



simply Cinema®

## SCS175(230V)

# PRELIMINARY Service - Technical Manual



# SCS 175 Technical Specifications

## SCS satellite

Freq. Resp.: 90-22000 Hz  
Crossover: 4 kHz  
Sensitivity: 86 dB  
Nom. Imp.: 8 Ohms  
Recommended amp.:  
25-100 Watts  
Drivers:  
100 mm woofer /  
10 mm polymer tweeter  
Dimensions (HxWxD):  
230 x 140 x 164 mm  
Weight: 2,5 kg

## SCS center

Freq. Resp.: 120-22000 Hz  
Crossover: 3 kHz  
Sensitivity: 88 dB  
Nom. Imp.: 8 Ohms  
Recommended amp.:  
25-100 Watts  
Drivers:  
Two 100 mm woofer /  
10 mm polymer tweeter  
Dimensions (HxWxD):  
160 x 410 x 159 mm  
Weight: 4 kg

## SCS active sub-woofer

Low-freq. cut-off: 36 Hz  
High-freq. cut-off:  
Adjustable 40-130 Hz  
Built-in power amp.:  
110 Watts  
Driver:  
210 mm long throw woofer  
Dimensions (HxWxD):  
350 x 295 x 350 mm  
Weight: 11 kg

Refinements may be made on occasion to existing products without notice, but will always meet or exceed original specifications unless otherwise stated.



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## Declaration of Conformity



We, JBL Europe, HCL  
2, route de Tours  
72500 Château-du-Loir  
France

declare in own responsibility, that the product  
described in this owner's manual is in compliance  
with technical standards:

EN 55013/A12:1994

EN 55020:1994

EN 55022:1994 class B

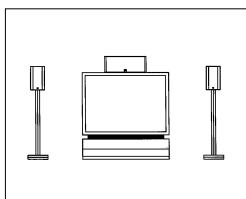
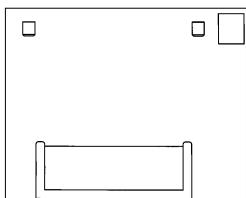
EN 61000-3-2:1995

EN 61000-3-3:1995

Luc Emmanuel Godard  
Harman Consumer International  
France, 06/01

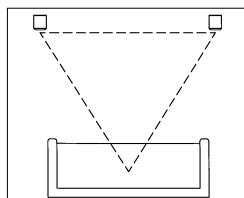
# one. Speaker Placement

## Subwoofer



Always start with the subwoofer as close to one of the front corners as possible to take advantage of solid-angle gains. If you get too much bass, adjust the "VOLUME" towards "MIN". The result will be lower distortion and higher reliability. If the excessive bass is at one or more discrete frequencies, then it might be necessary to consider dealing with room modes.

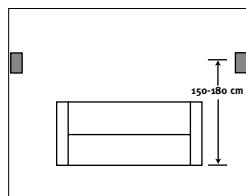
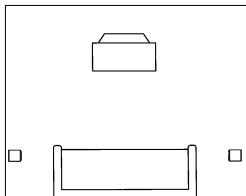
## Satellites



Here are your options:

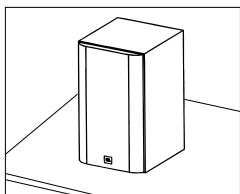
- Modify the acoustical coupling of the subwoofer to the room boundaries and/or the room modes, i.e. move the subwoofer.
- Modify the acoustical coupling of the listener to the room boundaries and/or the room modes, i.e. move the listener.
- Move both the subwoofer and the listener.

## Surround Speakers

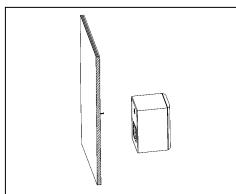


## Mounting Options

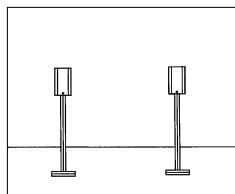
### Satellites and Surrounds



On shelves.



On the wall.

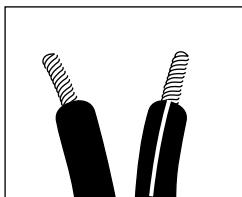


On optional stands.

The customer is responsible for proper selection and use of mounting hardware, available through hardware stores, to properly and safely wall-mount the speakers.

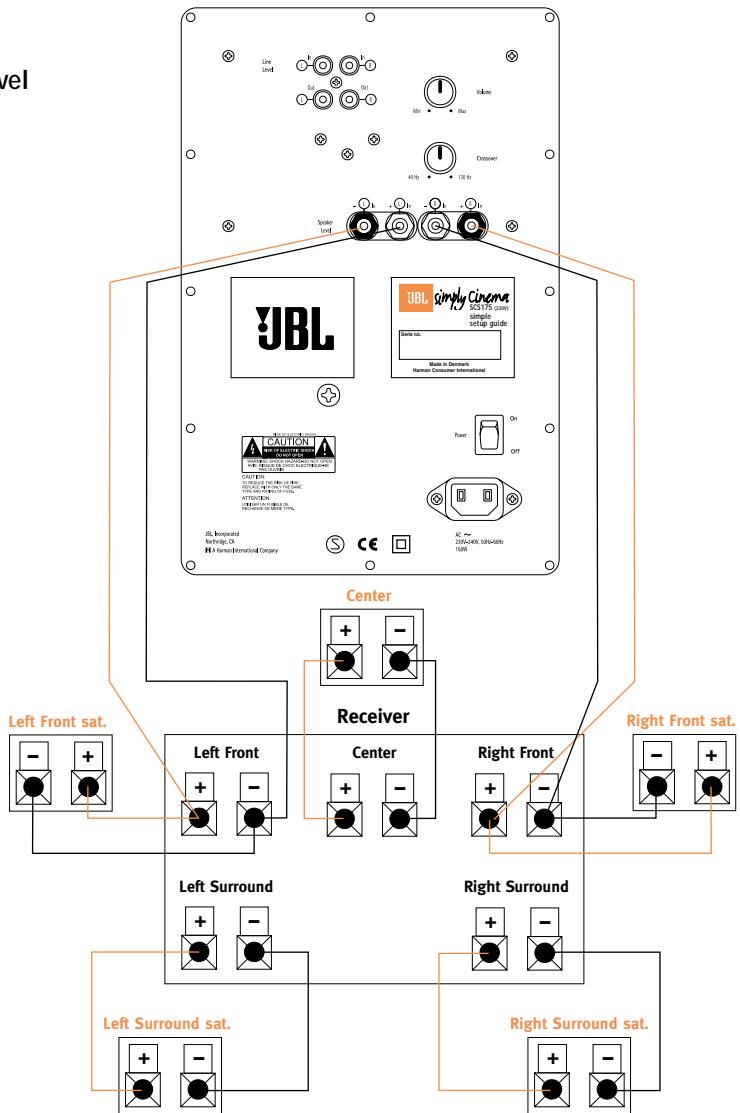
# two. Speaker Connections

## Connection Tips



Separate and strip the ends of the speaker wire as shown. Speakers and amplifiers/-receivers have corresponding (+) and (-) terminals. The (+) lead of the speaker wire is noted with a stripe. It is important to connect all the speakers identically; (+) on the speaker to (+) on the amplifier and (-) on the speaker to (-) on the amplifier. Wiring "out of phase" results in thin sound, weak bass and a poor stereo image.

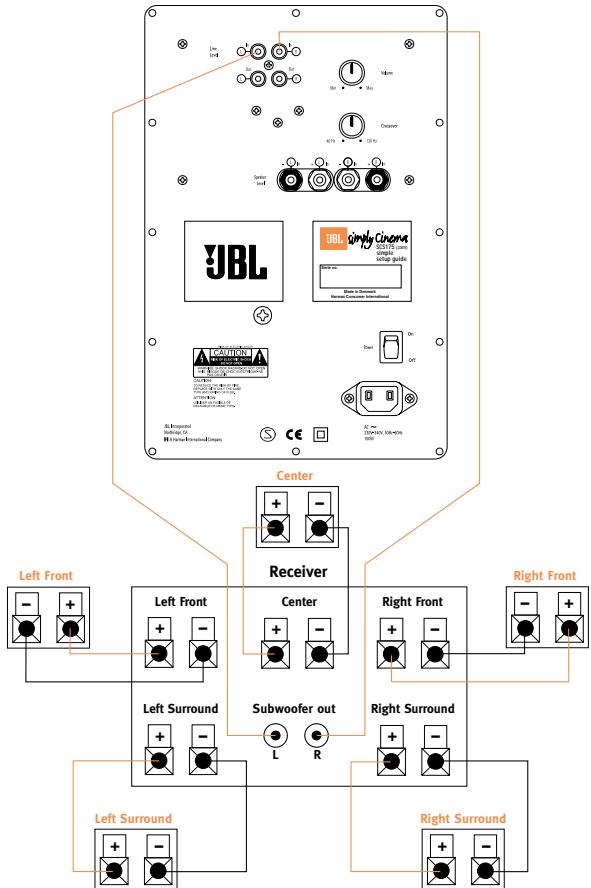
## Speaker Level



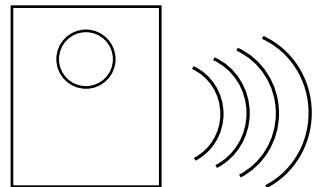
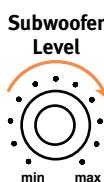
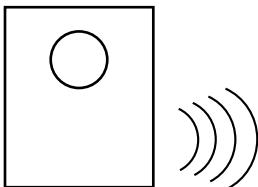
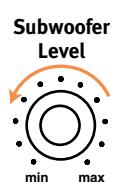
## Line Level

If your receiver has subwoofer output jacks, you may connect the SCS175 using this method.

Note: Some receivers/amplifiers have a single (mono) subwoofer output. In this case, it is recommended that you use a "Y"-connector (not included) to maximize the subwoofer's performance.



## Volume



## Crossover Frequency

The crossover frequency knob determines the highest frequency your subwoofer will reproduce. It allows a seamless transition from the subwoofer to the satellite speakers. Experiment with this adjustment to find the crossover frequency that sounds best with your speakers.

When the control is at the "40 Hz" position, very few high frequencies will be heard. This position is best suited to large main speakers. For most users, the control should be set somewhere near the mid position. For listeners using very small speakers, best

results will be obtained with the control at the "130 Hz" position. For subwoofers used with Surround Sound processors with dedicated subwoofer outputs, the best result will be obtained with the control at the "130 Hz" position.

# Troubleshooting

If there is no sound from any of the speakers, check the following:

- Receiver/amplifier is on and a source is playing.
- Powered subwoofer is plugged in and is in the “On” position.
- Check all wires and connections between receiver/amplifier and speakers. Make sure all wires are connected. Make sure none of the speaker wires are frayed, cut or punctured.
- Review proper operation of your receiver/amplifier.

If there is no sound coming from one speaker, check the following:

- Check the “Balance” control on your receiver/amplifier.
- Check all wires and connections between receiver/amplifier and speakers. Make sure all wires are connected. Make sure none of the speaker wires are frayed, cut or punctured.

If the system plays at low volumes but shuts off as volume is increased, check the following:

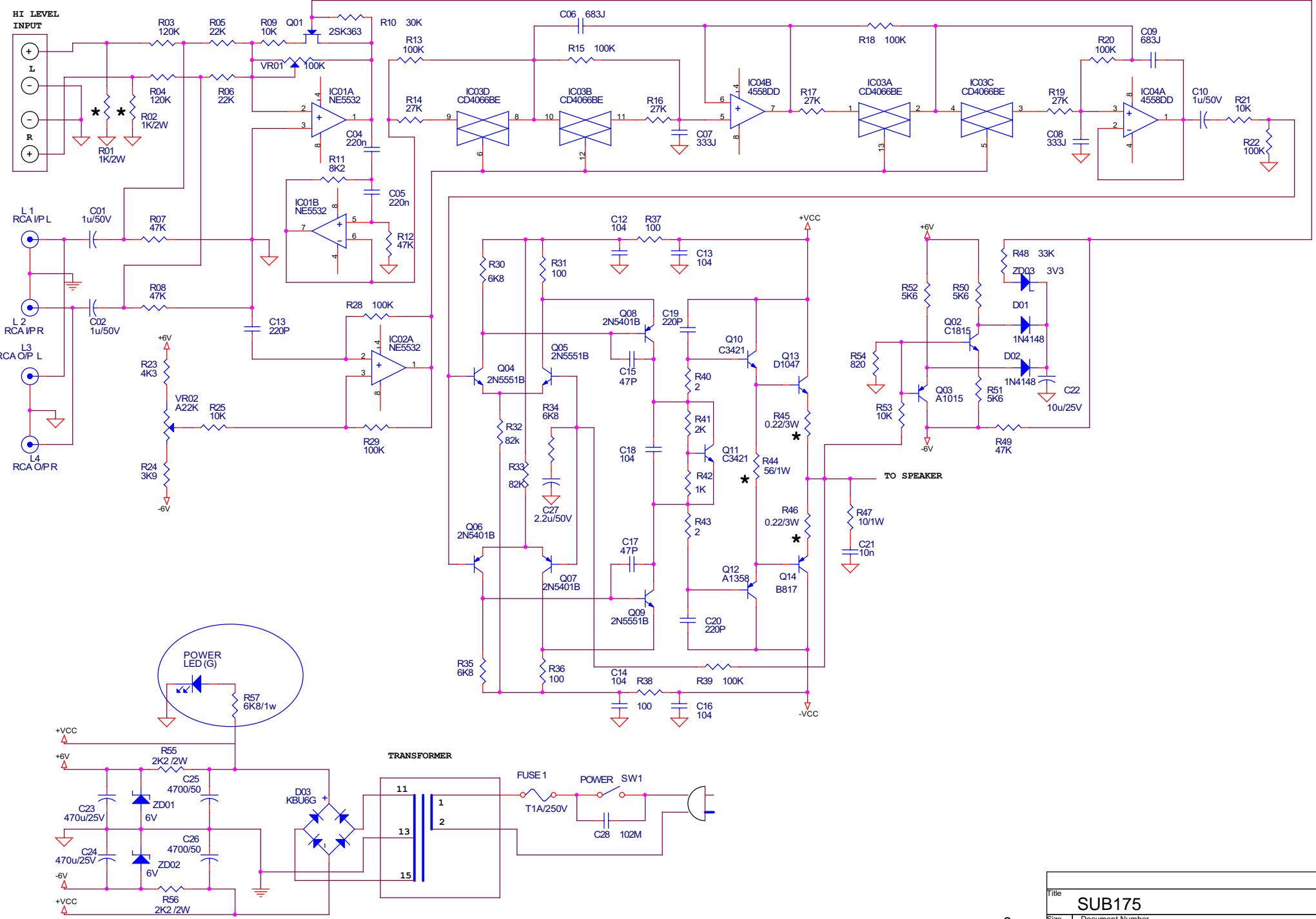
- Check all wires and connections between receiver/amplifier and speakers. Make sure all wires are connected. Make sure none of the speaker wires are frayed, cut or punctured.
- If more than one pair of main speakers is being used, check the minimum impedance requirements of your receiver/amplifier.

If there is low bass output, check the following:

- Make sure the connections to the left and right “Speaker Inputs” have the correct polarity (+ and -).
- Make sure that the subwoofer is plugged into an active electrical outlet and is turned on.

If there is no sound from the surround speakers, check the following:

- Check all wires and connections between receiver/amplifier and speakers. Make sure all wires are connected. Make sure none of the speaker wires are frayed, cut or punctured.
- Review proper operation of your receiver/amplifier and its surround sound features.
- Make sure the movie or TV show you are watching is recorded in Dolby surround. If it is not, check to see if your receiver/amplifier has other surround modes you may use.



Title		SUB175	
Size	A3	Document Number	(Doc)
Date:	Friday, May 04, 2001	Sheet	1 of 1

# BILL OF MATERIAL

REV: A3 ( PAGE 1 / 6 )  
2001/5/4

**MODEL NO:SWA-100CE-INFINITY**

## FINAL ASSEMBLY PARTS

NO.	LEVEL	PART NUMBER	DESCRIPTION	SPEC	UNIT	Q'TY	REMARK
**	0.....	ASY-100CEINFINIT	ASS'Y	SWA-100CE-INFINITY	EA	1	
1	1.....	ATR-2SC3421	TR	2SC3421	EA	1	Q11
2	1.....	ATR-2SD1047E	TR	2SD1047E (C3856)	EA	1	Q13
3	1.....	ATR-2SB817E	TR	2SB817E (A1492)	EA	1	Q14
4	1.....	DM09R0001	GASKET	200*12*2.0MM	EA	2	PANEL
5	1.....	DM09R0002	GASKET	276*12*2.0MM	EA	2	PANEL
6	1.....	ECE-050V478M-2	CAP ELE 50V	4700uF+-20% 22*42 105°C	EA	2	C25,C26
7	1.....	ECW-400W102K	CAP Y-SUPPRESSOR	0.001UF/400 +10%	EA	1	C28
8	1.....	EMX-1002	CABLE TIE BINDING	(YJ-80)	EA	4	BOSS, WIRE
9	1.....	EMX-1003	CABLE TIE	8MM	EA	1	SPEAKER WIRE
10	1.....	FUH-7001	FUSE HOLDER	5*20MM	EA	1	FOR 1A/250V
11	1.....	FUS-01-1001SC	FUSE VDE/UL	5*20 1A/250V TSD	EA	1	FUSE1
12	1.....	JK3-L04-G7001	RCA 4P GOLD		EA	1	INPUT
13	1.....	JK3-L02-7005	2P AC INLET		EA	1	PANEL
14	1.....	DM02A0050	PANEL FOR 100CE-INFINITY	300*200*T2 REV:B	EA	1	PANEL
15	1.....	N3R0D6R1D15R0TB	BOSS M3*15 BRASS		EA	4	PANEL
16	1.....	N6R0D10R0D4R5TSB	NUT M6 BLK		EA	1	FOR XFM
17	1.....	M06-G7002	GASKET 30*34*1.0MM		EA	1	RCA
18	1.....	M06-G7003A	GASKET 40*15*2MM	FOR CAPACITOR	EA	2	FOR CAP
19	1.....	M07-G7001	INSULATOR		EA	1	Q11,Q13,Q14
20	1.....	M09-7002	GASKET	FOR VR 17D*6	EA	1	VR02
21	1.....	M09-7003	GASKET	FOR VR 17D*4	EA	1	VR01
22	1.....	M11-P605-02	VR-KNOB	18*16	EA	2	VR
23	1.....	PCB-1702	PCB FOR FUSE		EA	1	FUSE
24	1.....	SS3R0+08SPB	SCREW MACHINE	TAPPING 3*8 PAN BLK	EA	4	BOSS
25	1.....	SM3R0+06SPN	SCREW MACHINE	3*6 PAN NI	EA	4	PCB
26	1.....	SP3R0+08SPB	SCREW TAPPING	3*8 PAN BLK	EA	2	HEAT SINK-PANEL

# BILL OF MATERIAL

REV: A3 ( PAGE 2 / 6 )  
2001/5/4

**MODEL NO:SWA-100CE-INFINITY**

## FINAL ASSEMBLY PARTS

NO.	LEVEL	PART NUMBER	DESCRIPTION	SPEC	UNIT	Q'TY	REMARK
27	1.....	SP3R0+14SGB	SCREW TAPPING 3*14	PAN SPG/FLAT WASHER BLK	EA	2	Q13,Q14 TRANSISTOR
28	1.....	SP3R0+12SGB	SCREW TAPPING 3*12	PAN SPG/FLAT WASHER BLK	EA	1	Q11 C3421 TRANSISTOR
29	1.....	SM6R0+60SPB	SCREW MACHINE	M6*60 PAN BLK	EA	1	FOR XFM
30	1.....	SM3R0+12SBB	SCREW MACHINE	M3*12 BIND BLK	EA	4	AC INLET
31	1.....	SN3R0+10SPB	SCREW TAPPING	3*10 PAN BLK	EA	1	RCA JACK
32	1.....	N3R0D5R5D2R7TSZW	NUT M3 NI	WITH GEAR WASHER	EA	4	AC INLET
33	1.....	SWK-G7006	POWER SWITCH	16A/250V (3024)	EA	1	SW1
34	1.....	JK1-L01-G7009C	BINDING POST GOLDEN	RED ( $\phi$ 3mm WITH RED CAP)	EA	2	HIGH LEVEL INPUT
35	1.....	JK1-L01-G7010C	BINDING POST GOLDEN	BLACK( $\phi$ 3mm WITH BLK CAP)	EA	2	HIGH LEVEL INPUT
36	1.....	KM07A0019	HEAT SINK	FOR 100CE INFINITY	EA	1	PANEL
37	1.....	TU1-B0060-015	TUBING BLK 6MMD 15MM		EA	2	POWER SW
38	1.....	VRR-G7003C	VR	100K	EA	1	VR01
39	1.....	VRR-G7004	VR	22K	EA	1	VR02
40	1.....	W04-C2140-05-10	WIRE PVC # 18 1617	RED TIN 140mm	EA	1	
41	1.....	WF6R2D11R4D1R5TS	WASHER FLAT	M6.2 BLK	EA	1	FOR XFM
42	1.....	WPC-7024	POWER CORD	6FT VDE(2P)	EA	1	PANEL
43	1.....	WS6R2D10R0D2R0TS	WASHER FLAT	M6.2 BLK	EA	1	FOR XFM
44	1.....	WF3R2D6R0D0R5TSN	WASHER FLAT M3 NI		EA	2	PCB
45	1.....	XFM-3010*A	TRAN 230VAC 2A 28V*2	80VA PRIMARY WIRE130,SECONDARY WIRE 190	EA	1	TRANS FORMER
46	1.....	M09-G7004	BALATA MAT		EA	2	XFM
47	1.....	WF6R5D90R0D1R6TS	WASHER	$\Phi$ 6.5* $\Phi$ 9.0*1.6T	EA	1	XFM
48	1.....	WF6R2D80R0D1R0TS	WASHER PROTRUDING	BLK	EA	2	XFM
49	1.....	EMX-1018	LED BUSHING	5MM	EA	1	PANEL
50	1.....	ADL-5S703	LED GRN	5mmD 332GD	EA	1	LED BUSH
51	1.....	TU1-B0050-035	TUBING SHRINK	5MMD 35MM	EA	1	LED
52	1.....	TU1-B0080-035	TUBING SHRINK	BLK 8MMD 35MM	EA	1	LED
53	1.....	ERB-102K682J	RES MO	1W 6K8 +5%	EA	1	LED

# BILL OF MATERIAL

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**MODEL NO:SWA-100CE-INFINITY**

## FINAL ASSEMBLY PARTS

NO.	LEVEL	PART NUMBER	DESCRIPTION	SPEC	UNIT	Q'TY	REMARK
54	1.....	WAS-7104	2468 #18 2P	180mm	EA	1	LED
**	1.....	PKG-100CEINFINIT	PACKAGE	SWA-100CE-INFINITY	EA	1	***
1	2.....	M92-6450	LABLE SERIAL NO.	SWA100CE	EA	1	
2	2.....	M92-6452	LABLE MADE IN CHINA	BLK /WHT	EA	1	
3	2.....	M93-7100	POLYBAG		EA	1	
4	2.....	DM905002	CARTON OUTER	FOR INFINITY	EA	0.17	
5	2.....	KM900024	CARTON INNER		EA	1	
6	2.....	KM900023	PACKING BOARD	6 FOLD	EA	2	CARTON BOX
7	2.....	BGF100250	POLY BAG	0.05*100*250	EA	1	
8	2.....	DM920013	LABEL FOR FUSE TYPE	18*4MM	EA	1	PANEL

----- END -----

APPROVED :

CHECKED :

PREPARED :

# BILL OF MATERIAL

REV:A3 ( PAGE 4 / 6 )

2001/5/4

MODEL NO:SWA-100CE-INFINITY

## PCBA ASSEMBLY PARTS

NO.	LEVEL	PART NUMBER	DESCRIPTION	SPEC	UNIT	Q'TY	REMARK
**	1.....	ASY-PCB-100CE-02	PACKAGE	SWA-100CE-INFINITY	EA	1	***
1	2.....	ADD-IN4148*TAP	DIODE SWITCH	IN4148 52mm	EA	2	D01,D02
2	2.....	ADB-KBU6G	DIODE BRIDGE KBU6G	6A/400V	EA	1	D03
3	2.....	ADZ-UZ3.3BM	DIODE ZENER UZ	3.3BM 1/2W	EA	1	ZD03
4	2.....	ADZ-BZX55C6V2	DIODE ZENER	BZX55C6V2 (TAPPING)	EA	2	ZD01,ZD02
5	2.....	AIC-NJM4558D	IC NJM4558DD	OP AMP	EA	1	IC04
6	2.....	AIC-CD4066BE	IC CD4066BE		EA	1	IC03C
7	2.....	AIC-NE5532P	IC NE5532P		EA	2	IC01,IC02
8	2.....	ATR-5401B	TRANSISTOR 5401B		EA	3	Q06,Q07,Q08
9	2.....	ATR-5551B	TRANSISTOR 5551B		EA	3	Q04,Q05,Q09
10	2.....	ATR-2SK363	TR	2SK363	EA	1	Q01
11	2.....	ATR-2SA1358	TR	2SA1358	EA	1	Q12
12	2.....	ATR-2SA1015*TAP	TR	2SA1015	EA	1	Q03
13	2.....	ATR-2SC3421	TR	2SC3421	EA	1	Q10
14	2.....	ATR-2SC1815*TAP	TR	2SC1815	EA	1	Q02
15	2.....	ECD-050T470K	CAP CER	50V 47pF +-10% 105°C	EA	2	C15,C17
16	2.....	ECD-050T221K	CAP, CER	50V 220pF +-10% 105°C	EA	3	C03,C19,C20
17	2.....	ECE-050T105M-2	CAP ELE	50V 1uF +-20% 105°C	EA	3	C01,C02,C10
18	2.....	ECE-050T225M-2	CAP ELE	50V 2.2uF +-20% 105°C	EA	1	C27
19	2.....	ECE-050T106M-2	CAP ELE	50V 10uF +-20% 105°C	EA	1	C22
20	2.....	ECE-016V477M-2	CAP ELE	16V 470uF +-20% 105°C	EA	2	C23,C24
21	2.....	ECM-100T103K	CAP MYLAR	100V 0.01uF +-10% 105°C	EA	1	C36
22	2.....	ECM-100T333K	CAP MYLAR	100V 0.033uF +-10% 105°C	EA	2	C07,C08
23	2.....	ECM-100T683K	CAP MYLAR	100V 0.068uF +-10%	EA	2	C06,C09
24	2.....	ECM-100T104K	CAP MYLAR	100V 0.1uF +-10% 105°C	EA	5	C12,C13,C14,C16,C18
25	2.....	ECM-100T224K/M	CAP MYLAR	100V 0.22uF +-10%	EA	2	C04,C05

# BILL OF MATERIAL

REV:A3 ( PAGE 5 / 6 )

2001/5/4

MODEL NO:SWA-100CE-INFINITY

## PCBA ASSEMBLY PARTS

NO.	LEVEL	PART NUMBER	DESCRIPTION	SPEC	UNIT	Q'TY	REMARK
26	2.....	ERB-302MR22J	RES MO	3W 0.22Ω +-5%	EA	2	R45,R46
27	2.....	ERB-102L100J	RES MO	1W 10Ω+-5%	EA	1	R47
28	2.....	ERB-102Y560J	RES MO	1W 56Ω+-5%	EA	1	R44
29	2.....	ERB-202L102J	RES MO	2W 1K +-5%	EA	2	R01,R02
30	2.....	ERB-202K222J	RES MO	2W K 2K2 +-5%	EA	2	R55,R56
31	2.....	ERC-251Y2R0J	RES CF	1/4W 2Ω+-5%	EA	2	R40,R43
32	2.....	ERC-251Y101J	RES, 100 OHM	1/4W +-5%	EA	4	R31,R36,R38,R37
33	2.....	ERC-251Y102J	RES CF	1/4W Y 1K +-5%	EA	1	R42
34	2.....	ERC-251Y202J	RES CF	1/4W Y 2K +-5%	EA	1	R41
35	2.....	ERC-251Y682J	RES, 6K8 OHM	1/4W +-5%	EA	3	R30,R35,R34
36	2.....	ERC-251Y103J	RES, 10K OHM	1/4W +-5%	EA	1	R53
37	2.....	ERC-251Y223J	RES, 22K OHM	1/4W +-5%	EA	2	R05,R06
38	2.....	ERC-251Y473J	RES, 47K OHM	1/4W +-5%	EA	2	R07,R08
39	2.....	ERC-251Y823J	RES CF	1/4W Y 82K +-5%	EA	2	R32,R33
40	2.....	ERC-251Y104J	RES, 100K OHM	1/4W +-5%	EA	1	R39
41	2.....	ERC-251Y124J	RES CF	1/4W Y 120K +-5%	EA	2	R03, R04
42	2.....	ERC-121Y821J	RES CF	1/8W Y 820Ω +-5%	EA	1	R54
43	2.....	ERC-121Y562J	RES CF	1/8W Y 5K6 +-5%	EA	3	R52,R50,R51
44	2.....	ERC-121Y822J	RES CF	1/8W Y 8K2 +-5%	EA	1	R11
45	2.....	ERC-121Y103J	RES CF	1/8W Y 10K +-5%	EA	3	R09,R21,R25
46	2.....	ERC-121Y303J	RES CF	1/8W Y 30K +-5%	EA	1	R10
47	2.....	ERC-121Y333J	RES CF	1/8W Y 33K +-5%	EA	1	R48
48	2.....	ERC-121Y473J	RES CF	1/8W Y 47K +-5%	EA	2	R12,R49
49	2.....	ERC-121Y104J	RES CF	1/8W Y 100K +-5%	EA	7	R22,R28,R29,R13,R15,R18,R20
50	2.....	ERC-121Y392J	RES CF	1/8W Y 3K9 +-5%	EA	1	R24
51	2.....	ERC-121Y432J	RES CF	1/8W 4.3K +-5%	EA	1	R23

# BILL OF MATERIAL

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2001/5/4

MODEL NO:SWA-100CE-INFINITY

## PCBA ASSEMBLY PARTS

NO.	LEVEL	PART NUMBER	DESCRIPTION	SPEC	UNIT	Q'TY	REMARK
52	2.....	ERC-121Y273J	RES CF	1/8W Y 27K +-5%	EA	4	R14,R16,R17,R19
53	2.....	PCB-SWA100CE-JBL	AMP	PCB	EA	1	
54	2.....	WAS-7059	WIRE ASS'Y W/2P PLUG	600MM 18# BLK / RED	EA	1	SPEAK OUT
55	2.....	WAS-G7006	WIRE ASS'U W/3P 70MM	HOUSING*2 BLK 105°C	EA	1	Q11
56	2.....	W00-22*TAP52	WIRE TINNER COPPER	#22 52mm	EA	41	J01-J15,J17-J38,J124,J125,J128,J129

----- END -----

APPROVED :

CHECKED :

PREPARED :