CHIP C 2.2UF K	
C64,65			CK73GB1H104K	CHIP C 0.10UF K	
C66,67			CC73GCH1H080D	CHIP C 8.0PF D	
C68,69			CK73FB0J106K	CHIP C 10UF K	
C70,71			CK73GB1H104K	CHIP C 0.10UF K	
C72			CK73GB0J225K	CHIP C 2.2UF K	
C73			CK73GB1H104K	CHIP C 0.10UF K	
C76,77			CK73GB1H104K	CHIP C 0.10UF K	
C78			CC73GCH1H331J	CHIP C 330PF J	
C80			CC73GCH1H331J	CHIP C 330PF J	
C81			CE32BJ1H100M	CHIP EL 10UF 50WV	
C82			CK73GB1H152K	CHIP C 1500PF K	
C83			CE32BJ1H100M	CHIP EL 10UF 50WV	
C84			CK73GB1H152K	CHIP C 1500PF K	
C85			CK73GB1H104K	CHIP C 0.10UF K	
C86			CK73GB1A105K	CHIP C 1.0UF K	
C87			CK73GB0J475K	CHIP C 4.7UF K	
C88			CK73GB1H473K	CHIP C 0.047UF K	
C89			CK73GB1A105K	CHIP C 1.0UF K	
C91			CK73GB1H104K	CHIP C 0.10UF K	
C93-98			CK73GB1H104K	CHIP C 0.10UF K	
C99			CC73GCH1H060D	CHIP C 6.0PF D	
C100			CC73GCH1H020C	CHIP C 2.0PF C	
C101			CK73GB1H104K	CHIP C 0.10UF K	
C102			CK73FB0J106K	CHIP C 10UF K	
C103			CK73GB1H103K	CHIP C 0.010UF K	
C104			CK73FB1C105K	CHIP C 1.0UF K	
C200			CK73GB1H103K	CHIP C 0.010UF K	
C201,202			CK73GB1H102K	CHIP C 1000PF K	
C203,204			CE32BJ1H2R2M	CHIP EL 2.2UF 50WV	
C205,206		✻	CE32BJ1V220M	CHIP EL 22UF 35WV	
C207			CE32BJ1C100M	CHIP EL 10UF 16WV	
C208			CK73GB1H104K	CHIP C 0.10UF K	
C209,210			CK73EB1E105K	CHIP C 1.0UF K	
C211,212			CK73GB1H102K	CHIP C 1000PF K	
C213,214			CE32BJ1H2R2M	CHIP EL 2.2UF 50WV	
C215,216		✻	CE32BJ1V220M	CHIP EL 22UF 35WV	
C217			CE32BJ1C100M	CHIP EL 10UF 16WV	
C218			CK73GB1H104K	CHIP C 0.10UF K	
C219,220			CK73EB1E105K	CHIP C 1.0UF K	
C221,222			CK73GB1H102K	CHIP C 1000PF K	
C223,224			CE32BJ1H2R2M	CHIP EL 2.2UF 50WV	
C225,226		✻	CE32BJ1V220M	CHIP EL 22UF 35WV	
C227			CE32BJ1C100M	CHIP EL 10UF 16WV	
C228			CK73GB1H104K	CHIP C 0.10UF K	
C229-232			CK73EB1E105K	CHIP C 1.0UF K	
C233,234			CK73GB1H103K	CHIP C 0.010UF K	
C235,236			CK73GB1H102K	CHIP C 1000PF K	
C241			CE32BJ1C101M	CHIP EL 100UF 16WV	
C242-244			CE32BJ1C100M	CHIP EL 10UF 16WV	
C251,252			CK73FB0J106K	CHIP C 10UF K	
C305-308			CK73GB1H103K	CHIP C 0.010UF K	
C309			CK73GB1H222K	CHIP C 2200PF K	
C310			CK73GB1H103K	CHIP C 0.010UF K	

E1 : Europe **K** : North America

⚠ Indicates safety critical components.

PARTS LIST

MODULAR UNIT (X14-9790-10/2-71)

Ref. No.	Add	New	Parts No.	Description			Destination
C311,312			CC73GCH1H060D	CHIP C	6.0PF	D	
C313			CK73GB1H103K	CHIP C	0.010UF	K	
C315			CK73GB1H104K	CHIP C	0.10UF	K	
C316			CK73GB1H103K	CHIP C	0.010UF	K	
C317,318			CK73GB1H102K	CHIP C	1000PF	K	
C319			CK73GB1A105K	CHIP C	1.0UF	K	
C320			CC73GCH1H101J	CHIP C	100PF	J	
C321			CK73GB1H102K	CHIP C	1000PF	K	
C400			CK73GB1H102K	CHIP C	1000PF	K	
C401,402			CE32BJ1C100M	CHIP EL	10UF	16WV	
C403			CE32BJ1C101M	CHIP EL	100UF	16WV	
C404			CK73GB1H222K	CHIP C	2200PF	K	E1
C404			CK73GB1H332K	CHIP C	3300PF	K	K
C405			CC73GCH1H151J	CHIP C	150PF	J	
C406			CE32BJ1C100M	CHIP EL	10UF	16WV	
C407			CK73FB1C105K	CHIP C	1.0UF	K	
C408			CE32BJ1C100M	CHIP EL	10UF	16WV	
C409			CK73GB1H103K	CHIP C	0.010UF	K	
C410			CE32BF1E101M	CHIP EL	100UF	25WV	
C411			CK73GB1H473K	CHIP C	0.047UF	K	
C412			CK73GB1H222K	CHIP C	2200PF	K	
C413			CE32BJ1C100M	CHIP EL	10UF	16WV	
C414			CC73GCH1H471J	CHIP C	470PF	J	
C415			CC73GCH1H220J	CHIP C	22PF	J	
C416			CC73GCH1H070D	CHIP C	7.0PF	D	
C417			CC73GCH1H120J	CHIP C	12PF	J	
C418			CK73GB1H103K	CHIP C	0.010UF	K	
C419,420			CK73GB1H102K	CHIP C	1000PF	K	
C421			CC73GCH1H180J	CHIP C	18PF	J	
C422			CC73GCH1H330J	CHIP C	33PF	J	
C423			CC73GCH1H180J	CHIP C	18PF	J	
C424			CE32BJ1C100M	CHIP EL	10UF	16WV	
C425			CK73GB1H104K	CHIP C	0.10UF	K	
C426			CC73GCH1H270J	CHIP C	27PF	J	
C427			CC73GCH1H220J	CHIP C	22PF	J	
C428			CE32BM1E470M	CHIP EL	47UF	25WV	
C429			CC73GCH1H151J	CHIP C	150PF	J	
C430			CK73GB1H222K	CHIP C	2200PF	K	E1
C430			CK73GB1H332K	CHIP C	3300PF	K	K
C431			CC73GCH1H101J	CHIP C	100PF	J	
C432			CK73GB1H102K	CHIP C	1000PF	K	
C433			CQ93FMG1H223J	MYLAR	0.022UF	J	
C434			CK73GB1H103K	CHIP C	0.010UF	K	
C436			CK73GB1H104K	CHIP C	0.10UF	K	
C437,438			CK73FB0J106K	CHIP C	10UF	K	
C439			CK73GB1H103K	CHIP C	0.010UF	K	
C441,442			CK73GB1H332K	CHIP C	3300PF	K	
C452,453			CK73GB1H103K	CHIP C	0.010UF	K	
C501			C90-5612-05	ELECTRO	3900UF	16WV	
C502			CK73GB1H104K	CHIP C	0.10UF	K	
C503-506			CK73GB1H103K	CHIP C	0.010UF	K	
C511			CE32BM1C221M	CHIP EL	220UF	16WV	
C512			CK73GB1H103K	CHIP C	0.010UF	K	
C513			CE32BJ1C100M	CHIP EL	10UF	16WV	
C514			CE32BJ1C101M	CHIP EL	100UF	16WV	

Ref. No.	Add	New	Parts No.	Description			Destination
C515,516			CK73GB1A105K	CHIP C	1.0UF	K	
C522			CK73FB1C105K	CHIP C	1.0UF	K	
C523			CE32BM1C221M	CHIP EL	220UF	16WV	
C524			CK73FB1H334K	CHIP C	0.33UF	K	
C531,532			CK73GB1H103K	CHIP C	0.010UF	K	
C570			CK73GB1H104K	CHIP C	0.10UF	K	
C571			CK73GB1H102K	CHIP C	1000PF	K	
C572			CC73GCH1H221J	CHIP C	220PF	J	
C573			CK73GB1H104K	CHIP C	0.10UF	K	
C575			CK73GB1H103K	CHIP C	0.010UF	K	
C601			CE32BJ1C101M	CHIP EL	100UF	16WV	
C602			CK73GB1H104K	CHIP C	0.10UF	K	
C603			CE32BJ1V4R7M	CHIP EL	4.7UF	35WV	
C604,605			CC73GCH1H220J	CHIP C	22PF	J	
C606			CK73GB1H104K	CHIP C	0.10UF	K	
C609,610			CK73GB1H104K	CHIP C	0.10UF	K	
C902			CK73GB1H332K	CHIP C	3300PF	K	
C903,904			CK73GB1H104K	CHIP C	0.10UF	K	
C905			CK73GB1H682K	CHIP C	6800PF	K	
C907,908			CK73GB1H104K	CHIP C	0.10UF	K	
C910,911			CE32BF1C221M	CHIP EL	220UF	16WV	
C913			CE32BF1C221M	CHIP EL	220UF	16WV	
C914			CK73EB1E105K	CHIP C	1.0UF	K	
C915			CE32BF1E101M	CHIP EL	100UF	25WV	
C951			CK73GB1H104K	CHIP C	0.10UF	K	
C952			CE32BM1C221M	CHIP EL	220UF	16WV	
C953			CK73GB1H104K	CHIP C	0.10UF	K	
C954			CK73GB1H102K	CHIP C	1000PF	K	
C961,962			CK73GB1H104K	CHIP C	0.10UF	K	
C963			CE32BF1E101M	CHIP EL	100UF	25WV	
CN1		✻	E40-6525-05	PIN ASSY			
CN2		✻	E40-6526-05	PIN ASSY			
J1			E08-0413-05	RECTANGULAR RECEPTACLE			
J2			E56-0865-05	CYLINDRICAL RECEPTACLE			
J3			E63-0930-05	PIN JACK			
J4		✻	E11-0647-05	3.5D PHONE JACK (LGY3309-0150 (G			
J6			E59-0849-05	RECTANGULAR PLUG			
J7			E11-0625-05	PHONE JACK (LGY6502-0900)			
L1			L33-2283-05	CHOKE COIL			
L100			L92-0615-05	CHIP FERRITE			
L401,402			L41-2285-33	SMALL FIXED INDUCTOR (0.22U)			
L403			L41-1088-18	SMALL FIXED INDUCTOR			
L404		✻	L41-3315-32	SMALL FIXED INDUCTOR (330UH)			
L901			L33-2296-05	SMALL FIXED INDUCTOR (47UH)			
L902			L33-2297-05	SMALL FIXED INDUCTOR (68UH)			
X1			L77-2863-05	CRYSTAL RESONATOR (16.899M)			
X2			L78-1215-05	RESONATOR (11.500MHZ)			
X3			L77-2923-05	CRYSTAL RESONATOR (6.000MHZ,LF)			
X4			L77-2002-05	CRYSTAL RESONATOR			
X401			L77-2882-05	CRYSTAL RESONATOR			
D	1B		N89-3008-48	BINDING HEAD TAPTITE SCREW			
CP2			RK74GA1J101J	CHIP-COM	100	J 1/16W	
CP5			RK74GA1J102J	CHIP-COM	1.0K	J 1/16W	

E1 : Europe **K** : North America

⚠ Indicates safety critical components.

PARTS LIST

MODULAR UNIT (X14-9790-10/2-71)

Ref. No.	Add	New	Parts No.	Description	Destination
CP7			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
CP19			RK74GA1J103J	CHIP-COM 10K J 1/16W	
CP20-23			RK74HB1J153J	CHIP-COM 15K J 1/16W	
CP24,25			RK74HB1J100J	CHIP-COM 10 J 1/16W	
CP26			RK74GA1J100J	CHIP-COM 10 J 1/16W	
CP27-30			RK74HB1J100J	CHIP-COM 10 J 1/16W	
CP31			RK74GA1J101J	CHIP-COM 100 J 1/16W	
CP50			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
CP52			RK74GA1J472J	CHIP-COM 4.7K J 1/16W	
CP53			RK74GA1J473J	CHIP-COM 47K J 1/16W	
CP56,57			RK74GA1J103J	CHIP-COM 10K J 1/16W	
CP300			RK74HB1J680J	CHIP-COM 68 J 1/16W	
CP301			RK74GA1J680J	CHIP-COM 68 J 1/16W	
CP302,303			RK74HB1J101J	CHIP-COM 100 J 1/16W	
CP401			RK74GB1J101J	CHIP-COM 100 J 1/16W	
CP601			RK74GB1J101J	CHIP-COM 100 J 1/16W	
CP602			RK74GA1J101J	CHIP-COM 100 J 1/16W	
CP603			RK74GB1J101J	CHIP-COM 100 J 1/16W	
CP604,605			RK74GA1J101J	CHIP-COM 100 J 1/16W	
CP607,608			RK74GA1J472J	CHIP-COM 4.7K J 1/16W	
R4			RK73GB2A473J	CHIP R 47K J 1/10W	
R15			RK73GB2A223J	CHIP R 22K J 1/10W	
R17			RK73GB2A221J	CHIP R 220 J 1/10W	
R18			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R19			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R20			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R21,22			RK73GB2A104J	CHIP R 100K J 1/10W	
R23,24			RK73GB2A103J	CHIP R 10K J 1/10W	
R25			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R29			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R37			RK73GB2A103J	CHIP R 10K J 1/10W	
R40			RK73GB2A274J	CHIP R 270K J 1/10W	
R41			RK73GB2A103J	CHIP R 10K J 1/10W	
R42			RK73GB2A101J	CHIP R 100 J 1/10W	
R48			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R51			RK73GB2A392J	CHIP R 3.9K J 1/10W	
R67,68			RK73GB2A152J	CHIP R 1.5K J 1/10W	
R69			RK73GB2A682J	CHIP R 6.8K J 1/10W	
R100			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R101			RK73GB2A242J	CHIP R 2.4K J 1/10W	
R102			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R109			RK73GH2A562D	CHIP R 5.6K D 1/10W	
R110			RK73GH2A822D	CHIP R 8.2K D 1/10W	
R112			RK73GH2A752D	CHIP R 7.5K D 1/10W	
R115			RK73GH2A562D	CHIP R 5.6K D 1/10W	
R116			RK73GH2A752D	CHIP R 7.5K D 1/10W	
R118,119			RK73GH2A100D	CHIP R 10 D 1/10W	
R121			RK73GH2A822D	CHIP R 8.2K D 1/10W	
R130			RK73GB2A101J	CHIP R 100 J 1/10W	
R133			RK73GB2A391J	CHIP R 390 J 1/10W	
R138			RK73GB2A330J	CHIP R 33 J 1/10W	
R142			RK73FB2B4R7J	CHIP R 4.7 J 1/8W	
R144			RK73GB2A223J	CHIP R 22K J 1/10W	
R148			RK73GB2A103J	CHIP R 10K J 1/10W	
R150			RK73GB2A103J	CHIP R 10K J 1/10W	

Ref. No.	Add	New	Parts No.	Description	Destination
R151			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R152			RK73GB2A221J	CHIP R 220 J 1/10W	
R153-155			RK73GB2A330J	CHIP R 33 J 1/10W	
R156			RK73GB2A103J	CHIP R 10K J 1/10W	
R200			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R201-203			RK73EB2E101J	CHIP R 100 J 1/4W	
R205,206			RK73GB2A101J	CHIP R 100 J 1/10W	
R210			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R211-213			RK73EB2E101J	CHIP R 100 J 1/4W	
R214			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R221-223			RK73EB2E101J	CHIP R 100 J 1/4W	
R224			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R231			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R241,242			RK73GB2A103J	CHIP R 10K J 1/10W	
R243,244			RK73GB2A123J	CHIP R 12K J 1/10W	
R251,252			RK73GB2A103J	CHIP R 10K J 1/10W	
R253,254			RK73GB2A473J	CHIP R 47K J 1/10W	
R300,301			RK73GB2A680J	CHIP R 68 J 1/10W	
R304			RK73GB2A101J	CHIP R 100 J 1/10W	
R306,307			RK73GB2A270J	CHIP R 27 J 1/10W	
R308-310			RK73GB2A153J	CHIP R 15K J 1/10W	
R311-316			RK73GB2A100J	CHIP R 10 J 1/10W	
R320-323			RK73GB2A101J	CHIP R 100 J 1/10W	
R336			RK73GB2A101J	CHIP R 100 J 1/10W	
R337			RK73GB2A153J	CHIP R 15K J 1/10W	
R339			RK73GB2A682J	CHIP R 6.8K J 1/10W	
R345			RK73GB2A103J	CHIP R 10K J 1/10W	
R346			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R348			RK73GB2A223J	CHIP R 22K J 1/10W	
R351			RK73GB2A103J	CHIP R 10K J 1/10W	
R353			RK73GB2A473J	CHIP R 47K J 1/10W	
R358,359			RK73GB2A473J	CHIP R 47K J 1/10W	
R361,362			RK73GB2A223J	CHIP R 22K J 1/10W	
R364			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R367			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R368			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R370			RK73GB2A101J	CHIP R 100 J 1/10W	
R371			RK73GB2A2R2J	CHIP R 2.2 J 1/10W	
R372			RK73FB2B2R2J	CHIP R 2.2 J 1/8W	
R374			RK73GB2A473J	CHIP R 47K J 1/10W	
R401			RK73GB2A473J	CHIP R 47K J 1/10W	
R402			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R403,404			RK73GB2A332J	CHIP R 3.3K J 1/10W	
R405,406			RK73GB2A621J	CHIP R 620 J 1/10W	
R407			RK73GB2A392J	CHIP R 3.9K J 1/10W	
R408			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R409			RK73GB2A103J	CHIP R 10K J 1/10W	
R410			RK73GB2A101J	CHIP R 100 J 1/10W	
R411			RK73GB2A103J	CHIP R 10K J 1/10W	
R412			RK73GB2A101J	CHIP R 100 J 1/10W	
R413			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R414,415			RK73GB2A332J	CHIP R 3.3K J 1/10W	
R416			RK73GB2A103J	CHIP R 10K J 1/10W	
R417			RK73GB2A473J	CHIP R 47K J 1/10W	
R418			RK73GB2A111J	CHIP R 110 J 1/10W	

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PARTS LIST

MODULAR UNIT (X14-9790-10/2-71)

Ref. No.	Add	New	Parts No.	Description			Destination
R419			RK73GB2A221J	CHIP R 220	J	1/10W	
R420,421			RK73GB2A111J	CHIP R 110	J	1/10W	
R422			RK73GB2A221J	CHIP R 220	J	1/10W	
R423			RK73GB2A111J	CHIP R 110	J	1/10W	
R425			RK73GB2A101J	CHIP R 100	J	1/10W	
R426			RK73EB2E101J	CHIP R 100	J	1/4W	
R427			RK73GB2A473J	CHIP R 47K	J	1/10W	
R431			RK73GB2A223J	CHIP R 22K	J	1/10W	
R433			RK73GB2A473J	CHIP R 47K	J	1/10W	
R434			RK73GB2A822J	CHIP R 8.2K	J	1/10W	
R435			RK73GB2A222J	CHIP R 2.2K	J	1/10W	
R436			RK73GB2A681J	CHIP R 680	J	1/10W	
R437			RK73GB2A221J	CHIP R 220	J	1/10W	
R438-440			RK73GB2A223J	CHIP R 22K	J	1/10W	
R441,442			RK73GB2A333J	CHIP R 33K	J	1/10W	
R443		✻	RK73GH2A911D	CHIP R 910	D	1/10W	
R444			RK73GH2A221D	CHIP R 220	D	1/10W	
R501			RK73EB2E104J	CHIP R 100K	J	1/4W	
R502			RK73EB2E203J	CHIP R 20K	J	1/4W	
R503,504			RK73GH2A103D	CHIP R 10K	D	1/10W	
R505			RK73GB2A223J	CHIP R 22K	J	1/10W	
R506			R92-5088-05	CHIP R 3.3K	J	3/4W	
R507			RK73EB2E333J	CHIP R 33K	J	1/4W	
R508			RK73GB2A103J	CHIP R 10K	J	1/10W	
R509			RK73GB2A223J	CHIP R 22K	J	1/10W	
R511			RK73EB2E223J	CHIP R 22K	J	1/4W	
R513			RK73FB2B2R2J	CHIP R 2.2	J	1/8W	
R519			RK73FB2B221J	CHIP R 220	J	1/8W	
R521			RK73GH2A243D	CHIP R 24K	D	1/10W	
R522			RK73GH2A432D	CHIP R 4.3K	D	1/10W	
R551			RK73EB2E101J	CHIP R 100	J	1/4W	
R554,555			RK73EB2E101J	CHIP R 100	J	1/4W	
R557			RK73EB2E101J	CHIP R 100	J	1/4W	
R559-561			RK73EB2E101J	CHIP R 100	J	1/4W	
R563			RK73EB2E101J	CHIP R 100	J	1/4W	
R565-567			RK73GB2A104J	CHIP R 100K	J	1/10W	
R568			RK73GB2A472J	CHIP R 4.7K	J	1/10W	
R570			RK73GB2A472J	CHIP R 4.7K	J	1/10W	
R571			RK73EB2E103J	CHIP R 10K	J	1/4W	
R573-575			RK73EB2E151J	CHIP R 150	J	1/4W	
R577			RK73GB2A473J	CHIP R 47K	J	1/10W	
R589			RK73GB2A473J	CHIP R 47K	J	1/10W	
R600			RK73GB2A473J	CHIP R 47K	J	1/10W	
R601			RK73GB2A101J	CHIP R 100	J	1/10W	
R602			RK73GB2A104J	CHIP R 100K	J	1/10W	
R604			RK73GB2A473J	CHIP R 47K	J	1/10W	
R606			RK73GB2A101J	CHIP R 100	J	1/10W	
R607			RK73GB2A473J	CHIP R 47K	J	1/10W	E1
R607,608			RK73GB2A473J	CHIP R 47K	J	1/10W	K
R610,611			RK73GB2A473J	CHIP R 47K	J	1/10W	E1
R611			RK73GB2A473J	CHIP R 47K	J	1/10W	K
R612			RK73GB2A223J	CHIP R 22K	J	1/10W	
R614,615			RK73GB2A101J	CHIP R 100	J	1/10W	
R617			RK73GB2A104J	CHIP R 100K	J	1/10W	
R622			RK73GB2A473J	CHIP R 47K	J	1/10W	

Ref. No.	Add	New	Parts No.	Description			Destination
R909			RK73GH2A683D	CHIP R 68K	D	1/10W	
R910			RK73GH2A203D	CHIP R 20K	D	1/10W	
R911			RK73GH2A823D	CHIP R 82K	D	1/10W	
R912			RK73GH2A822D	CHIP R 8.2K	D	1/10W	
R913			RK73GH2A103D	CHIP R 10K	D	1/10W	
R914			RK73GH2A753D	CHIP R 75K	D	1/10W	
R915			RK73GB2A332J	CHIP R 3.3K	J	1/10W	
R916			RK73GB2A154J	CHIP R 150K	J	1/10W	
R951			RK73GB2A153J	CHIP R 15K	J	1/10W	
R954			RK73GB2A153J	CHIP R 15K	J	1/10W	
R960			RK73GB2A101J	CHIP R 100	J	1/10W	
R961			RK73FB2B222J	CHIP R 2.2K	J	1/8W	
R962			RK73FB2B104J	CHIP R 100K	J	1/8W	
K1			S51-1058-05	MAGNETIC RELAY			
D1			S2V60-5009F46	DIODE			
D2			DA204U	DIODE			
D3,4			IMSA-6802-E	SURGE ABSORBER			
D9			DA204U	DIODE			
D100			UDZS6.2B	ZENER DIODE			
D201-203			02DZ6.8F-Y	ZENER DIODE			
D211-213			02DZ6.8F-Y	ZENER DIODE			
D221-223			02DZ6.8F-Y	ZENER DIODE			
D401			1SV228-F	VARIABLE CAPACITANCE DIODE			
D402			1SS355	DIODE			
D503,504			UDZS6.8B	ZENER DIODE			
D505			RB160L-40	DIODE			
D506			UDZS5.6B	ZENER DIODE			
D551-558			02DZ6.2F-Y	ZENER DIODE			
D901			NSQ03A04G	DIODE			
D902			SFPB-54VNF	DIODE			
D903			UDZS20B	ZENER DIODE			
D951			STZ6.8N	ZENER DIODE			
IC1			M30620MCPA28GP	MICROCONTROLLER IC			
IC2			UPD63712GC	MOS-IC			
IC13			BA4560RF	ANALOGUE IC			
IC14			TAR5S50-F	ANALOGUE IC			
IC15			CS7410-IQZ	MOS-IC			
IC16			IC42S164007TIG	DRAM IC			
IC17		✻	29LV800CBTI3W7	ROM IC			
IC18			WM8716SEDS/R	MOS-IC			
IC20			S-1132B18U5T1G	ANALOGUE IC			
IC25			TDUHC1240F0C00	MOS-IC			
IC26			TC74LCX00FT-F	MOS-IC			
IC28			TC7WH125FK-F	MOS-IC			
IC201-203			BA3121F	ANALOGUE IC			
IC204		✻	NJM2750M-ZB	ANALOGUE IC			
IC205			BA4560RF	ANALOGUE IC			
IC401			BH1415F	ANALOGUE IC			
IC402,403			TC7WT126FU-F	MOS-IC			
IC404			BA4560RF	ANALOGUE IC			
IC501			S-1112B33MCG	ANALOGUE IC			
IC502			M5237ML-CF0J	ANALOGUE IC			
IC511,512			TC7WT126FU-F	MOS-IC			
IC601		✻	703260YGC306A	MICROCONTROLLER IC			

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PARTS LIST

MODULAR UNIT (X14-9790-10/2-71)

Ref. No.	Add	New	Parts No.	Description	Destination
IC602			S-80830CNNB-G	MOS-IC	
IC901			BD9302FP	ANALOGUE IC	
IC951			MIC2026-1YM	MOS-IC	
Q16			DTA143ZE	DIGITAL TRANSISTOR	
Q17			DTA143XUA	DIGITAL TRANSISTOR	
Q18			DTC114YUA	DIGITAL TRANSISTOR	
Q250			DTA124EUA	DIGITAL TRANSISTOR	
Q251,252			DTC143TUA	DIGITAL TRANSISTOR	
Q401			2SA1577	TRANSISTOR	
Q402			DTC114YUA	DIGITAL TRANSISTOR	
Q403,404			2SK3018	FET	
Q405,406			2SC4081	TRANSISTOR	
Q407			DTC143TUA	DIGITAL TRANSISTOR	
Q408			2SB1689	TRANSISTOR	
Q409-413			DTC114YUA	DIGITAL TRANSISTOR	
Q501,502			2SC4081	TRANSISTOR	
Q505			2SB1565	TRANSISTOR	
Q506			2SC4081	TRANSISTOR	
Q509			2SB1565	TRANSISTOR	
Q510			DTC114YUA	DIGITAL TRANSISTOR	
Q570			2SA1577	TRANSISTOR	
Q571			DTC114YUA	DIGITAL TRANSISTOR	
Q572			DTA124EUA	DIGITAL TRANSISTOR	
Q901,902			DTC143TUA	DIGITAL TRANSISTOR	
Q905			2SC2873-F	TRANSISTOR	
Q906			2SB1565	TRANSISTOR	
Q907			DTC114YUA	DIGITAL TRANSISTOR	
Q908			DTA124EUA	DIGITAL TRANSISTOR	

Ref. No.	Add	New	Parts No.	Description	Destination

E1 : Europe **K** : North America

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SPECIFICATIONS

FM Modulator Section

Modulating Frequency (200kHz step) 87.9/ 88.1/ 88.3/ 88.5/ 88.7/ 88.9/ 89.1/ 89.3/ 89.5/ 89.7/ 89.9MHz

RDS Encode

RDS Encode ..... Compliant with CENELEC RDS Standard EN50067

USB Interface

USB Standard USB1.1/ 2.0
File System FAT16/ 32
Maximum Supply Current 500mA
MP3 Decode ..... Compliant with MPEG-1/2 Audio Layer-3
WMA Decode ..... Compliant with Windows Media Audio
AAC Decode ..... AAC-LC ".m4a" files

Audio Input

Input Maximum Voltage 1200mV
Input Impedance ..... ≧22kΩ

General

Operating Voltage (11~16V allowable) 14.4V
Current Consumption 5A
Installation Size (W x H x D) ..... 185 x 31 x 135 mm (7-5/16 x 1-1/4 x 5-5/16 inch)
Weight ..... 1.8 lbs (800g)

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