

Service Manual

National
RADIO
Panasonic

K



AC ADAPTOR.....RD-9480B

FM/AM 4-BAND PORTABLE RADIO

MODEL **RF-966MB**

■ SPECIFICATIONS

Frequency Range:	FM 87.5~108 MHz MW 520~1610 kHz (577~186m) Marine 1.6~4.5 MHz (187~66.7m) SW 5.9~18 MHz (50.8~16.7m)	(National UM-2 or equivalent) AC (Using AC Adaptor RD-9480B) 50-60 Hz, 110~125V/220~240V
Intermediate Frequency:	FM 10.7 MHz AM (MW, Marine & SW) 455 kHz	Speaker: 10 cm (4") PM Dynamic Speaker
Sensitivity:	FM 2 μ V for 50 mW Output MW 20 μ V/m for 50 mW Output Marine 10 μ V/m for 50 mW Output SW 3 μ V for 50 mW Output	Dimensions: 235(Wide) x 213(High) x 78(Deep) mm (9 $\frac{1}{4}$ " x 8 $\frac{3}{8}$ " x 3 $\frac{1}{16}$ ")
Power Output:	3.3W Maximum	Weight: 1.65 kg. (3 lb. 10.2 oz.) without batteries
Power Source:	Battery: 6V (Four "C" Size Flashlight Batteries)	Impedance: Speaker.....8 Ω Earphone Jack.....8 Ω Din Jack Phono500k Ω REC OUT80k Ω

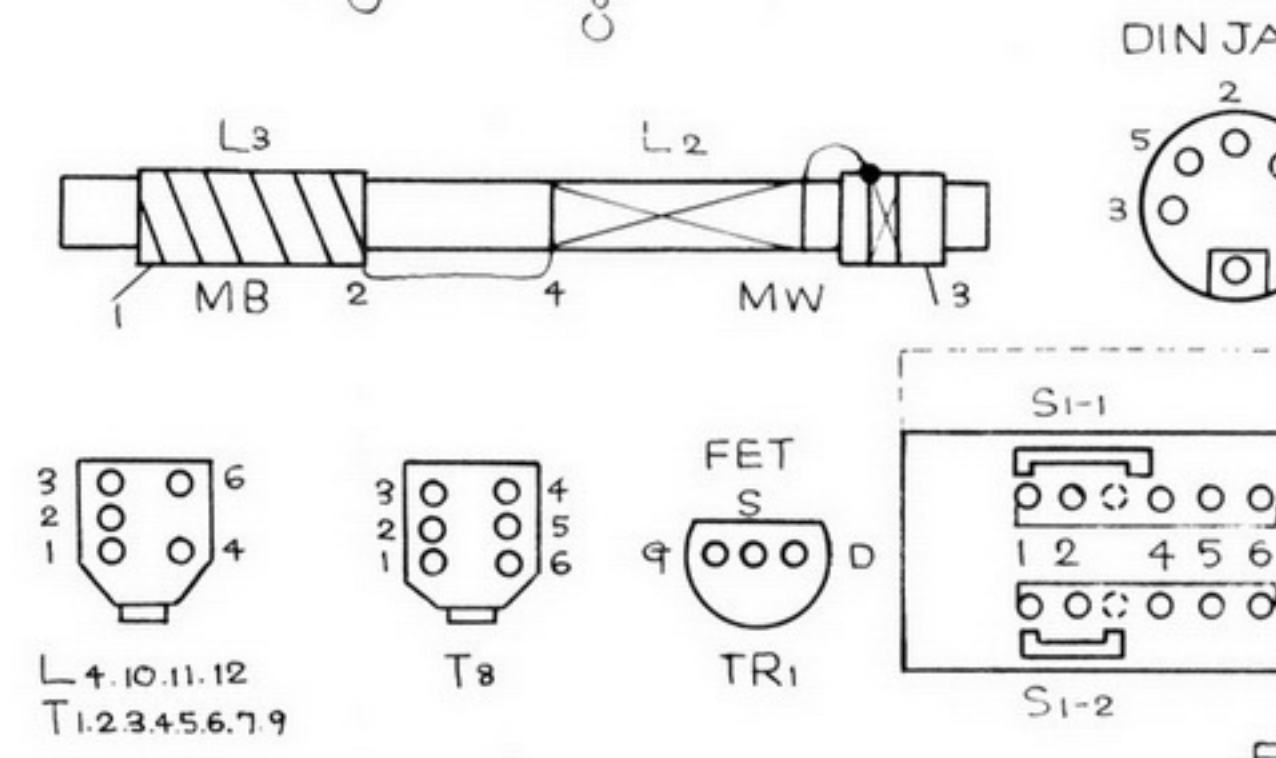
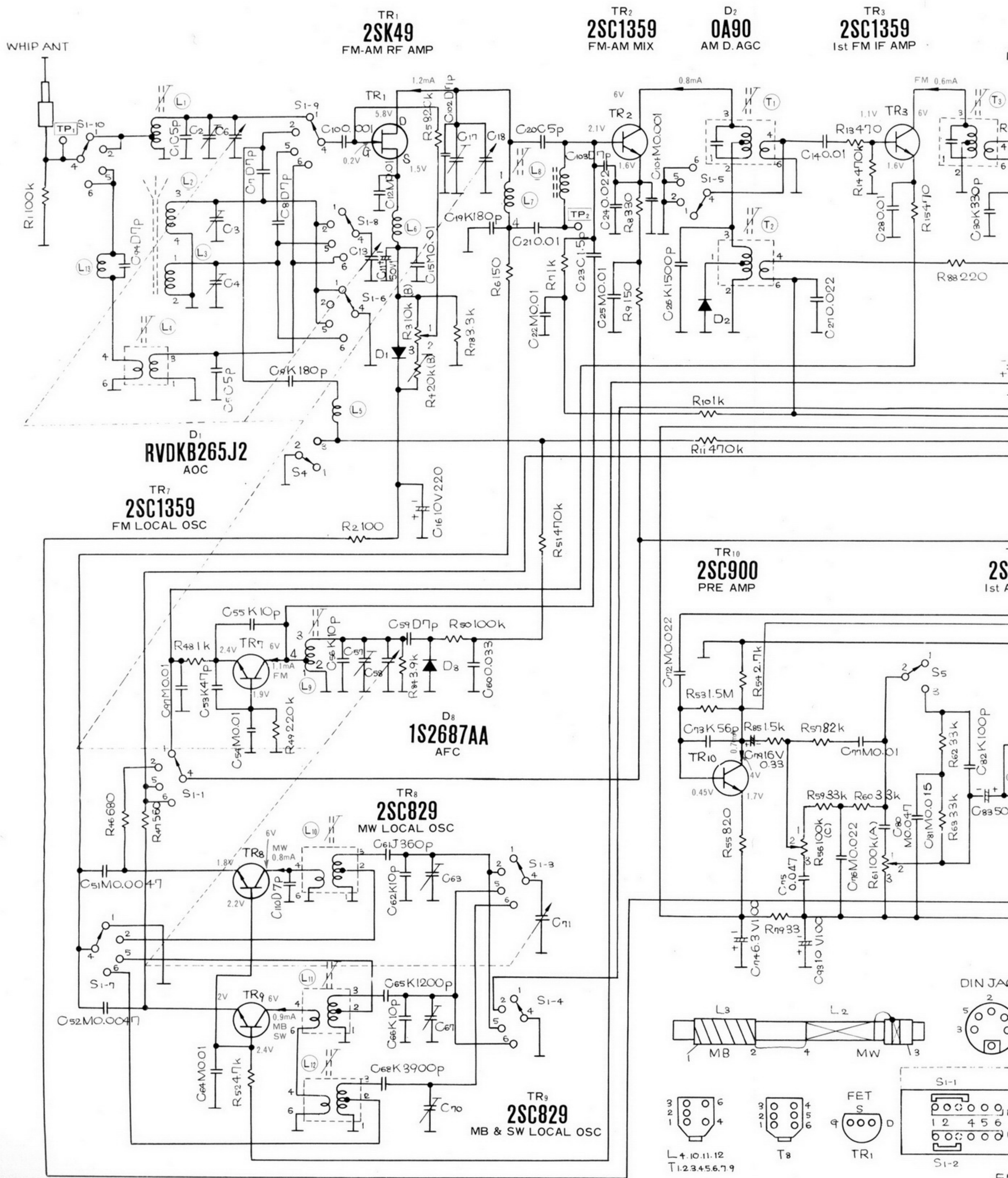
Specification are subject to change without notice for further improvement.

Matsushita Electric Industrial Co., Ltd.
MATSUSHITA ELECTRIC TRADING CO., LTD.

Panasonic RF 966 MB GFGF Archiv. Box 288 Central, Osaka, Japan



Schematic Diagram - Mod

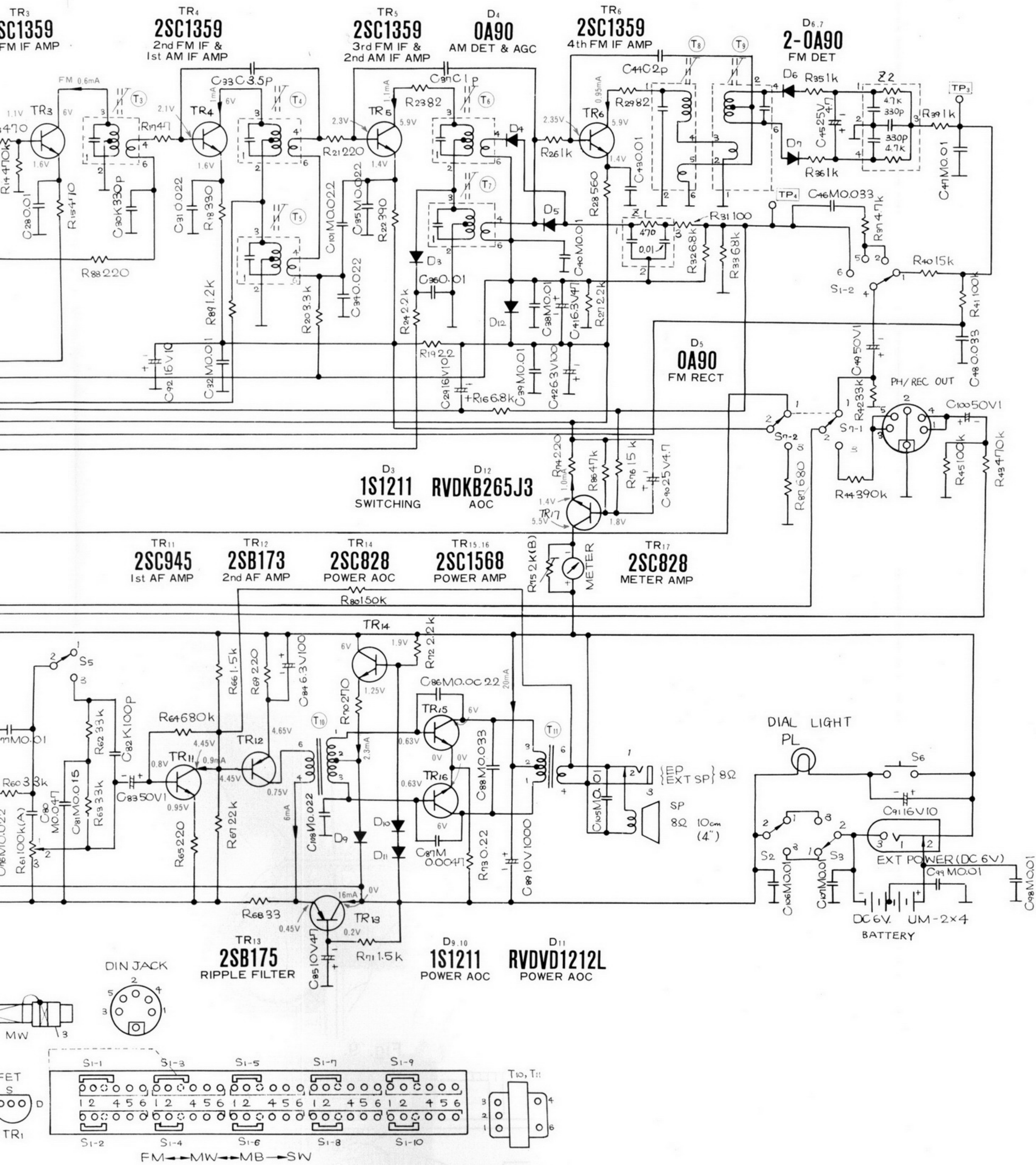


C	94	1	2	3	4	5	6	7	8	9	10	11	12	13	15	16	17	18	19	20	21	22	23	24	25	26	102	103	104	14	27	28	30	92	31	32		
	51	52	97	53	54	64	55	56	110	57	58	65	59	60	61	62	63	66	67	68	70	71	72	73	79	74	75	93	76	77	80	81	82	83				
R	1	46	47	48	52	49				2	3	4	5	7	8	9				8	9	10	11						13	14	15	38	17	18				
												84	50								51						53	54	55	85	79	56	57	59	60	61	62	63

Notes:

- S1-1~S1-10: Band selector switch in "FM" position.
- S2: Power switch in "OFF" position.
- S3: Timer switch in "OFF" position.
- S4: FM AFC/MW DX-Local selector switch in "AFC ON/DX" position.
- S5: Loudness switch in "OFF" position.
- S6: Dial light switch in "OFF" position.
- S7-1~7-2: Radio-Phono selector switch.
- DC voltage measurements are taken 10kΩ/V from negative line.

gram - Model RF-966MB



28	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	100
80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	
15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80

Switch in "OFF" position.
 Switch in "OFF" position.
 Phono selector switch in "RADIO" position.
 Measurements are taken with circuit tester
 relative line.

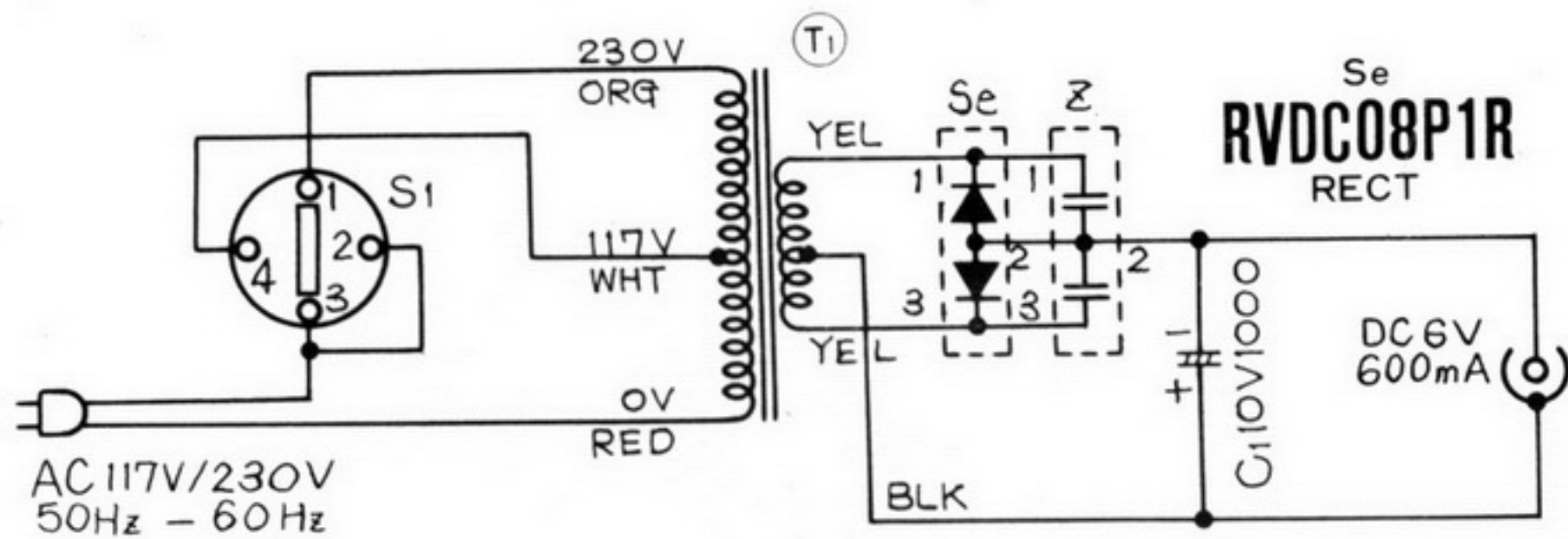
- TR1.....Gain control high position
- TR7.....FM position
- TR8.....MW position
- TR9.....MB position

9. Battery current: No signal 35mA
 600mA

Ref.No.	Part No.	Description	Per Set (Pcs.)	Remarks	Ref.No.	Part No.	Description	Per Set (Pcs.)	Remarks
CA31	RHG968A	Rubber, Whip Antenna	1	Z ○	CH12	RMK70Z	Bracket, Din Jack	1	Z ○
CA32	RSM2605B-W	Meter, Triple Indicator	1	X ○	CH13	RMC225A	Shield Cover, P.C. Board	1	Z ○
CA33	RSE40YK-T	Timer, ON/OFF	1	X ○	CH14	RMC227A	Shield Cover, P.C. Board	1	Z ○
CA34	XTW3+8E	Screw, Timer M'tg	2	Z	CH15	RMV75Z	Heat Sink, Transistors (TR15,16)	1	Z
CA35	RUB77A	Bracket, Antenna Drive Lever	1	Y ○	CH16	RDH88Z	Dial Back Plate	1	Z ○
CA36	RUB79A	Lever, Antenna Drive	1	Y ○	CH17	RKD272Y	Scale, Dial	1	Y ○
CA37	RDS9230A	Spring, Antenna Drive	1	Y ○	CH18	RHG703A	Rubber Cover, Power Switch	1	Z
CA38	RUB88Z	Shaft, Gyro Antenna Case	1	Z ○		XTN3+5B	Screw, Din Jack	1	Z
CA39	RDS5390A	Spring, Gyro Antenna Case	1	Y ○	CH19	XYN3+C8S	Screw, Power Switch M'tg	1	Z
CA40	RKE117Z	Cover, Gyro Antenna Case	1	Y ○	CH20	XTN26+8BFZ	Screw, Scale M'tg	1	Z ○
CA41	RKE118Z	Case, Core Antenna	1	Y ○	CH21	XWG23X6FZ	Washer, Scale M'tg	1	Z ○
CA42	RHR731Z	Cushion, Core Antenna	2	Z		RMC244Z	Earth Terminal, Speaker	1	Z ○
CA43	XUC8FW	E Ring, Gyro Antenna Case & Shaft M'tg	2	Z ○	CH22	XTW3+10E	Screw, Loudness & AFC Switch M'tg	2	Z
					CH23	XTN3+10B	Screw, Dial Drive Assembly & Din Jack Bracket M'tg	3	Z
CA44	RHG685Z	Rubber, Core Antenna	2	Z ○	CH24	XTN3+12B	Screw, Dial Drive Assembly M'tg	1	Z
CA45	RHR649Z	Cushion, Core Antenna	1	Z ○	CH25	XYN26+C6	Screw, Drum (Large) M'tg	1	Z
CA46	RKK79A	Battery Cover	1	X ○	ACCESSORIES				
CA47	RBN239A	Knob, Tuning	1	X ○	A1	EAE2SB	Magnetic Earphone	1	Y
CA48	RBN240A	Knob, Tone & Volume	2	X ○	A2	RJP16AS	Plug	1	Y
CA49	RBN241A	Knob, RF Gain Control	1	X ○	A3	RD-9480B	AC Adaptor	1	Y ○
CA50	RBN242AK	Knob, Timer	1	X ○	A4	RQC9010Z	Belt	1	Y ○
CA51	RBS71AK	Knob, Band Selector	1	X ○	PACKING				
CA52	RHR110-1	Spacer, Band Selector Knob	1	Z	P1	RPP117A	Polyethylene Cover	1	Z
CA53	RHG975Z	Rubber, Cabinet Upper Side	1	Z ○	P2	RPN1783Z	Pad, Lower Side	1	Z ○
CA54	XTB3+60BFN	Screw, Cabinet Cover M'tg	4	Z	P3	RPN1787Z	Pad, Upper Side	1	Z ○
CHASSIS					P4	RPK315Z	Gift Box	1	Y ○
CH4	RYDF966MBXG	Dial Drive Assembly	1	X ○	P5	RPF5A	Polyethylene Cover (Earphone & Plug)	1	Z
CH5	RDT9061Z	Shaft, Tuning	1	Y ○	P6	RQX5702Z	Instruction Book	1	Y ○
	RDD9009Z	Drum, Dial (Small)	1	Y ○					
	XUC4FW-V	E Ring, Drum (Small) M'tg	1	Z					
	XUCR5FY	E Ring, Tuning Shaft M'tg	1	Z					
CH6	RDD452A	Drum, Dial (Large)	1	Y ○					
CH7	RDZ05A	Cord, Dial (500m)	1 Roll	Y					
CH8	RDS4090A	Spring, Dial	1	Y					
CH9(PL)	XAMR96T150	Pilot Lamp, Indicator & Dial Light	1	X ○					
CH10	RHG211	Rubber, Pilot Lamp	1	Z					
CH11	RJJ85A-C	Jack, EXT. Power Source (DC 6V) & Earphone	1	Y ○					
	RJS17A-X	Connecting Socket, Speaker	2	Z					
	RUV283A	Cover, Radio-Phono Selector Switch	1	Z					
	RJS75Z-H	Din Jack Phono & Rec. Out	1	Y					

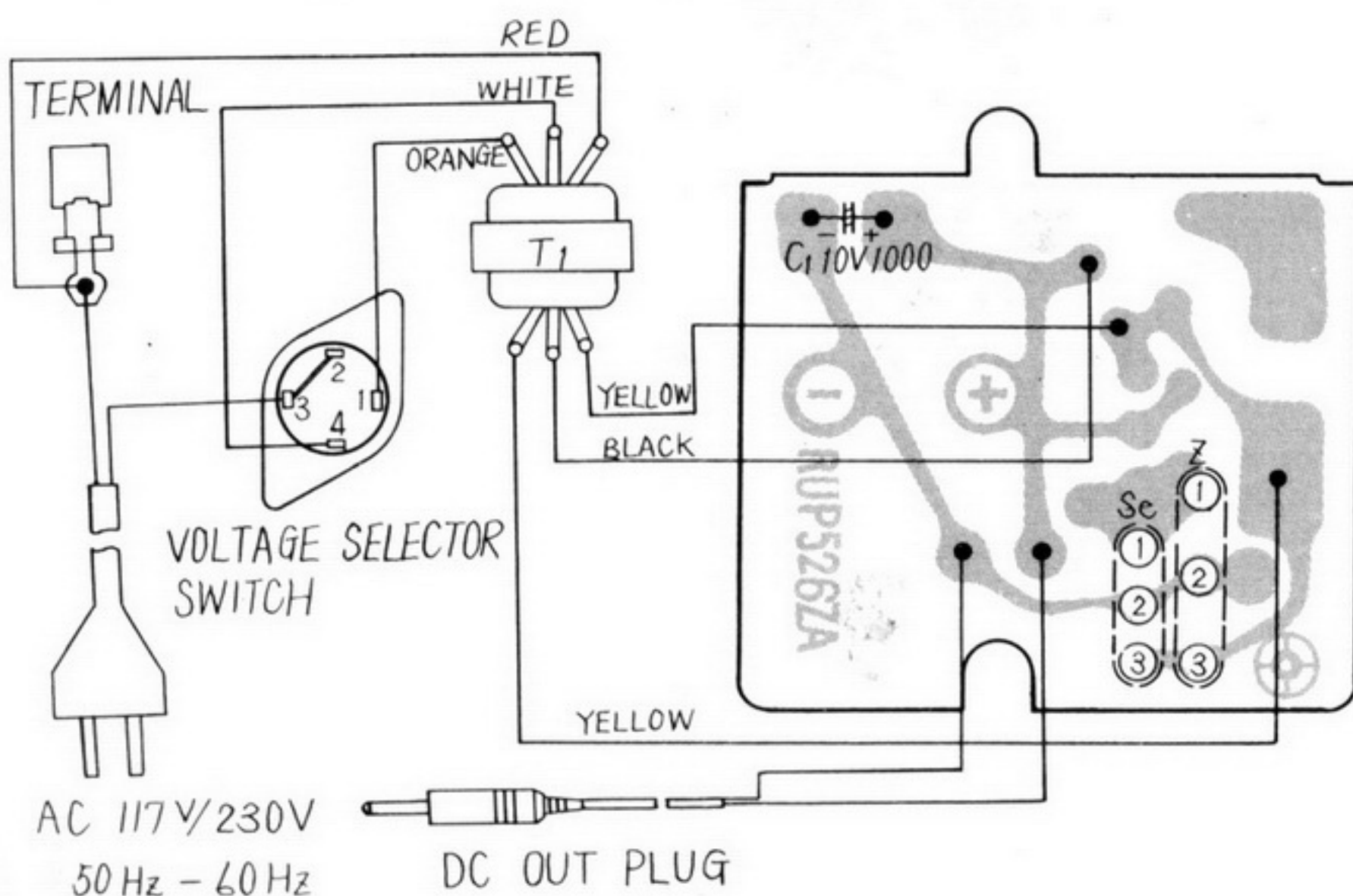
AC ADAPTOR-MODEL RD-9480B

SCHEMATIC DIAGRAM



Note:
1. S1: Voltage selector switch "230V" position.

CIRCUIT BOARD WIRING VIEW



REPLACEMENT PARTS LIST

Ref.No.	Part No.	Description	Per Set (Pcs.)	Remarks
RECTIFIER				
Se	RVDC08P1R	Rectifier	1	X
TRANSFORMER				
T1	RLT5J151-W	Power Transformer	1	X ○
COMPONENT COMBINATION				
Z	RXAF103P22HD	0.01µF × 2	1	Y
SWITCH				
S1	RSR12A	Voltage Selector Switch	1	X
CAPACITOR				
C1	ECEA10V1000	1000µF, 10WV, Electrolytic	1	Y
CABINET				
	RKM333Z	Cabinet Body Only	1	X ○
	RKF241Z	Cabinet Back Cover	1	X ○
	RGT402Z	Name Plate	1	Y ○
	XTB3+12BFN	Screw, Cabinet Back Cover M'tg	2	Z
CHASSIS				
	RJA40Z-K	AC Cord, Power Source	1	Y ○
	RJP96Z	DC OUT Plug with Cord	1	Y ○
	RJR18B	Lead Holder	1	Z
	RHR104B	Grommet (Rubber), AC Cord	1	Z
	RHR550A	Grommet (Plastic), AC Cord	1	Z
	XTN23+8B	Screw, Voltage Selector Switch M'tg	1	Z

Note: SAFETY indicates, for safety reasons, that only parts specified in service manual be used for replacement.