

Service
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Service Manual

Technical Specifications

Mains Voltage	:	230V
Mains Frequency	:	50Hz
Output Power (55Hz, 10% THD)	:	40W at 4 ohm load
Input Sensitivity	:	< 220mV
S/N Ratio (100Hz, 200mV)	:	> 60dB*
Minimum Volume Hum & Noise	:	< 3mV
Frequency Response (-3dB)	Low	: <40Hz
	High	: 120Hz - 140Hz
Distortion (100Hz, 200mV)	:	< 1%*

* at Output level of 2V across 4 ohm load

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Version 1.0

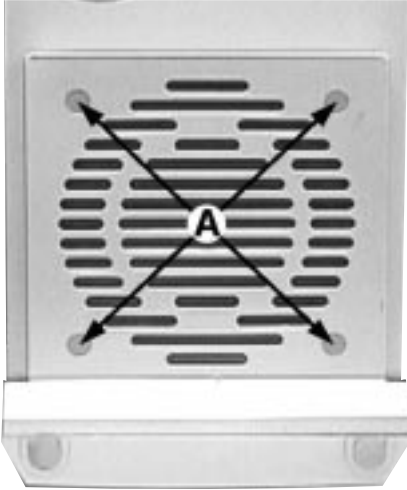


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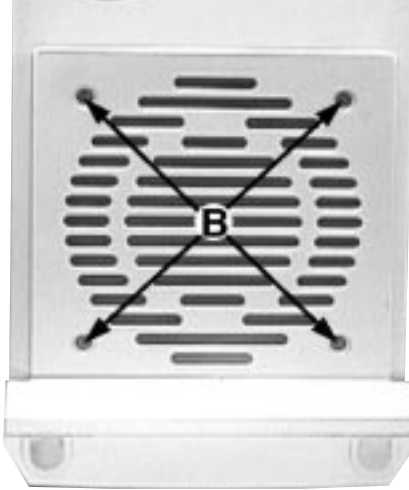
DISMANTLING INSTRUCTIONS

Dismantling the Grille Base & Speaker Driver

1. Place the Subwoofer Box upside down and remove the 4 Rubber Foot A (see Picture 1). Then unscrew 4 screws B (see Picture 2) to loosen the Grille Base (pos. 19).
2. Unscrew 4 screws C (see Picture 3) to remove the Speaker Driver (pos. 17).



Picture 1



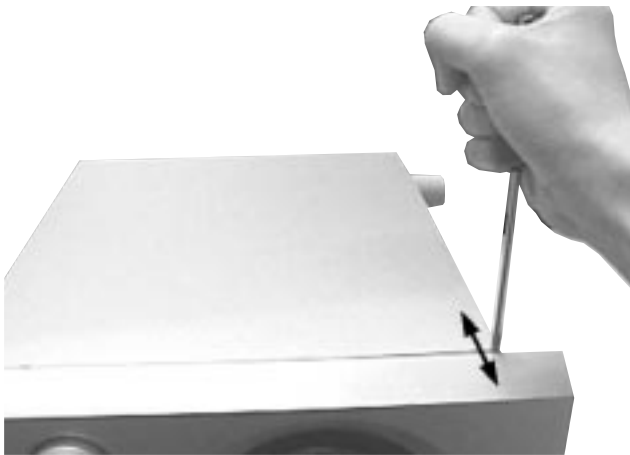
Picture 2



Picture 3

Dismantling the Front Assembly

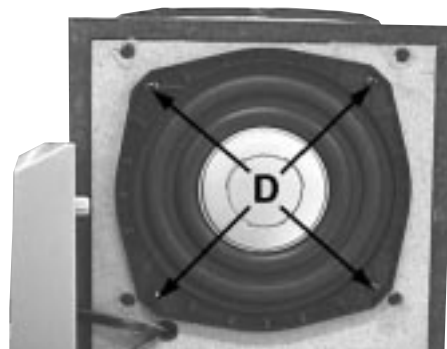
1. Place the Subwoofer Box as shown in the Picture 4 and Picture 5 and use a screw driver (minus type) to force open the front assembly.
Caution: Do not break the bundle of wires to the front.
2. Unscrew 4 screws D (see Picture 6) to remove the Woox Speaker (pos. 4).



Picture 5



Picture 4



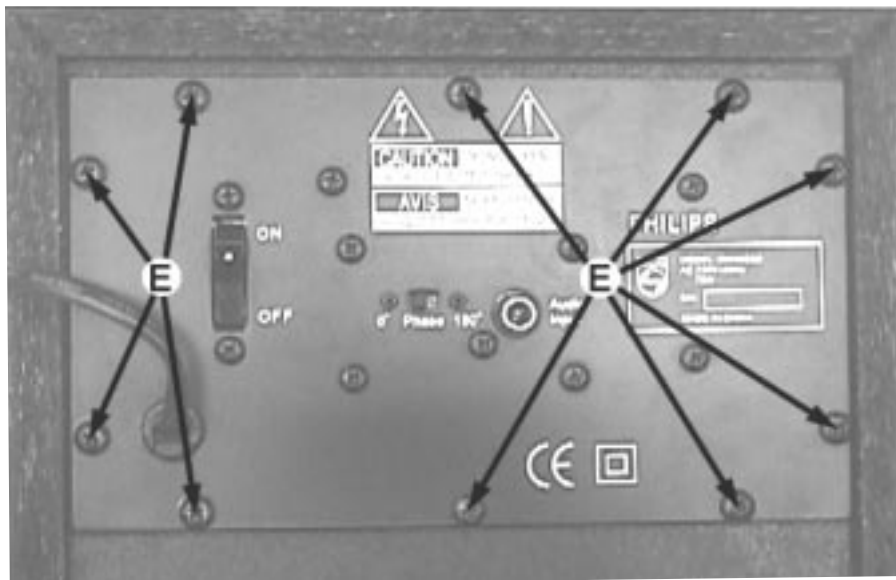
Picture 6

DISMANTLING INSTRUCTIONS

Dismantling the Rear Assembly

1. Unscrew 10 screws E (see Picture 7) to pull out the pc board assembly.

Caution: Do not break the bundle of wires to the front.

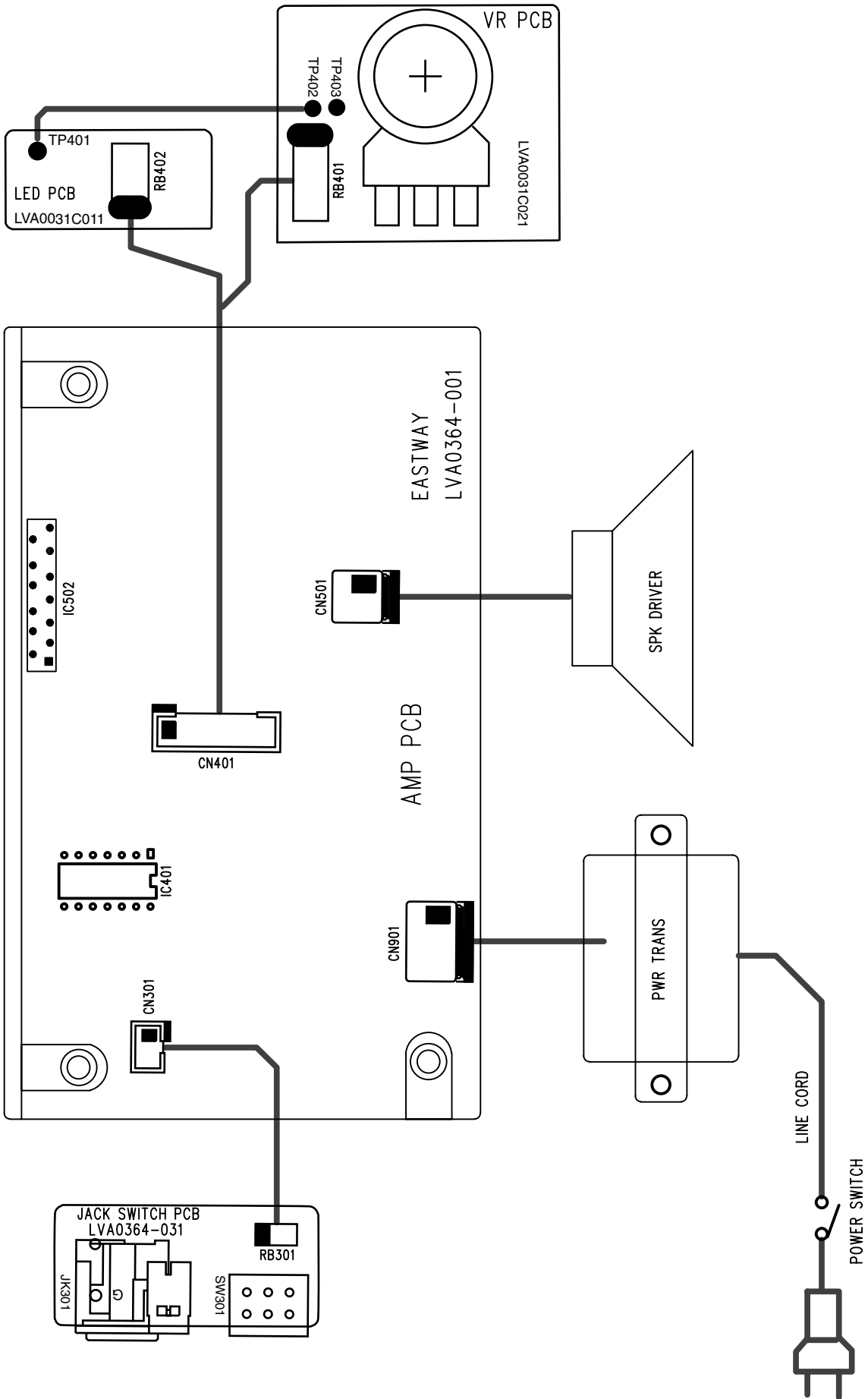


Picture 7

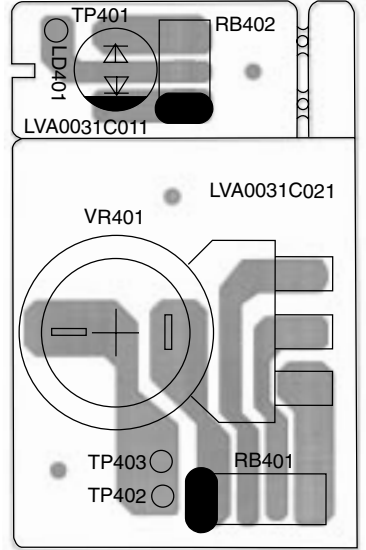
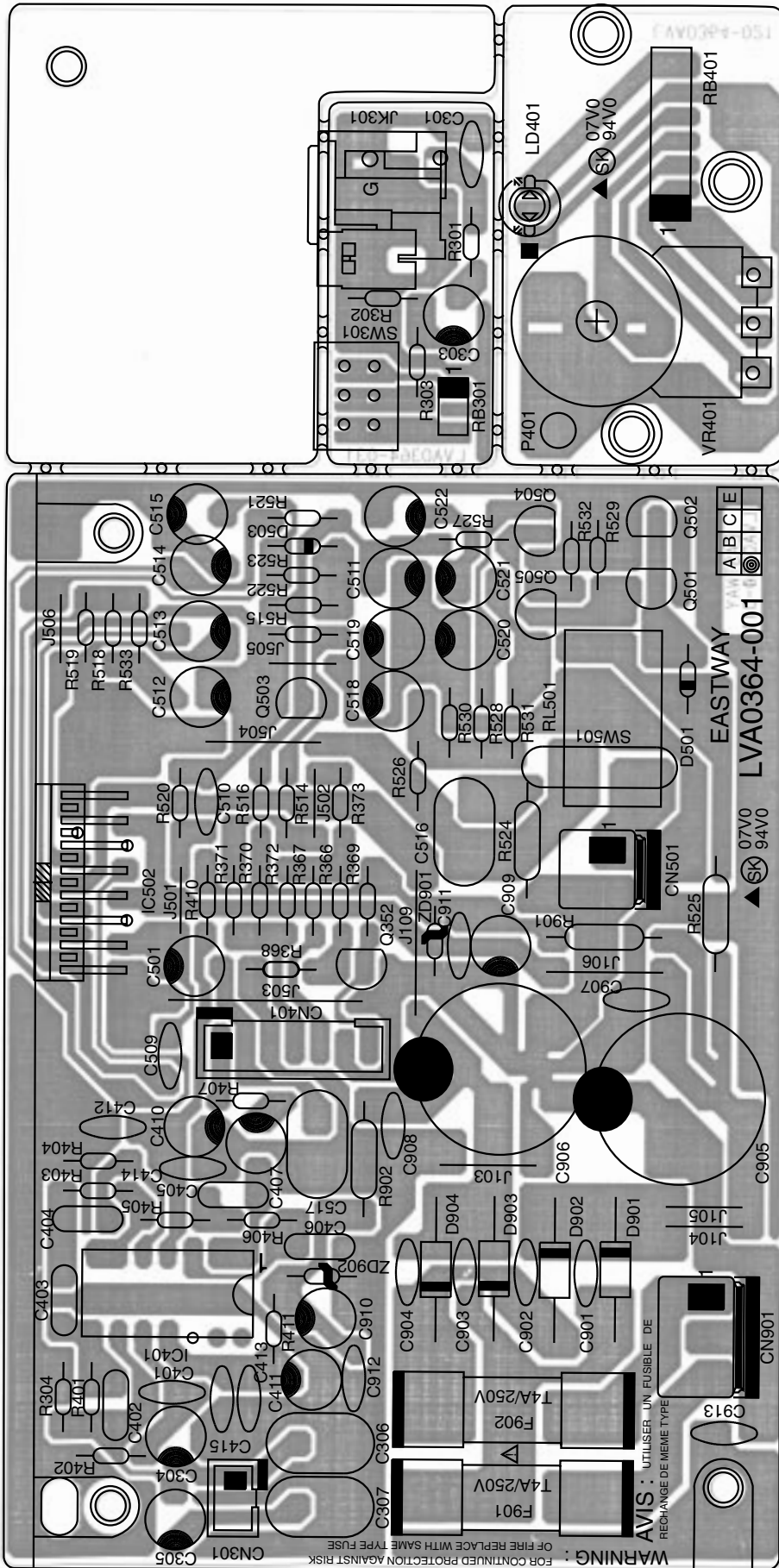
Service Position



WIRING DIAGRAM



COMPONENT LAYOUT



ELECTRICAL PARTS LIST**MISCELLANEOUS**

F901	4822 070 34002	△ Fuse T4A 250V
F902	4822 070 34002	△ Fuse T4A 250V
JK301	4822 267 41238	RCA Jack 1P
RL501	9965 000 09708	Relay GJ-SH-112DM 320OHM
SW301	4822 277 11821	Slide Switch
VR401	9965 000 08282	Control Rotary 50kB

C909	4822 124 40207	100µF 20% 25V
C910	4822 124 40207	100µF 20% 25V
C911	2038 554 00065	100nF +80/-20% 50V
C912	2038 554 00065	100nF +80/-20% 50V
C913	2038 554 00065	100nF +80/-20% 50V

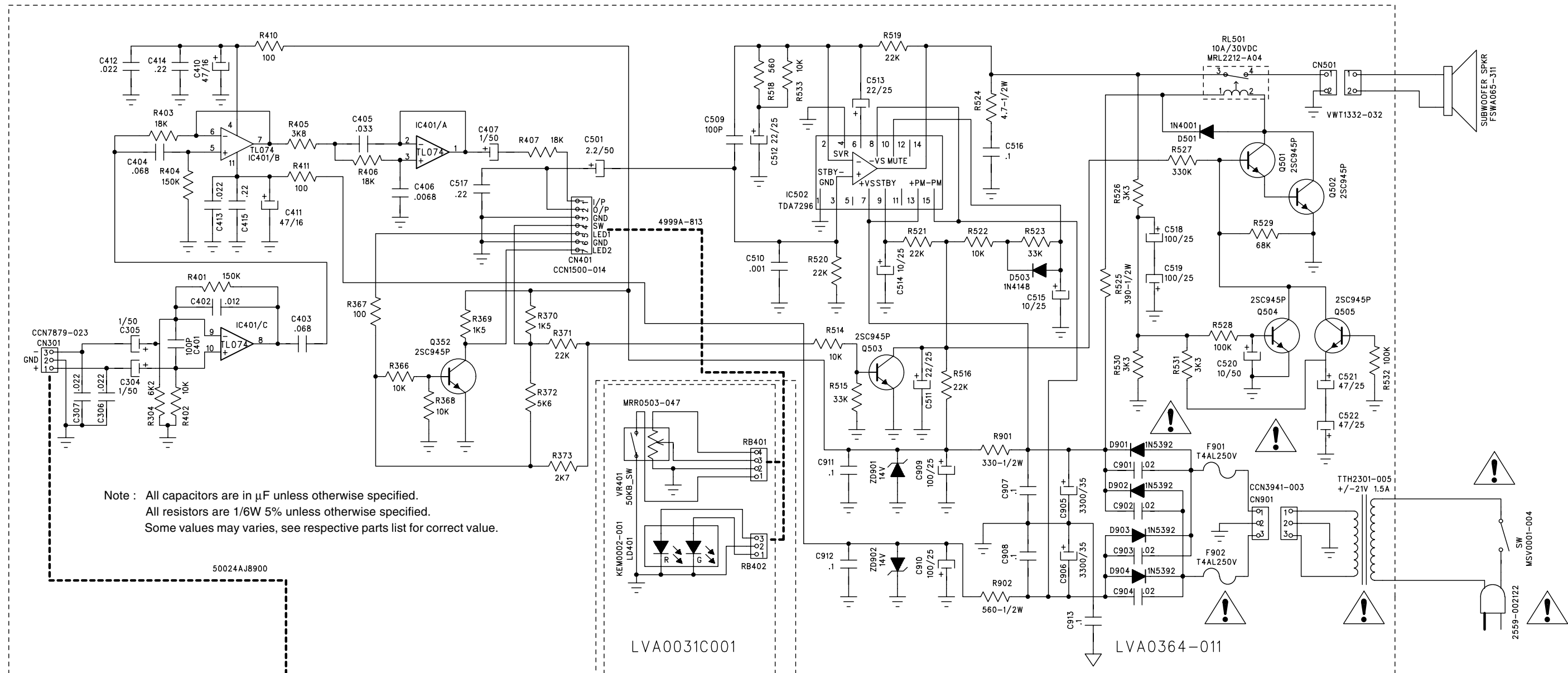
CAPACITORS

C301	4822 122 33293	100pF 5% 50V
C303	4822 124 21913	1µF 20% 63V
C304	4822 124 21913	1µF 20% 63V
C305	4822 124 21913	1µF 20% 63V
C306	9965 000 08286	0,022µF 5% 100V
C307	9965 000 08286	0,022µF 5% 100V
C401	4822 122 33293	100pF 5% 50V
C402	4822 121 41935	12nF 5% 250V
C403	5322 121 42662	68nF 5% 250V
C404	5322 121 42662	68nF 5% 250V
C405	5322 121 42489	33nF 5% 250V
C406	4822 121 42077	6,8nF 10% 400V
C407	4822 124 21913	1µF 20% 63V
C410	4822 124 23056	47µF 20% 16V
C411	4822 124 23056	47µF 20% 16V
C412	4822 122 30103	22nF 80% 63V
C413	4822 122 30103	22nF 80% 63V
C414	9965 000 03366	0,22µF +80/-20% 50V
C415	9965 000 03366	0,22µF +80/-20% 50V
C501	4822 124 22652	2,2µF 20% 50V
C509	4822 122 33293	100pF 5% 50V
C510	5322 122 32331	1nF 10% 100V
C511	5322 124 41945	22µF 20% 35V
C512	5322 124 41945	22µF 20% 35V
C513	5322 124 41945	22µF 20% 35V
C514	4822 124 40248	10µF 20% 63V
C515	4822 124 40248	10µF 20% 63V
C516	5322 121 42578	100nF 5% 250V
C517	9965 000 08287	0,22µF 5% 100V
C518	4822 124 40207	100µF 20% 25V
C519	4822 124 40207	100µF 20% 25V
C520	4822 124 40248	10µF 20% 63V
C521	4822 124 40433	47µF 20% 25V
C522	4822 124 40433	47µF 20% 25V
C901	4822 122 30103	22nF 80% 63V
C902	4822 122 30103	22nF 80% 63V
C903	4822 122 30103	22nF 80% 63V
C904	4822 122 30103	22nF 80% 63V
C905	4822 124 42402	3300µF 20% 35V
C906	4822 124 42402	3300µF 20% 35V
C907	2038 554 00065	100nF +80/-20% 50V
C908	2038 554 00065	100nF +80/-20% 50V

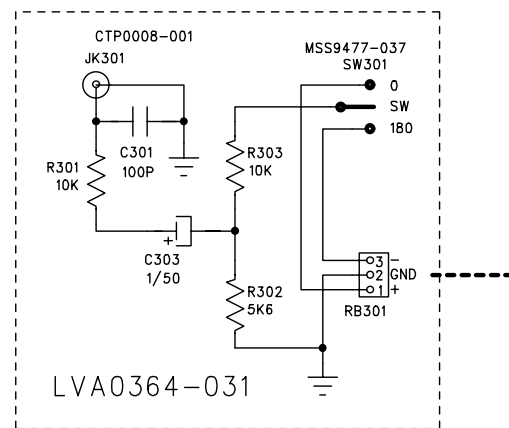
RESISTORS

R301	4822 050 21003	10k 1% 0,6W
R302	4822 050 25602	5k6 1% 0,6W
R303	4822 050 21003	10k 1% 0,6W
R304	4822 050 26202	6k2 1% 0,6W
R366	4822 050 21003	10k 1% 0,6W
R367	4822 050 21001	100R 1% 0,6W
R368	4822 050 21003	10k 1% 0,6W
R369	4822 050 21502	1k5 1% 0,6W
R370	4822 050 21502	1k5 1% 0,6W
R371	4822 050 22203	22k 1% 0,6W
R372	4822 050 25602	5k6 1% 0,6W
R373	4822 050 22702	2k7 1% 0,6W
R401	4822 050 21504	150k 1% 0,6W
R402	4822 050 21003	10k 1% 0,6W
R403	9965 000 08285	18k 5% 1/6W
R404	4822 050 21504	150k 1% 0,6W
R405	9965 000 08283	3,8k 5% 1/6W
R406	9965 000 08285	18k 5% 1/6W
R407	9965 000 08285	18k 5% 1/6W
R410	4822 050 21001	100R 1% 0,6W
R411	4822 050 21001	100R 1% 0,6W
R514	4822 050 21003	10k 1% 0,6W
R515	4822 050 23303	33k 1% 0,6W
R516	4822 050 22203	22k 1% 0,6W
R518	4822 050 25601	560R 1% 0,6W
R519	4822 050 22203	22k 1% 0,6W
R520	4822 050 22203	22k 1% 0,6W
R521	4822 050 22203	22k 1% 0,6W
R522	4822 050 21003	10k 1% 0,6W
R523	4822 050 23303	33k 1% 0,6W
R524	4822 116 81753	4R7 5% 0,5W
R525	4822 050 23901	390R 1% 0,6W
R526	4822 050 23302	3k3 1% 0,6W
R527	4822 050 23304	330k 1% 0,6W
R528	4822 050 21004	100k 1% 0,6W
R529	4822 050 26803	68k 1% 0,6W
R530	4822 050 23302	3k3 1% 0,6W
R531	4822 050 23302	3k3 1% 0,6W
R532	4822 050 21004	100k 1% 0,6W
R533	4822 050 21003	10k 1% 0,6W
R901	4822 050 23301	330R 1% 0,6W
R902	4822 050 25601	560R 1% 0,6W

CIRCUIT DIAGRAM



Note : All capacitors are in μF unless otherwise specified.
 All resistors are 1/6W 5% unless otherwise specified.
 Some values may varies, see respective parts list for correct value.



ELECTRICAL PARTS LIST

DIODES

D501	4822 130 31438	1N4001G
D503	4822 130 30621	1N4148
D901	4822 130 31878	1N4003G
D901	5322 130 80686	1N5392
D902	4822 130 31878	1N4003G
D902	5322 130 80686	1N5392
D903	4822 130 31878	1N4003G
D903	5322 130 80686	1N5392
D904	4822 130 31878	1N4003G
D904	5322 130 80686	1N5392

LD401	4822 130 10236	LED Green/Red
ZD901	4822 130 34195	BZX79-B13
ZD902	4822 130 34195	BZX79-B13

TRANSISTORS & INTEGRATED CIRCUITS

IC401	4822 209 32742	TL074CN
IC502	4822 209 16935	TDA7296
Q352	4822 130 41198	2SC945P
Q501	4822 130 41198	2SC945P
Q502	4822 130 41198	2SC945P

Q503	4822 130 41198	2SC945P
Q504	4822 130 41198	2SC945P
Q505	4822 130 41198	2SC945P

Note : Only the parts mentioned in this list are normal service spare parts.

EXPLODED VIEW

MECHANICAL PARTS LIST

1	9965 000 12141	Volume Knob
2	9965 000 12142	Bar Trim (Lens)
3	9965 000 12143	Front Cabinet
4	9965 000 12144	Woox Speaker
9	9965 000 09700	Foot
11	9965 000 09701	Foot D30X35mm
14	9965 000 09702	Rubber Pad
15	4822 532 13065	Speaker Sponge
16	9965 000 08277	Port Tube
17	9965 000 08278	Speaker Driver 100W 6,5" 4 ohm
18	9965 000 08279	Port Tube
19	9965 000 12145	Grille Base
21	9965 000 09704	Rubber Foot
35	9965 000 09705	△ Mains Cord
37	9965 000 07092	Bushing
39	9965 000 09707	△ SW Rocker 5A AC 250V TV-5
45	9965 000 09706	△ Power Transformer EI-66 230V 40W
	9965 000 09734	RCA Cable L=3000mm

Note: Only the parts mentioned in this list are normal service spare parts.

SCREW LIST

6	M3 x 6
7	M3 x 8
10	M3.5 x 14
12	M4 x 28
13	M4 x 25
20	M3.5 x 28
27	M3 x 8
28	M3 x 14
33	M3 x 10
34	M2 x 6
36	M3 x 12

