



Technical Manual

SEVEN CHANNEL POWER AMPLIFIER RMB-1077

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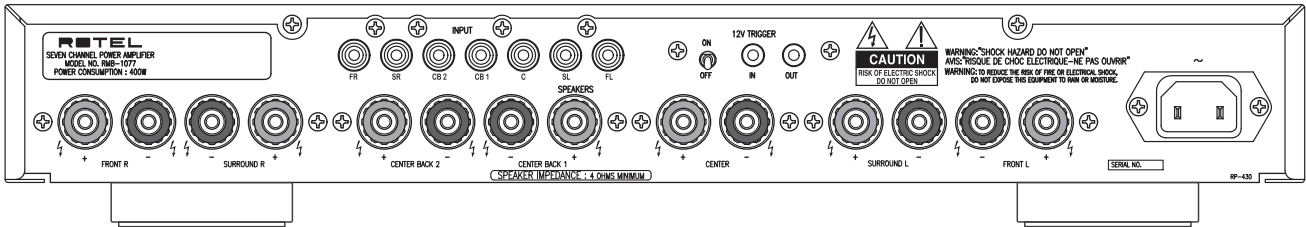
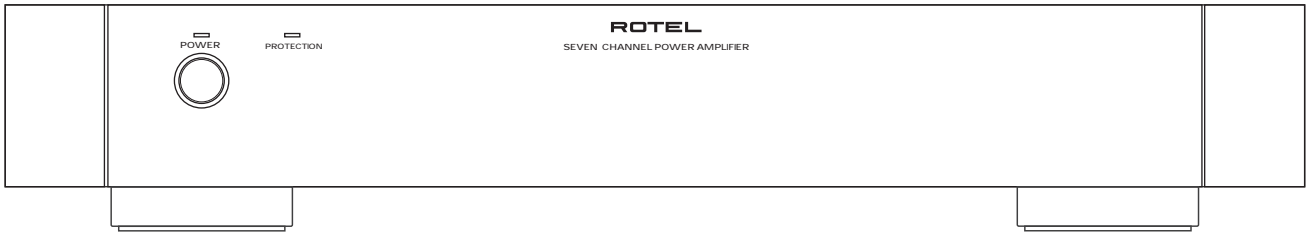
Specification

Power Configurations (FTC) Watts/Channel	7 x 100 watts/ch into 8 ohms 100 watts, all channel driven, with 20KHz filter, 8 ohm load, 20-20kHz, 0.03% THD
Total Harmonic Distortion(20-20kHz, 8 ohms)	< 0.03 %
Power Output (4 Ohms, 0.09%, THD)	200 watts
Intermodulation Distortion(60Hz : 7kHz, 4:1)	< 0.03 %
Dampning Factor(8 ohms)	400
Amp Gain	27.4 dB
Input Sensitivity / Impedance	1.2 volts / 8.3 k ohms
Frequency Response	10 Hz - 80 KHz (±3dB)
Signal to Noise Ratio(IHF A network)	105 dB
Power Requirement	
USA	120 volts 60 Hz
Europe	230 volts 50 Hz
Power Consumption	400 watts 70 watts - Idling 3 watts - Standby
Dimensions (W x H x D)	432 x 72 x 415 mm 17 1/8 x 27/8 x 16 3/8 inches
Panel Height	60 mm, 2 3/8 inches
Weight (net)	7.8 kg, 17.2 Lb.

THE ROTEL CO., LTD

10-10 SHINSEN-CHO , SHIBUYA-KU,
TOKYO 150-0045, JAPAN

Serial. NO.



Please request:

When the fault are in the 250A or 250ASP module,
replace the module and send back the modules later.

SYMBOL	PARTS NO.	DESCRIPTION
016 X-1415A01-03 PCB ASSY		
	501 X-1415	PCB ASSY
D94,95	019 TO-220	MICA SHEET TBM-51W-15 #9036
L9	021 2648701170	LINE FILTER COIL
L1-7	021 LF-173A00	FILTER COIL
IC11-15	031 AD629AN	IC (DIFFERENCE AMP)
IC19-21	031 NJM2901N	IC (QUAD COMPARATOR)
IC16-18	031 NJM4558DD	IC (OPE DUAL)
Q10-13	032 TA608-FG	TRANSISITOR 2SA608KAA-FG
Q14-17,70-73,91	032 TC536-FG	TRANSISITOR 2SC536KAA-FG
D94,95	034 IRL1605C	DIODE
D91-93	034 T1N4148-86	DIODE 1N4148TAP-50
D10-19	034 TRD5.6JST1	ZENER DIODE 5.6V (AB2)
C90-94	041 EEUFC1J102	ELECTROLYTIC CAPACITOR 63V1000uF
C21-24	041 TUTES1C101-7TF	ELECTROLYTIC CAPACITOR 16V100uF
C19,20	041 TUTES1H100-7TF	ELECTROLYTIC CAPACITOR 50V10uF
C71,72	041 TUTES1H2R2-7TF	ELECTROLYTIC CAPACITOR 50V2.2uF
C96	043 TC50V220	CERAMIC CAPACITOR 22pF
C15-18	043 TC50V331	CERAMIC CAPACITOR 330pF
C10-14	043 TC50VCH100	CERAMIC CAPACITOR 10pF
C95	044 DE1307E472M	SPARK KILLER 4700pF
C97	044 ECQU2A105KL	SPARK KILLER 275V1uF
R40-55,91,92	053 CR16-103J-A	CARBON RESISTOR 1/6W 10K
R25-29,70,71	053 CR16-104J-A	CARBON RESISTOR 1/6W 100K
R58,59,72-75	053 CR16-224J-A	CARBON RESISTOR 1/6W 220K
R76	053 CR16-272J-A	CARBON RESISTOR 1/6W 2.7K
R20-24,30-39	053 CR16-332J-A	CARBON RESISTOR 1/6W 3.3K
R56,57	053 CR16-473J-A	CARBON RESISTOR 1/6W 47K
R90	054 2WS10JF	MOF RESISTOR 2WS 10R
R10-14	054 BPR56C0.01	RESISTOR BPR56 0.01R(J) STRAIGHT
R94	054 MOF12-3M3	MOF RESISTOR 1/2W 3.3M
R93	054 MPC71-1F	MPC71 1R(K)
R0-R9	054 TMFR4180R	STANDARD METAL RESISTOR 180
S901	061 C-4176A07	POWER SWICH PS3-22-P3AV TV-8 (4P PCB)
JP1,2	066 4TR-2709#11	2P PIN JACK AU (BLACK)
PJ3	066 4TR-2964#13	3P PIN JACK AU (BLACK)
SP1,3,4	067 C-4761A01	4P SPEAKER TERMINAL
SP2	067 C-4762A01	2P SPEAKER TERMINAL
D002	068 B2B-EH	CONNECTOR WAFER 2P
K11C,K17C	068 B2B-PH-KS	CONNECTOR WAFER 2P
AC4	068 B2P3-VH	CONNECTOR WAFER 2P
K12C,K13C,K14C,K15C,K16C	068 B4B-PH-KS	CONNECTOR WAFER 4P
K22C,K23C,K24C,K25C,K26C	068 B4P-VH	CONNECTOR WAFER 4P
E1	068 C-3681#1	PCB TERMINAL 2P P5.0 TP WD-01 I-502NA
016 X-1438A01-02 PCB ASSY		
	501 X-1438	PCB ASSY
T101	022 T-1075NO2	SUB TRANSFORMER
IC101	031 PC817X2	PHOTO COUPLER
Q101	032 TC3708-ST	TRANSISITOR 2SC3708AA-ST
D102,103,104,106,107	034 T1N4148-86	DIODE 1N4148TAP-50
D105	034 TRD12JST1	ZENER DIODE 12V (AB2)
D101	034 W02M	POWER DIODE 1.5A 200V
C101	041 TUTES1E471-7TS	ELECTROLYTIC CAPACITOR 25V470uF
C102,103	044 DE1307E472M	SPARK KILLER 4700pF
R105	053 CR14-221J-A	CARBON RESISTOR 1/4W 220

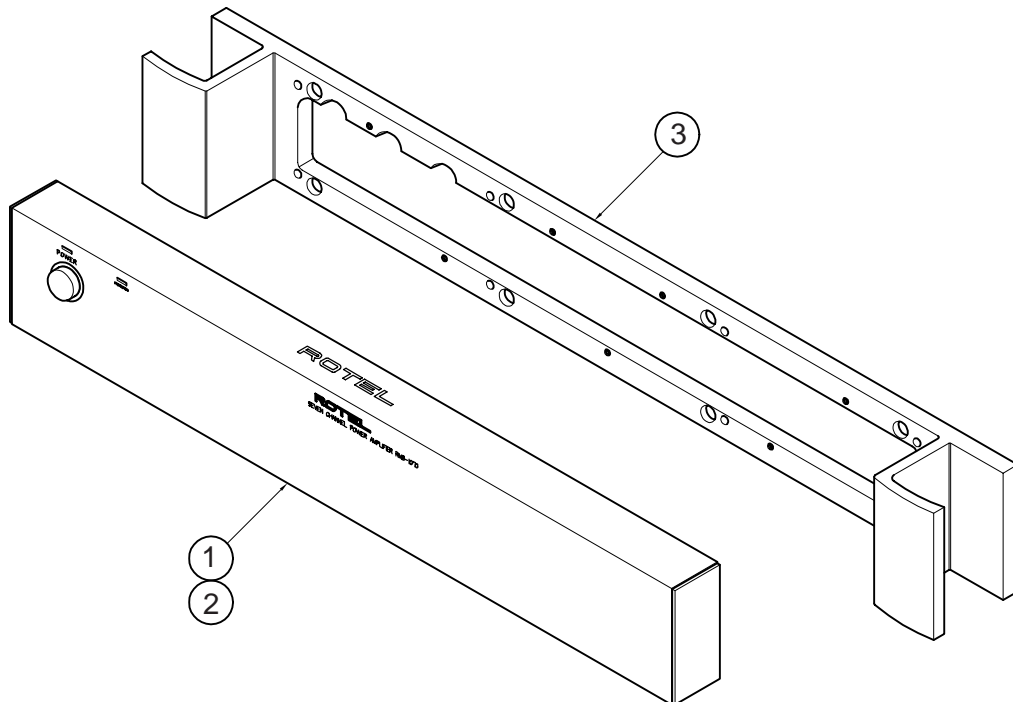
SYMBOL	PARTS NO.	DESCRIPTION
(R103)	053 CR14-272J-A	CARBON RESISTOR 1/4W 2.7K
(R103)	053 CR14-472J-A	CARBON RESISTOR 1/4W 4.7K
R102	053 CR16-333J-A	CARBON RESISTOR 1/6W 33K
R101,109	054 1WS120JF	MOF RESISTOR 1WS 120R
R104	054 1WS1KJF	MOF RESISTOR 1WS 1K
R107,108	054 ERQ12AJ2R2P	FUSIBLE RESISTOR 1/2W 2.2R
RY101,102	063 OZT-SS-112LM1	RELAY DC12V TV8
S101	064 C-4613A01	TOGGLE SW 200DP1T2B2M7RE
TJ101,TJ102	065 YKB21-5103A	3.5Φ MINIATURE JACK (ST)
K102	068 B2B-EH	CONNECTOR WAFER 2P
K101	068 B3B-EH	CONNECTOR WAFER 3P
AC1,AC2	068 C-3683#1	PCB TERMINAL 2P P7.5 TP WE-11 I-752NA
OTHERS		
	011 FP-586-B	FRONT PANEL ASSY (BLACK)
	011 FP-586-S	FRONT PANEL ASSY (SILVER)
	011 VA3-01A00	H/S PANEL
	012 RV4-09A00	PUSH BUTTON 14Φ (BLACK)
	012 RV4-09A01	PUSH BUTTON 14Φ (SLIVER)
	014 C-4884A00	SIDE CAPACITOR H=60mm (BLACK)
	015 RP-430	REAR CHASSIS
	015 VA3-03A00	FRONT CHASSIS
	019 C-4714A00	POWER KNOB RING 14Φ (BLACK)
	019 C-4714A01	POWER KNOB RING 14Φ (SLIVER)
	019 C-670#18	FELT 56Φ
	019 PK4-07A00T	METAL FOOT 60Φ
	034 SEL1124R	LED (RED) 1X5
	034 SEL1E24W	LED (BLU) 1X5
	036 5ST2.5	FUSE 250VT2.5A
	036 5ST3.15	FUSE 250VT3.15A
	036 5ST3.15	FUSE 250VT3.15A
	069 C-4629A01	AC 2P INLET 6102.3100 (WIRING)
	072 C-4621A03	AC CORD SET SJT AWG16 UL for USA
	072 C-4622A02	AC CORD SET for AUSTRALIA
	072 C-4624A03	AC CORD SET for EUROPE
	081 VA3-14A00	INSIDE CARTON
	081 VA3-15A00	SHIPPING CARTON
	081 Z-215	ETHAFOAM MOULDING
	082 OMRMB-1077	OWNER'S MANUAL (E)
SL, SR, C, CB1, CB2	092 ICEPOWER250A	DIGITAL AMP ASSY
FL, FR	092 ICEPOWER250ASP	DIGITAL AMP ASSY (WITH POWER SUPPLY)

Addendum List for Black and Silver

RMB-1077

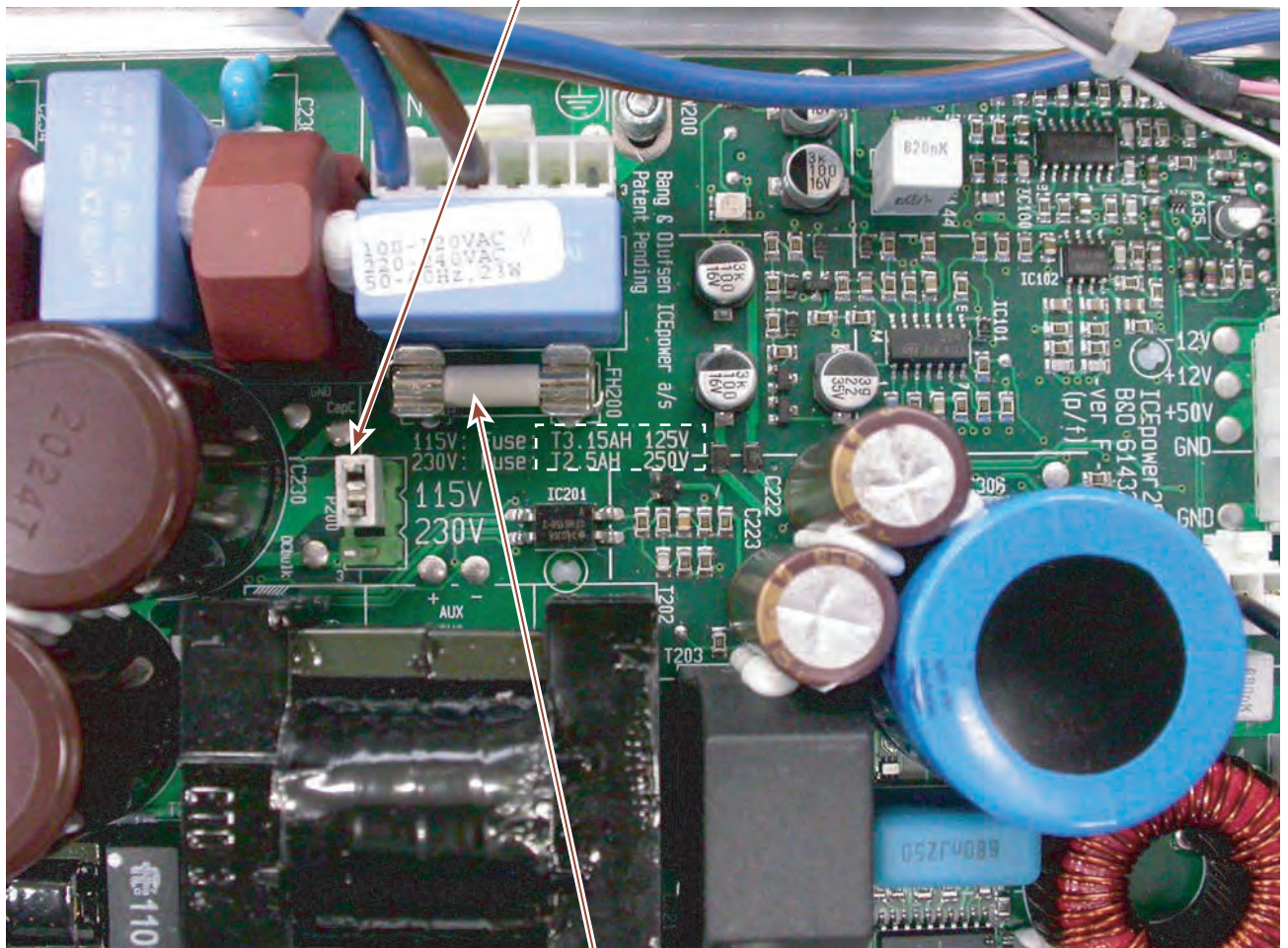
SYMBOL	PARTS	DESCRIPTION
①	011 FP-586-B	BLACK PANEL ASSY
②	011 FP-586-S	SILVER PANEL ASSY
③	011 VA3-01A00	H/S PANEL H60
	012 RV4-09A00	PUSH BUTTON 14F (BLK)
	012 RV4-09A01	PUSH BUTTON 14F (SLV)
	034 SEL1124R	LED (RED) 1X5
	034 SEL1E24W	LED (BLU) 1X5

Panel Assy is included:
 Side Cap
 Knob Ring
 LED



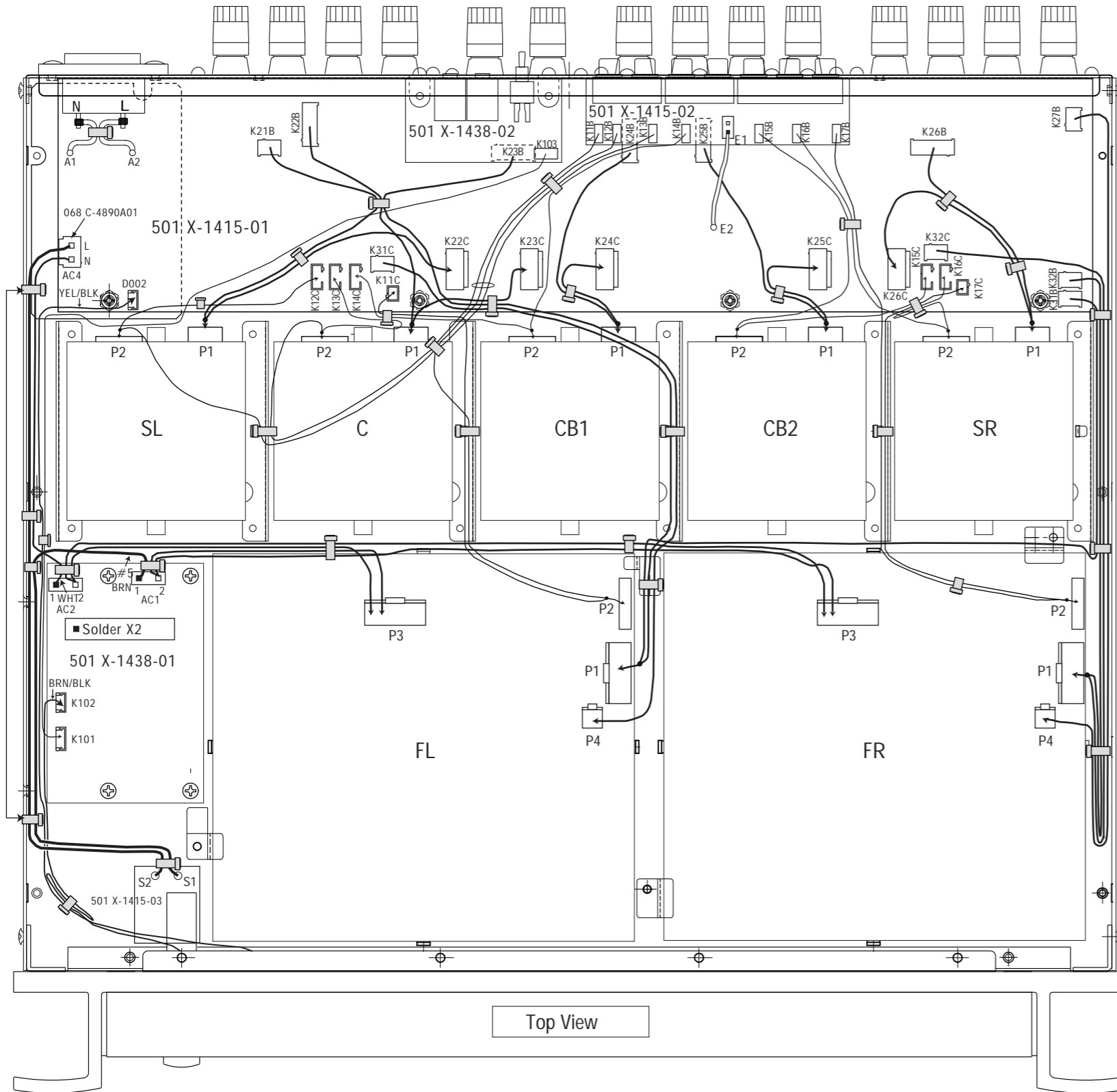
1. find the Setting Jumper and FUSE in the FL and FR 092 ICEPOWER250ASP.
2. Set the Jumper to the destination country voltage on both PCB's.
3. Replace the fuse value to the destination. T3.15A for 115V and T2.5A for 230V.
4. Rewire the Jumper wire on the PCB 016 X-1438A01. Use J101 for 115V and J102 for 230V.

Setting Jumper for the Destination
115V or 230V on both PCB's



Using Fuses
T3.15 for 115V, T2.5A for 230V on both PCB's

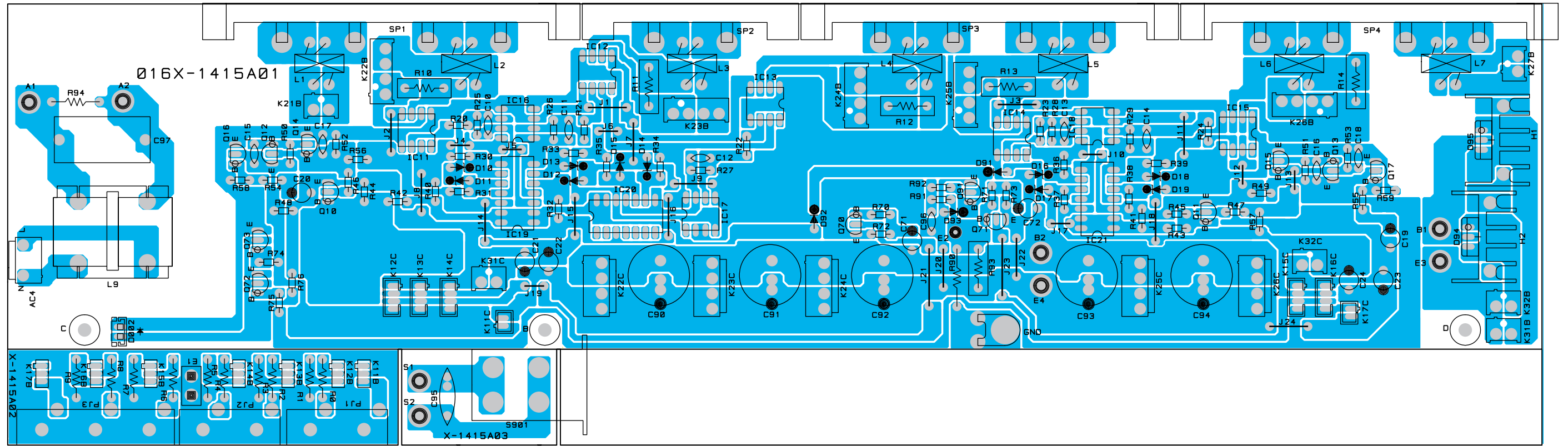
Wiring Diagram



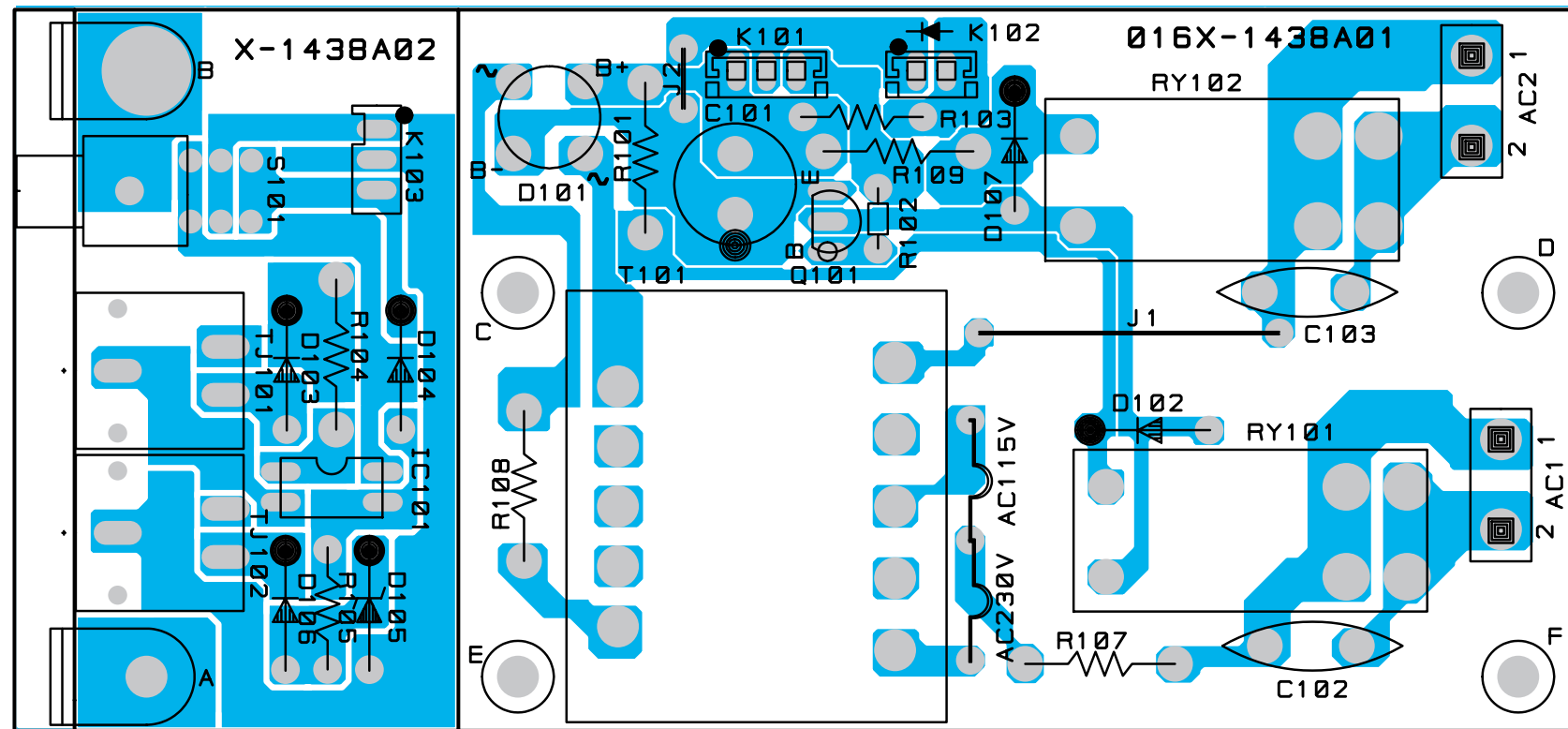
Wiring	CNT ASSY / WIRE	From	To 1	To 2
1	068 C-4586A01 (2P 270mm BRN/BLK)	POWER LED	X-1438-01 (K102)	
2	068 C-4586A06 (2P 420mm YEL/BLK)	PROTECTION LED	X-1415-01 (D002)	
3	073 RMB-1077-P#5 (BRN 220mm)	X-1415-03 (S1)	X-1438-01 (AC1-1)	
4	068 C-4890A01 (BRN)	X-1415-03 (S2)	X-1415-01 (AC4 -L, N)	
5	068 C-4890A01 (WHT)	X-1415-01 (AC4 -L)	X-1438-01 (AC2-1)	
6	073 RMB-1077-P#7 (WHT 80mm)	X-1415-01 (A1)	AC INLET (N)	
7	073 RMB-1077-P#9 (BRN 80mm)	X-1415-01 (A2)	AC INLET (L)	
8	073 RMB-1077-P#15 (BRN 80mm)	X-1415-01 (E2)	X-1415-02 (E1)	
9	068 C-4879A02 (4P 130/130mm)	X-1415-01 (K22B)	250A SL (P1)	X-1415-01 (K22C)
10	068 C-4879A01 (4P 130/70mm)	X-1415-01 (K23B)	250A C (P1)	X-1415-01 (K23C)
11	068 C-4879A01 (4P 130/70mm)	X-1415-01 (K24B)	250A CB1 (P1)	X-1415-01 (K24C)
12	068 C-4879A01 (4P 130/70mm)	X-1415-01 (K25B)	250A CB2 (P1)	X-1415-01 (K25C)
13	068 C-4879A02 (2P 130/130mm)	X-1415-01 (K26B)	250A SR (P1)	X-1415-01 (K26C)
14	068 C-4753A02 (2P 340/340mm)	X-1415-01 (K21B)	250ASP FL (P4)	
15	068 C-4885A01 (6P 380/240mm)	X-1415-01 (K31B), (K31C)	250ASP FL (P1)	
16	068 C-4753A02 (2P 340/340mm)	X-1415-01 (K27B)	250ASP FR (P4)	
17	068 C-4885A01 (6P 380/240mm)	X-1415-01 (K32B), (K32C)	250ASP FR (P1)	
18	068 C-4878A01 (9P 210/260mm)	X-1415-02 (K11B)	250ASP FL (P2)	
19	068 C-4878A01 (9P 210/260mm)	X-1415-02 (K17B)	250ASP FR (P2)	
20	068 C-4878A02 (8P 100/260mm)	X-1415-02 (K12B)	250A SL (P2)	X-1415-01 (K12C)
21	068 C-4878A02 (8P 100/260mm)	X-1415-02 (K13B)	250A C (P2)	X-1415-01 (K13C)
22	068 C-4878A03 (8P 100/140mm)	X-1415-02 (K14B)	250A CB1 (P2)	X-1415-01 (K14C)
23	068 C-4878A03 (8P 100/140mm)	X-1415-02 (K15B)	250A CB2 (P2)	X-1415-01 (K15C)
24	068 C-4878A03 (8P 100/140mm)	X-1415-02 (K16B)	250A SR (P2)	X-1415-01 (K16C)
25	068 C-4588A09 (3P 420mm)	X-1438-02 (K103)	X-1438-01 (K101)	
26	068 C-4666A06 (6P 170mm)	250ASP (FL -P3)	X-1438-01 AC1-2 (BRN), AC2-2 (BLU)	
27	068 C-4666A07 (6P 330mm)	250ASP (FR -P3)	X-1438-01 AC1-2 (BRN), AC2-2 (BLU)	

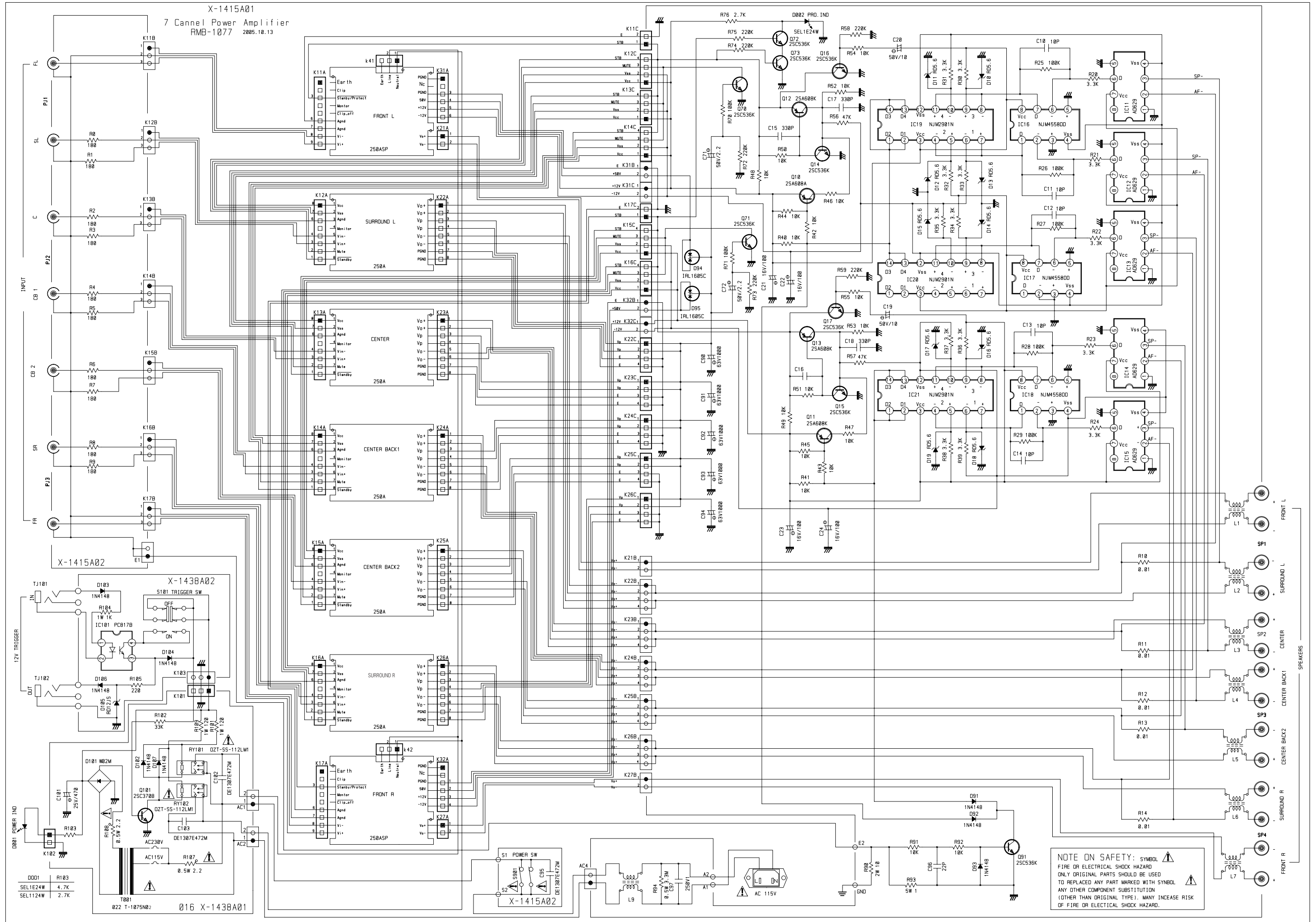
Output and Protection PCB

016 X-1415A01 - 03



Sub Transformer PCB
016 X-1438A01 -02





DD01	R183
SEL1E24W	4.7K
SEL124W	2.7K

NOTE ON SAFETY: SYMBOL ⚠
 FIRE OR ELECTRICAL SHOCK HAZARD
 ONLY ORIGINAL PARTS SHOULD BE USED
 TO REPLACE ANY PART MARKED WITH SYMBOL
 ANY OTHER COMPONENT SUBSTITUTION
 (OTHER THAN ORIGINAL TYPE) MANY INCREASE RISK
 OF FIRE OR ELECTRICAL SHOCK HAZARD.