

S/N : 9CD8304900

Service Manual

Micro Component Sound System

Model : RH-4353U



DAEWOO DAT CO., LTD.

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DIGITAL ADVANCED TECHNOLOGY

DAT

Micro component sound system

RH-4353U

Table of Contents

SAFETY PRECAUTIONS	1
ADJUSTMENTS	2
EXPLODED VIEW AND MECHANICAL PARTS LIST	3
WIRING DIAGRAM	4
BLOCK DIAGRAM	5
SCHEMATIC DIAGRAM	6
• FRONT Section	
• MP3 CD Section	
• AMP Section	
• MAIN Section	
• AUX/SPEAKER JACK Section	
• POWER Section	
• HEADPHONES/MIC Section	
PCB PATTERN LAYOUT	7
• FRONT Section	
• MP3 CD Section	
• AMP Section	
• MAIN Section	
• POWER Section	
• HEADPHONES/MIC Section	
APPENDIX - ELECTRICAL PART LIST	8
APPENDIX - ELECTRICAL OPTION PART LIST	9

Safety Precautions

WARNING: TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

	CAUTION RISK OF ELECTRIC SHOCKS DO NOT OPEN	
CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.		
	THIS SYMBOL IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT'S ENCLOSURE THAT MAY BE SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK TO PERSONS.	
	THIS SYMBOL IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE APPLIANCE.	

CAUTION

TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

LASER SAFETY

THIS UNIT EMPLOYS A LASER. ONLY QUALIFIED SERVICE PERSONNEL SHOULD REMOVE THE COVER OR ATTEMPT TO SERVICE THIS DEVICE DUE TO POSSIBLE EYE INJURY.

CAUTION : USE OF ANY CONTROLS, ADJUSTMENTS, OR PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

CAUTION : TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

ATTENTION : POUR EVITER LES CHOCS ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

Important Safety Instructions

- All the safety and operating instructions should be read before the appliance is operated.
 - The safety and operating instructions should be retained for future reference.
 - All warnings on the appliance and in the operating instructions should be adhered to.
 - All operating and use instructions should be followed.
1. Water and Moisture - The appliance should not be used near water - for example, near a bathtub, washbowl, kitchen sink,

laundry tub, in a wet basement, or near a swimming pool, and the like.

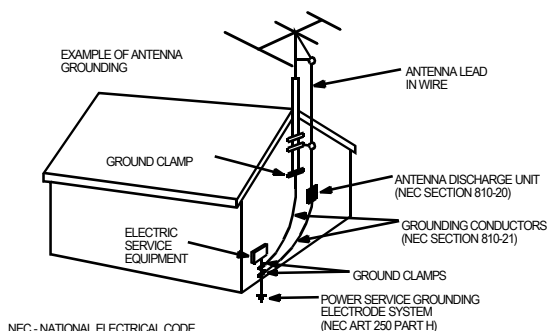
PORTABLE CART



Figure 2

2. Carts and Stands - The appliance should be used only with a cart or stand that is recommended by the manufacturer.
3. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.
4. Wall or Ceiling Mounting - The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
5. Ventilation - The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
6. Heat - The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
7. Power Sources - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
8. Grounding or Polarization - The precautions that should be taken so that the grounding or polarization means of an appliance is not defeated.
9. Power - Cord Protection - Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
10. Protective Attachment Plug - If the appliance is equipped with an attachment plug having overload protection. This is a safety feature. See Instruction Manual for replacement or resetting of protective device. If replacement of the plug is required, be sure the service technician has used a replacement plug specified by the manufacturer that has the same overload protection as the original plug.
11. Cleaning - The appliance should be cleaned only as recommended by the manufacturer.
12. Power Lines - An outdoor antenna should be located away from power lines.

13. Outdoor Antenna Grounding - If an outside antenna is connected to the receiver be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna-discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes and requirements for the grounding electrode. See Figure 1.



14. Non-use Periods - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

15. Object and Liquid Entry - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

16. Damage Requiring Service - The appliance should be serviced by qualified service personnel when:

- a) The power-supply cord or the plug has been damaged; or
- b) Objects have fallen, or liquid has been spilled into the appliance; or
- c) The appliance has been exposed to rain; or
- d) The appliance does not appear to operate normally or exhibits a marked change in performance; or
- e) The appliance has been dropped, or the enclosure damaged.

17. Servicing - The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

APPENDIX - ELECTRICAL PART LIST

Locations	Part Code	Part Name	Description
PCB MAIN ASS'Y	9CDC084500		RH-4353U/435U
D102	DZN4148---	DIODE SW	IN4148 AUTO 52MM
HD101 HD301 HD401 HD404	DZDS160---	DIODE SW CHIP	KDS160
HD403 (RH-4353U)	DZDS160---	DIODE SW CHIP	KDS160
HDZ401 HDZ402	DRLZ3R6B--	DIODE ZENER CHIP	3.6V
HQ118 HQ301 HQ467 HQ471 HQ101 HQ117	TZRA107S--	TR CHIP	KRA107S
HQ303 HQ304 HQ305 HQ306 HQ468 HQ469 HQ470	TZRC111S--	TR CHIP	KRC111S
HQ462 HQ465 HQ466	TZTC3875S-	TR CHIP	KTC3875S
IC101	1LC875D435U-	IC u-COM	LC875D80B
IC102	1M24C04MN-	IC EEPROM	M24C04MN SOP
IC302 IC402 IC403 IC404	1NJM4558M-	IC CHIP OP AMP	NJM4558M
IC303	1BA4560N--	IC H/P AMP	BA4560N
IC401	1BD3872FS-	IC FUNCTION(VOLUME)	ICBD3872FS
L101 L102	5LC100K005	COIL CHOC	10uH
Q401	TZTA1273Y-	TR	KTA1273Y (A966Y) (KSA928A-Y)
TU001 (for CE)	9737652001	TUNER MODULE	KST-MP104MA1-60D
TU001 (for SEMP)	9737652301	TUNER MODULE	KST-MP000MA0-60D
XC101	5PCST10MTW	RESONATOR CERA	CST10.00MTW
XC102	5XA32R768C	X-TAL	C38T 32.768KHz 20PPM
PCB HP&MIC ASS'Y	9CDC084600		RH-4353U/435U
HD301 HD302	DZDS160---	DIODE SW CHIP	KDS160
HQ301 HQ302	TZTC3875S-	TR CHIP	KTC3875S
HQ303	TZRC107S--	TR CHIP	KRC107S
IC301	1NJM4558M-	IC CHIP OP AMP	NJM4558M
J301 J302	9736325300	JACK H/P	HTJ-035-18A
J303	9736329300	JACK USB	USAF-046N-WP-01
VR301	5V1503730B	VOL MIC	XV09211NPV20F1B50K
PCB CD_USB ASS'Y	9CDC084700		RH-4353U/435U
HD501	DZDS160---	DIODE SW CHIP	KDS160
HQ501 HQ507	TZRC107S--	TR CHIP	KRC107S
HQ504 HQ505	TZTA1504S-	TR CHIP	KTA1504S
HZ500 HZ502	DRLZ5R6B--	DIODE ZENER CHIP	RLZ5.6B
HZ501	DRLZ3R9B--	DIODE ZENER CHIP	RLZ3.9B
IC501	1LC78691E-	IC SERVO + DSP	LC78691E
IC502	1IP9005---	IC MOTOR DRIVE	IP9005 (motor driver)
IC503	1LC87F14C8	IC USB	LC87F14C8A
L501 L504	HLC220J03A	COIL CHIP	22uH CHIP COIL 2012
L502	HLC101J03A	COIL CHIP	100uH CHIP COIL 2012
Q501	TZTA1273Y-	TR	KTA1273Y (A966Y) (KSA928A-Y)
Q502 Q503 Q504	TZSC2331Y-	TR	KSC2331Y AUTO
XC501	5PQZTT1693	RESONATOR CERA	QZTT16.93MMX(3PIN)
XC571	5XE12R288J	X-TAL	12.288MHZ HC-49U
PCB FRONT ASS'Y	9CDC084800		RH-4353U/435U
FD701	DHNA10SS36	VFD	HNA10SS36
IC701	1PT6315---	IC	PT6315
IC702	1354HF----	IC RMC	354HF
LD701 (for CE)	DLTL16KEE-	LED	LTL-16KEE(RED)PI3.1
LD702 LD703 LD704 LD705	DML3FB23H-	LED	ML3FB23H-JEC
SW701 SW702 SW703 SW704 SW705 SW706 SW707 SW708 SW709 SW710 SW711 SW712 SW713 SW714 SW715 SW716 SW717	5S50101001	SW TACT	KPT-1105A IC-1P
VR701	5SH1224375	SW ENCODER	RE0123PVB25FINB 1-2-24 PCE
PCB POWER ASS'Y	9CDC084900		RH-4353U/435U
CM901 CM902 CM903 CM904	CMXM2A104J-X	IC MYLAR	100V 0.1MF J
CN904	9736910800	AC CORD	LY-21 1800MM H03VVH2-F 2*0.75

APPENDIX - ELECTRICAL PART LIST

Locations	Part Code	Part Name	Description
D902 D903	DIN4001---	DIODE	IN4001
D904 D905 D906 D907	DRL202----	DIODE	RL202
D908 D909 D910 D911	DIN5402---	DIODE	IN5402
D991 D992 D993 D994 D996 (for CE)	DIN4001---	DIODE	IN4001
D995	DZN4148---	DIODE SW	IN4148 AUTO 52MM
F901 (for SEMP)	5F1GB2522L	FUSE GLASS TUBE	VDE TL 2.5A 250V MF51
F902	5FSGB1222L	FUSE GLASS TUBE	VDE TL 1.25A 250V MF51
HQ902	TZTC3875S-	TR CHIP	KTC3875S
HQ903	TZRA111S--	TR CHIP	KRA111S
HQ904	TZRC107S--	TR CHIP	KRC107S
HZ901	DRLZ6R2B--	DIODE ZENER CHIP	RLZ6.2B
HZ902	DRLZ12B---	DIODE ZENER CHIP	RLZ12B
HZ903	DRLZ30D---	DIODE ZENER CHIP	RLZ30D
IC901	1L4959----	IC REGULATOR	L4959
IC991 (for CE)	1KIA7805AP	IC REGULATOR	KIA7805AP
J401	9CD6313700	JACK RCA	S-436P
J801	9736325600	JACKRC	JACKRCA 1P
J802	9736320500	JACK SPEAKER	CJ9007-040
PT991 (for SEMP)	5TP8074974	TRANS POWER	EI=74X42 127V/230V 60Hz/50Hz
PT992 (for CE)	5TP8028829	TRANS POWER	EI=28X12 230V 50HZ
Q901	TZTA1046Y-	TR	KTA1046Y(KTA1366Y) AUTO
Q905	TZTA1274Y-	TR	KTA1274Y AUTO
Q992 (for CE)	TZTC3205Y-	TR	KTC3205Y(2236Y)
RF901 RF902	RF01F4780J-32	R FUSEABLE	1W 0.47 OHM (32É)
RY991 (for CE)	5SC2001A01	SW RELAY	SDT-S-105LMR
SW991 (for SEMP)	5S30102377-1	SW VOLTAGE SELE	ZH-06-01

PCB AMP ASS'Y	9CDC085000		RH-4353U/435U
HD805	DZDS160---	DIODE SW CHIP	KDS160(KDS511)
HD811 HD812 HD813 HD815 HD816 HD817 HD818 HD827	DZDS160---	DIODE SW CHIP	KDS160(KDS511)
HD819 HD820 HD 828 (RH-4353U)	DZDS160---	DIODE SW CHIP	KDS160(KDS511)
HQ801 HQ803 HQ807 HQ809 HQ810 HQ811 HQ827 HQ829	TZTA1504S-	TR CHIP	KTA1504Y
HQ802	TMMBTA06--	TR CHIP	MMBTA06
HQ804	TMMBTA56--	TR CHIP	MMBTA56
HQ805 HQ806 HQ808 HQ812 HQ813 HQ814 HQ815 HQ817 HQ818 HQ819 HQ823 HQ828	TZTC3875S-	TR CHIP	KTC3875Y
HQ816 HQ832 (RH-4353U)	TZTC3875S-	TR CHIP	KTC3875Y
HQ820	TZRA111S--	TR CHIP	KRA111S
HQ821 HQ822 HQ830 (RH-4353U)	TZRC111S--	TR CHIP	KRC111S
HQ824 HQ825	TEMT2----	TR CHIP	EMT2 2SA1037AK X 2
HQ826	TEMX2----	TR CHIP	EMX2 2SC2412AK X 2
HQ831 HQ834 HQ836 (RH-4353U)	TZTA1504S-	TR CHIP	KTA1504Y
HQ833 (RH-4353U)	TMMBTA06--	TR CHIP	MMBTA06
HQ835 (RH-4353U)	TMMBTA56--	TR CHIP	MMBTA56
HZ801 HZ802 HZ803 HZ804	DRLZ10B---	DIODE ZENER CHIP	RLZ10B
HZ805	DRLZ2R7B--	DIODE ZENER CHIP	RLZ2.7B
HZ806 HZ807 (RH-4353U)	DRLZ10B---	DIODE ZENER CHIP	RLZ10B
HZ808 (RH-4353U)	DRLZ2R7B--	DIODE ZENER CHIP	RLZ2.7B
IC801	1S1A0071--	IC AUDIO PROCESSOR	S1A0071 401
IC802	1S1A0051X-	IC FET DRIVER	S1A0051X
IC803	1KIA7905AP	IC REGULATOR	KIA7905AP
IC804	1KIA7805AP	IC REGULATOR	KIA7805AP
IC806 (RH-4353U)	1NJM4558M-	IC	NJM4558
IC807 (RH-4353U)	1S1A0071--	IC AUDIO PROCESSOR	S1A0071 401
IC808 (RH-4353U)	1S1A0051X-	IC FET DRIVER	S1A0051X
L801 L802	5LF150K855	COIL FILTER	15uH(TC16B-09)
L803 (RH-4353U)	5LF150K855	COIL FILTER	15uH(TC16B-09)

APPENDIX - ELECTRICAL PART LIST

Locations	Part Code	Part Name	Description
Q801 Q803	DFQF15P12-	FET	FQPF15P12
Q802 Q804	DFQF16N15-	FET	FQPF16N15
Q805 (RH-4353U)	DFQF15P12-	FET	FQPF15P12
Q806 (RH-4353U)	DFQF16N15-	FET	FQPF16N15
R817 R847	RS03Y100J-	R METAL OXIDE FILM	3W 10 OHM J
R818 (RH-4353U)	RS03Y100J-	R METAL OXIDE FILM	3W 10 OHM J
R829 R853	HRFR047JLCR	R CHIP	1W 0.047 OHM 64X32 5%(MCR100JZHJSR047)
R832 (RH-4353U)	HRFR047JLCR	R CHIP	1W 0.047 OHM 64X32 5%(MCR100JZHJSR047)
TH801 (RH-4353U)	DTD5410K--	THERMISTOR	DTD5410K--

REMOCON ASS'Y

9CDM062600 (with RDS) : AM-52MR

9CDM062500 (without RDS) : AM-52M

APPENDIX - ELECTRICAL OPTION PART LIST

• TUNER

LOCATION	PART CODE	PART DESCRIPTION	REMARK
TU001	9737652001	KST-MP104MA1-60D	4-GANG, w/RDS, 50uS
	9737652401	KST-MP001MA0-60D	3-GANG, w/o RDS, 75uS
	9737652201	KST-MP101MA1-60D	3-GANG, w/RDS, 50uS
	9737652301	KST-MP000MA0-60D	2-GANG, w/o RDS, 75uS

• PSM

LOC	PART NAME	w/o PSM		w/ PSM		ASSY
		PART CODE	DESCRIPTION	PART CODE	DESCRIPTION	
JW923	WIRE JUMPER	W581GY7595	AWG22 1/0.65 SN 7.5 AUTO		X	POWER
JW913	WIRE JUMPER		X	W581GY1505	AWG22 1/0.65 SN 10 AUTO	
JW919	WIRE JUMPER		X	W581GY6095	AWG22 1/0.65 SN 6 AUTO	
CE915	C ELECTRO		X	CEXF1E102V	25V 1000uF	
CW902	WAFER	2001-WS-03	3P 2.0MM	2001-WS-05	5P 2.0MM	
D991	DIODE RECTIFIER		X	D1N4001---	1N4001	
D992	DIODE RECTIFIER		X	D1N4001---	1N4001	
D993	DIODE RECTIFIER		X	D1N4001---	1N4001	
D994	DIODE RECTIFIER		X	D1N4001---	1N4001	
D995	DIODE		X	D1N4148---	1N4148	
D996	DIODE RECTIFIER		X	D1N4001---	1N4001	
IC991	IC REGULATOR		X	1KIA78L05B	KIA78L05BP	
PT992	TRANS PWR-SUB		X	5TP8028829	28X12 230V 50Hz	
Q992	TR		X	TZTC3205Y-	KTC3205Y	
R992	R CARBON FILM		X	RD-4Z100J-	1/4 10Ω J	
R994	R CARBON FILM		X	RD-AZ103J-	1/6 10KM Ω J	
R995	R CARBON FILM		X	RD-AZ103J-	1/6 10KΩ J	
RY991	RELAY		X	5SC2001A01	SDT-S-105LMR	
CN701	CONN AS	9728838200	1571#28 3P 100MM P=2.0	9728838300	1571#28 5P 100MM P=2.0	FRONT
JW721	WIRE JUMPER		X	W581GY7595	AWG22 7.5MM	
R702	R CARBON FILM		X	HRFT561JBA	1/6W 3.9K OHM J	
R711	R CARBON FILM		X	RD-4Z561J-	1/4W 560 OHM J	
LD701	LED		X	DLTL16KEE-	LTL-16KEE(RED)PI3.1	
JW410	WIRE JUMPER		X	W581GY6095	AWG22 1/0.65 SN 6 AUTO	MAIN
HQ117	TR CHIP		X	TZRC107S--	KRC107S	
HR114	R CHIP		X	HRFT103JBA	1/10 10K OHM J 1608	
R407	R CARBON FILM	RD-AZ473J-	1/6 47K OHM J		X	

• Digital Out

PCB Ass'y	LOC	PART NAME	w/o DIGITAL OUT	w/DIGITAL OUT		ASSY
POWER 9CDC084900	IC507	IC OPTICAL	X	1PLT133T9-	PLT133/T9	POWER
	CW510	WAFER	X	2503-WS-03	3P P=2.5	POWER
	CC568	C CERA	X	CCXF1H104Z	50V F 0.1MF Z	POWER
CD_USB 9CDC084700	CN510	CONN AS	X	9728827500	1007#26 3P 300MM P=2.5	CD_USB
	HC590	C CHIP CERA	X	HCQK150JBA	50V CH 15PF J 1608	CD_USB
	HC591	C CHIP CERA	X	HCBK104ZBA	50V X7R 0.1MF Z 1608	CD_USB
	HR590	R CHIP	X	HRFT102JBA	1/10 1K OHM J 1608	CD_USB

APPENDIX - ELECTRICAL PART LIST

● FAN

PCB Ass'y	LOC	PART NAME	w/o FAN		w/FAN	
MAIN	CE482	C ELECTRO	X		CEXF1E470V	25V RSS 47MF
	CW805	CONN WAFER	X		2503-WS-02	2P 2.5MM
	FAN001	DC Fan	X		9738101700	SP602512M-03(DC12V, 0.11A)
	HC410	C CHIP CERA	X		HCBK104KBA	50V X7R 0.1MF Z 1608
	HD402	DIODE SW CHIP	X		DZDS160---	KDS160
	HQ462	TR CHIP	X		TZTC3875S-	KTC3875S
	HR492	R CHIP	X		HRFT103JBA	1/10 10K OHM J 1608
	R403	R CHIP	X		RD-AZ472J-	1/6 4.7K OHM J
	HR494	R CHIP	X		HRF2220JEA	1/2W 22 OHM J 3216
	HR497	R CHIP	X		HRFT103JBA	1/10 10K OHM J 1608
	HR499	R CHIP	X		HRFT472JBA	1/10 4.7K OHM J 1608
	HR112	R CHIP	X		HRFT000-BA	1/10 0 OHM J 1608
	Q401	TR	X		TZTA1273Y-	KTA1273Y (A966Y) (KSA928A-Y)

● Thermistor

PCB Ass'y	LOC	PART NAME	w/o TEMPERATURE SENSOR		w/TEMPERATURE SENSOR	
MAIN	CE104	C ELECTRO	X	X	CEXF1H100V	50V RSS 10MF
	HR164	R CHIP	X	X	HRFT103JBA	1/10 10K OHM J 1608
	HR165	R CHIP	X	X	HRFT273JBA	1/10W 27K OHM J 1608
	TH101	THERMISTOR	X	X	DDKSF103HF	DKSF103HF
AMP	HQ821	TR CHIP	X	X	TZRC111S--	KRC111S
	HQ822	TR CHIP	X	X	TZRC111S--	KRC111S
	HQ830	TR CHIP	X	X	TZRC111S--	KRC111S
	HR8147	R CHIP	X	X	HRFT103JBA	1/10 10K OHM J 1608
	HR8148	R CHIP	X	X	HRFT102JBA	1/10 1K OHM J 1608
	HR8149	R CHIP	X	X	HRFT332JBA	1/10 3.3K OHM J 1608
	HR8150	R CHIP	X	X	HRFT331FBA	1/10 330 OHM F 1608(1%)
	HR8151	R CHIP	X	X	HRFT100JBA	1/10 10 OHM J 1608
	TH801	THERMISTOR	X	X	DTD5410K--	DTD5410K--

APPENDIX - ELECTRICAL OPTION PART LIST

● Output Power

LOC	PART NAME	2.1 ch(with subwoofer) 50W/2ch +70W/1ch		2ch 50W/2ch		ASSY
CE407	C ELECTRO	CEXF1E470V-X	25V RSS 47MF (5X11) TP	X	X	MAIN BD
CE408	C ELECTRO	CEXF1H479V	50V RSS 4.7MF (5X11)	X	X	
CE413	C ELECTRO	CEXF1H479V	50V RSS 4.7MF (5X11)	X	X	
CE414	C ELECTRO	CEXF1E470V-X	25V RSS 47MF (5X11) TP	X	X	
CE415	C ELECTRO	CEXF1H100V-X	50V RSS 10MF (5X11) TP	X	X	
CE416	C ELECTRO	CEXF1H100V-X	50V RSS 10MF (5X11) TP	X	X	
CE422	C ELECTRO	CEXF1E470V-X	25V RSS 47MF (5X11) TP	X	X	
CE423	C ELECTRO	CEXF1E470V-X	25V RSS 47MF (5X11) TP	X	X	
CE424	C ELECTRO	CEXF1E470V-X	25V RSS 47MF (5X11) TP	X	X	
CE425	C ELECTRO	CEXF1E470V-X	25V RSS 47MF (5X11) TP	X	X	
CE426	C ELECTRO	CEXF1H108V	50V RSS 0.1MF (5X11)	X	X	
HC421	C CHIP CERA	HCBK333KBA	50V X7R 0.033MF M 1608	X	X	
HC422	C CHIP CERA	HCBK333KBA	50V X7R 0.033MF M 1608	X	X	
HC423	C CHIP CERA	HCBK333KBA	50V X7R 0.033MF M 1608	X	X	
HC424	C CHIP CERA	HCBK333KBA	50V X7R 0.033MF M 1608	X	X	
HC428	C CHIP CERA	HCBK273KBA	50V X7R 0.027MF M 1608	X	X	
HC429	C CHIP CERA	HCBK273KBA	50V X7R 0.027MF M 1608	X	X	
HC432	C CHIP CERA	HCBK562KBA	50V X7R 5600PF K 1608	X	X	
HD403	DIODE SW CHIP	DZDS160---	KDS160	X	X	
HDZ401	DIODE ZENER CHIP	DRLZ3R6B--	3.6V	X	X	
HDZ402	DIODE ZENER CHIP	DRLZ3R6B--	3.6V	X	X	
HQ465	TR CHIP	TZTC3875S-	KTC3875S	X	X	
HQ466	TR CHIP	TZTC3875S-	KTC3875S	X	X	
HQ467	TR CHIP	TZRA107S--	KRA107S	X	X	
HQ468	TR CHIP	TZRC111S--	KRC111S	X	X	
HR414	R CHIP	HRFT223JBA	1/10 22K OHM J 1608	X	X	
HR416	R CHIP	HRFT433JBA	1/10 43K OHM J 1608	X	X	
HR442	R CHIP	HRFT223JBA	1/10 22K OHM J 1608	X	X	
HR444	R CHIP	HRFT102JBA	1/10 1K OHM J 1608	X	X	
HR445	R CHIP	HRFT102JBA	1/10 1K OHM J 1608	X	X	
HR448	R CHIP	HRFT433JBA	1/10 43K OHM J 1608	X	X	
HR451	R CHIP	HRFT103JBA	1/10 10K OHM J 1608	X	X	
HR452	R CHIP	HRFT103JBA	1/10 10K OHM J 1608	X	X	
HR454	R CHIP	HRFT682JBA	1/10 6.8K OHM J 1608	X	X	
HR455	R CHIP	HRFT101JBA	1/10 100 OHM J 1608	X	X	
HR456	R CHIP	HRFT103JBA	1/10 10K OHM J 1608	X	X	
HR457	R CHIP	HRFT104JBA	1/10 100K OHM J 1608	X	X	
HR460	R CHIP	HRFT101JBA	1/10 100 OHM J 1608	X	X	
HR461	R CHIP	HRFT104JBA	1/10 100K OHM J 1608	X	X	
HR462	R CHIP	HRFT104JBA	1/10 100K OHM J 1608	X	X	
HR464	R CHIP	HRFT102JBA	1/10 1K OHM J 1608	X	X	
HR465	R CHIP	HRFT821JBA	1/10 820 OHM J 1608	X	X	
HR466	R CHIP	HRFT821JBA	1/10 820 OHM J 1608	X	X	
HR467	R CHIP	HRFT102JBA	1/10 1K OHM J 1608	X	X	
HR468	R CHIP	HRFT562JBA	1/10 5.6K OHM J 1608	X	X	
HR470	R CHIP	HRFT102JBA	1/10 1K OHM J 1608	X	X	
HR471	R CHIP	HRFT153JBA	1/10 15K OHM J 1608	X	X	
HR472	R CHIP	HRFT472JBA	1/10 4.7K OHM J 1608	X	X	
HR473	R CHIP	HRFT153JBA	1/10 15K OHM J 1608	X	X	
HR474	R CHIP	HRFT102JBA	1/10 1K OHM J 1608	X	X	
IC402	IC CHIP OP AMP	1NJM4558M-	NJM4558M	X	X	
IC403	IC CHIP OP AMP	1NJM4558M-	NJM4558M	X	X	
IC404	IC CHIP OP AMP	1NJM4558M-	NJM4558M	X	X	
R401	R CARBON FILM	RD-AZ101J-	1/6 100 OHM J	X	X	
R402	R CARBON FILM	RD-AZ101J-	1/6 100 OHM J	X	X	
R404	R CARBON FILM	RD-AZ102J-	1/6 1K OHM J	X	X	
R405	R CARBON FILM	RD-AZ102J-	1/6 1K OHM J	X	X	
R406	R CARBON FILM	RD-AZ102J-	1/6 1K OHM J	X	X	
CE417	C ELECTRO	CEXF1H229V-X	50V RSS 2.2MF (5X11) TP	CEXF1H479V	50V RSS 4.7MF (5X11)	
CE418	C ELECTRO	CEXF1H229V-X	50V RSS 2.2MF (5X11) TP	CEXF1H479V	50V RSS 4.7MF (5X11)	
CN802	CONN AS	9728835900	#24 12P 180MM P=2.0	9728838400	#24 10P 180MM P=2.0	
HR482	R CHIP	X	X	HRF4000-EA	1/4W 0 OHM J 3216	
JW441	WIRE JUMPER	X	X	W581GY6095	AWG22 1/0.65 SN 6 AUTO	
JW442	WIRE JUMPER	X	X	W581GY6095	AWG22 1/0.65 SN 6 AUTO	
CW801	WAFER	2503-WS-09	9P 2.5MM	2503-WS-05	5P 2.5MM	AMP BD
CW802	WAFER	2001-WS-12	12P P=2.0	2001-WS-10	10P P=2.0	
HR820	R CHIP	HRFT473JBA	1/10 47K OHM J 1608	HRFT223JBA	1/10 22K OHM J 1608	
CE808	C ELECTRO	CEXF1J478V	63V RSS 0.47MF (5X11)	X	X	
CE815	C ELECTRO	CEXF1J478V	63V RSS 0.47MF (5X11)	X	X	
CE834	C ELECTRO	CEXF1C101V	16V RSS 100MF (6.3X11) TP	X	X	
CE835	C ELECTRO	CEXF1C101V	16V RSS 100MF (6.3X11) TP	X	X	
CM818	C MYLAR	CMXK2A105J	MC 100V 1MF J	X	X	
CM821	C MYLAR	CMXK2A104J	MC 100V 0.1MF J	X	X	
HC8100	C CHIP CERA	HCBK123KBA	50V X7R 0.012MF M 1608	X	X	
HC8101	C CHIP CERA	HCBK222KBA	50V X7R 2200PF K 1608	X	X	
HC8102	C CHIP CERA	HCBK122KBA	50V X7R 1200PF K 1608	X	X	
HC8103	C CHIP CERA	HCBK682KBA	50V X7R 6800PF K 1608	X	X	
HC8104	C CHIP CERA	HCQK681JBA	50V CH 680PF J 1608	X	X	
HC8105	C CHIP CERA	HCFH105MBA	25V Y5V 1MF M 1608	X	X	

APPENDIX - ELECTRICAL PART LIST

LOC	PART NAME	2.1 ch(with subwoofer) 50W/2ch +70W/1ch		2ch 50W/2ch		ASSY
HC8106	C CHIP CERA	HCBK223KBA	50V X7R 0.022MF M 1608	X	X	
HC8107	C CHIP CERA	HCBK102KBA	50V X7R 1000PF K 1608	X	X	
HC8108	C CHIP CERA	HCFK104MBA	50V Y5V 0.1MF M 1608	X	X	
HC8109	C CHIP CERA	HCFK104MBA	50V Y5V 0.1MF M 1608	X	X	
HC8110	C CHIP CERA	HCFK224MBA	50V Y5V 0.22MF M 1608	X	X	
HC8111	C CHIP CERA	HCFK104MBA	50V Y5V 0.1MF M 1608	X	X	
HC8112	C CHIP CERA	HCFK104MBA	50V Y5V 0.1MF M 1608	X	X	
HC8113	C CHIP CERA	HCFK104MBA	50V Y5V 0.1MF M 1608	X	X	
HC8114	C CHIP CERA	HCFK104MBA	50V Y5V 0.1MF M 1608	X	X	
HC8115	C CHIP CERA	HCBN104KEA	100V X7R 0.1MF K 3216	X	X	
HC8118	C CHIP CERA	HCBN104KEA	100V X7R 0.1MF K 3216	X	X	
HC8121	C CHIP CERA	HCBN104KEA	100V X7R 0.1MF K 3216	X	X	
HC8124	C CHIP CERA	HCBN104KEA	100V X7R 0.1MF K 3216	X	X	
HC8127	C CHIP CERA	HCQK821JBA	50V CH 820PF 1608	X	X	
HC8128	C CHIP CERA	HCQK821JBA	50V CH 820PF 1608	X	X	
HC8129	C CHIP CERA	HCQK821JBA	50V CH 820PF 1608	X	X	
HC8130	C CHIP CERA	HCQK821JBA	50V CH 820PF 1608	X	X	
HC8131	C CHIP CERA	HCQK391JBA	50V CH 390PF 1608	X	X	
HC8132	C CHIP CERA	HCQK391JBA	50V CH 390PF 1608	X	X	
HC8133	C CHIP CERA	HCQK271JBA	50V CH 270PF J 1608	X	X	
HC8134	C CHIP CERA	HCFK104MBA	50V Y5V 0.1MF M 1608	X	X	
HC8135	C CHIP CERA	HCFK104MBA	50V Y5V 0.1MF M 1608	X	X	
HC8136	C CHIP CERA	HCFK104MBA	50V Y5V 0.1MF M 1608	X	X	
HC8137	C CHIP CERA	HCFK104MBA	50V Y5V 0.1MF M 1608	X	X	
HC8138	C CHIP CERA	HCFK104MBA	50V Y5V 0.1MF M 1608	X	X	
HC8139	C CHIP CERA	HCFK104MBA	50V Y5V 0.1MF M 1608	X	X	
HC8149	C CHIP CERA	HCBN104KEA	100V X7R 0.1MF K 3216	X	X	
HC8151	C CHIP CERA	HCBN104KEA	100V X7R 0.1MF K 3216	X	X	
HC8152	C CHIP CERA	HCFK104MBA	50V Y5V 0.1MF M 1608	X	X	
HC8153	C CHIP CERA	HCFK104MBA	50V Y5V 0.1MF M 1608	X	X	
HC8155	C CHIP CERA	HCBK103KBA	50V X7R 0.01MF M 1608	X	X	
HC853	C CHIP CERA	HCFH105MBA	25V Y5V 1MF M 1608	X	X	
HC867	C CHIP CERA	HCFK224MBA	50V Y5V 0.22MF M 1608	X	X	
HC882	C CHIP CERA	HCFH105MBA	25V Y5V 1MF M 1608	X	X	
HC883	C CHIP CERA	HCFH105MBA	25V Y5V 1MF M 1608	X	X	
HC885	C CHIP CERA	HCFH105MBA	25V Y5V 1MF M 1608	X	X	
HC892	C CHIP CERA	HCFH105MBA	25V Y5V 1MF M 1608	X	X	
HC899	C CHIP CERA	HCFH105MBA	25V Y5V 1MF M 1608	X	X	
HD819	DIODE SW CHIP	DZDS160---	KDS160(KDS511)	X	X	AMP BD
HD820	DIODE SW CHIP	DZDS160---	KDS160(KDS511)	X	X	
HD828	DIODE SW CHIP	DZDS160---	KDS160(KDS511)	X	X	
HQ816	TR CHIP	TZTC3875S-	KTC3875Y	X	X	
HQ831	TR CHIP	TZTA1504S-	KTA1504Y	X	X	
HQ832	TR CHIP	TZTC3875S-	KTC3875Y	X	X	
HQ833	TR CHIP	TMMBTA06--	MMBTA06	X	X	
HQ834	TR CHIP	TZTA1504S-	KTA1504Y	X	X	
HQ835	TR CHIP	TMMBTA56--	MMBTA56	X	X	
HQ836	TR CHIP	TZTA1504S-	KTA1504Y	X	X	
HR8102	R CHIP	HRFT104JBA	1/10 100K OHM J 1608	X	X	
HR8103	R CHIP	HRFT122JBA	1/10 1.2K OHM J 1608	X	X	
HR8104	R CHIP	HRFT182JBA	1/10 1.8K OHM J 1608	X	X	
HR8105	R CHIP	HRFT471JBA	1/10 470 OHM J 1608	X	X	
HR8106	R CHIP	HRFT222JBA	1/10 2.2K OHM J 1608	X	X	
HR8107	R CHIP	HRFT103JBA	1/10 10K OHM J 1608	X	X	
HR8108	R CHIP	HRFT104JBA	1/10 100K OHM J 1608	X	X	
HR8109	R CHIP	HRFT224JBA	1/10 220K OHM J 1608	X	X	
HR8110	R CHIP	HRFT000-BA	1/10 0 OHM J 1608	X	X	
HR8111	R CHIP	HRF8223JCA	1/8 22K OHM J 2012	X	X	
HR8112	R CHIP	HRF8102JCA	1/8 1K OHM J 2012	X	X	
HR8113	R CHIP	HRFT102JBA	1/10 1K OHM J 1608	X	X	
HR8114	R CHIP	HRF8223JCA	1/8 22K OHM J 2012	X	X	
HR8115	R CHIP	HRF8102JCA	1/8 1K OHM J 2012	X	X	
HR8116	R CHIP	HRFT000-BA	1/10 0 OHM J 1608	X	X	
HR8117	R CHIP	HRFT222JBA	1/10 2.2K OHM J 1608	X	X	
HR8118	R CHIP	HRFT223JBA	1/10 22K OHM J 1608	X	X	
HR8119	R CHIP	HRFT223JBA	1/10 22K OHM J 1608	X	X	
HR8120	R CHIP	HRFT473JBA	1/10 47K OHM J 1608	X	X	
HR8121	R CHIP	HRFT223JBA	1/10 22K OHM J 1608	X	X	
HR8122	R CHIP	HRFT223JBA	1/10 22K OHM J 1608	X	X	
HR8123	R CHIP	HRFT222JBA	1/10 2.2K OHM J 1608	X	X	
HR8124	R CHIP	HRFT473JBA	1/10 47K OHM J 1608	X	X	
HR8125	R CHIP	HRFT473JBA	1/10 47K OHM J 1608	X	X	
HR8126	R CHIP	HRF8519JCA	1/8 5.1 OHM J 2012	X	X	
HR8127	R CHIP	HRFT222JBA	1/10 2.2K OHM J 1608	X	X	
HR8128	R CHIP	HRFT473JBA	1/10 47K OHM J 1608	X	X	
HR8129	R CHIP	HRFT473JBA	1/10 47K OHM J 1608	X	X	
HR8130	R CHIP	HRFT220JBA	1/10 22 OHM J 1608	X	X	
HR8131	R CHIP	HRF4100JEA	1/4W 10 OHM J 3216	X	X	
HR8132	R CHIP	HRF4100JEA	1/4W 10 OHM J 3216	X	X	

APPENDIX - ELECTRICAL OPTION PART LIST

LOC	PART NAME	2.1 ch(with subwoofer) 50W/2ch +70W/1ch		2ch 50W/2ch		ASSY
HR8133	R CHIP	HRF8223JCA	1/8 22K OHM J 2012	X	X	AMP BD
HR8134	R CHIP	HRFT102JBA	1/10 1K OHM J 1608	X	X	
HR8135	R CHIP	HRF8102JCA	1/8 1K OHM J 2012	X	X	
HR8136	R CHIP	HRFT102JBA	1/10 1K OHM J 1608	X	X	
HR8140	R CHIP	HRFT392JBA	1/10 3.9K OHM J 1608	X	X	
HR8141	R CHIP	HRFT392JBA	1/10 3.9K OHM J 1608	X	X	
HR8143	R CHIP	HRFT223JBA	1/10 22K OHM J 1608	X	X	
HR8145	R CHIP	HRFT223JBA	1/10 22K OHM J 1608	X	X	
HR8153	R CHIP	HRFT101JBA	1/10 100 OHM J 1608	X	X	
HR8155	R CHIP	X	X	HRFT000-BA	1/10 0 OHM J 1608	
HR829	R CHIP	HRFT122JBA	1/10 1.2K OHM J 1608	X	X	
HR858	R CHIP	HRFT102JBA	1/10 1K OHM J 1608	X	X	
HR864	R CHIP	HRFT122JBA	1/10 1.2K OHM J 1608	X	X	
HR878	R CHIP	HRFT102JBA	1/10 1K OHM J 1608	X	X	
HZ806	DIODE ZENER CHIP	DRLZ10B---	RLZ10B	X	X	
HZ807	DIODE ZENER CHIP	DRLZ10B---	RLZ10B	X	X	
HZ808	DIODE ZENER CHIP	DRLZ2R7B--	RLZ2.7B	X	X	
IC806	IC	1NJM4558M-	NJM4558	X	X	
IC807	IC AUDIO PROCESSOR	1S1A0071--	S1A0071_401	X	X	
IC808	IC FET DRIVER	1S1A0051X-	S1A0051X	X	X	
L803	COIL FILTER	5LF150K855	15uH(TC16B-09)	X	X	
Q805	FET	DFQF15P12-	FQPF15P12	X	X	
Q806	FET	DFQF16N15-	FQPF16N15	X	X	
R818	R METAL OXIDE FILM	RS03Y100J-	3W 10 OHM J	X	X	
R832	R CHIP	HRFR047JLCR	1W 0.047 OHM 64X32 5%(MCR100JZHJSR047)	X	X	
HR8160	R CHIP	X	X	HRF4000-EA	1/4W 0 OHM J 3216	
HR8161	R CHIP	X	X	HRF4000-EA	1/4W 0 OHM J 3216	
HR8162	R CHIP	X	X	HRF4000-EA	1/4W 0 OHM J 3216	
HR8163	R CHIP	X	X	HRF4000-EA	1/4W 0 OHM J 3216	
J801	JACKRC	9736325600	JACKRCA 1P	X	X	POWER BD
JW803	WIRE JUMPER	W581GY7595	AWG22 1/0.65 SN 7.5 AUTO	X	X	
HC8160	C CHIP CERA	HCBK104ZBA	50V X7R 0.1MF Z 1608	X	X	
HC8161	C CHIP CERA	HCBK104ZBA	50V X7R 0.1MF Z 1609	X	X	
HC8162	C CHIP CERA	HCBK104ZBA	50V X7R 0.1MF Z 1610	X	X	
HC8163	C CHIP CERA	HCBK104ZBA	50V X7R 0.1MF Z 1611	X	X	
HC8164	C CHIP CERA	HCBK104ZBA	50V X7R 0.1MF Z 1612	X	X	
HC8165	C CHIP CERA	HCBK104ZBA	50V X7R 0.1MF Z 1613	X	X	