

# Technical Manual

## STEREO POWER AMPLIFIER

# RB-981

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### Specification

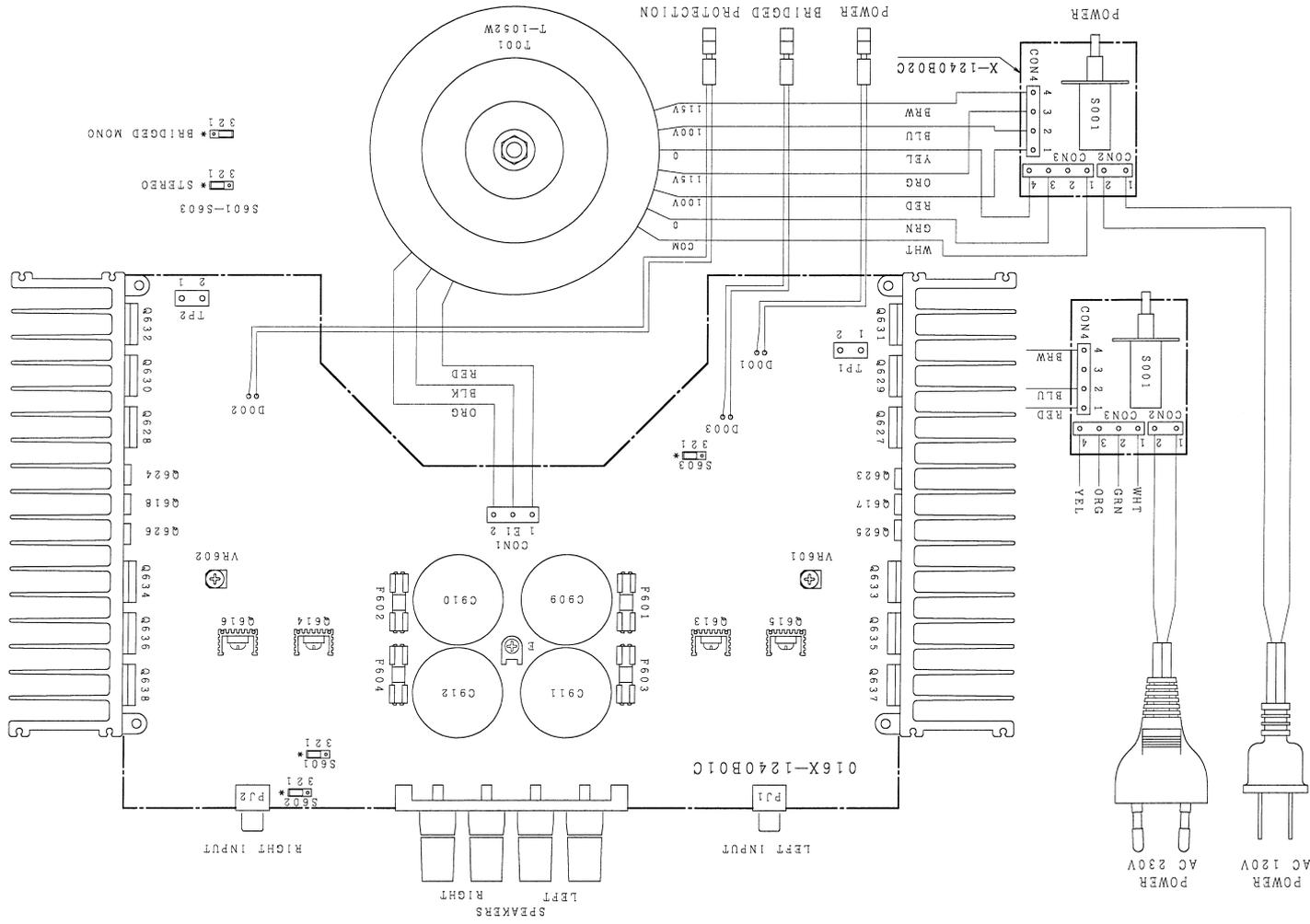
Continuous Power Output	(20-20 kHz, $\leq 0.03\%$ , 8 ohms)	130 watts/ch.
Bridged Mono Power Output	(20-20 kHz, $\leq 0.05\%$ , 4 ohms)	170 watts/ch.
Total Harmonic Distortion	(20-20 kHz, $\leq 0.1\%$ THD, 8 ohms)	360 watts
Intermodulation Distortion	(20 Hz-20 kHz, 8 ohms)	$\leq 0.03\%$
Frequency Response	(60 Hz : 7 kHz, 4:1)	$\leq 0.03\%$
Damping Factor	(20-20,000 Hz, 8 ohms)	500
Speaker Impedance	(Normal mode)	4 ohms minimum
	(Bridged mode)	8 ohms minimum
	(HF A network)	120 dB
Signal to Noise Ratio		33 k Ohms/1.0 volt
Input Impedance/Sensitivity		115 Volts, 60 Hz or
Power Requirements		230 Volts, 50 Hz
Power Consumption		400 Watts
Dimensions (W, H, D)		440 x 121 x 327 mm
Weight(net)		17.38 x 4.76 x 12.87"
		10.3 kg., 22.66 lb.

**THE ROTEL CO., LTD**

BUNZAN-SHINSEN-BLD. 4F 10-10 SHINSEN-CHO, SHIBUYA-KU,  
TOKYO 150-0045, JAPAN

Serial. NO.  
Beginning

### Wiring Diagram



## Parts List

SYMBOL	PARTS NO.	DESCRIPTION
<b>X-1240-01 PCB ASSEMBLY</b>		
C601,602	041 50BGF4R7M	CAP, ELEC. 50V/4.7UF
C603,604	044 TRP2-100V680PF	CAP, FILM 100V680PF
C605,606	044 LFC160V221H	CAP, STYROL 160V220PF
C607,608	041 25BGF100M	CAP, ELEC. 25V100UF
C609,610	044 LFC160V331H	CAP, STYROL 160V330PF
C611,612	041 50BGF10M	CAP, ELEC. 50V10UF
C613,616	044 LFC160V561H	CAP, STYROL 160V560PF
C617,618	044 LFC160V471H	CAP, STYROL 160V470PF
C623,624	044 MKT18-100V104K	CAP, FILM 100V0.1UF
C802	041 GS25V101-B	CAP, ELEC. 25V100UF
C803	041 GS63V221-D	CAP, ELEC. 63V220UF
C804	041 GS63V220-B	CAP, ELEC. 63V220UF
C901-908	043 LTC500V103	CAP, CER. 500V0.01UF
C909-912	041 ALC20S1023XX	CAP. ELEC. 63V10000UF
D601-608	034 LTTN4148-86	DIODE
D609-612	034 LTTN4003-TB	DIODE
D801	034 LTTN4148-86	DIODE
D802	034 TRD6, 2JST1	ZENER DIODE
D803-806	034 LTTN4003-TB	DIODE
D807,808	034 LTTN4148-86	DIODE
F901,902	034 LBR84	POWER DIODE
F601-604	036 5ST5	MINI FUSE 250V/5A
P11	066 L4TR-2487#8	1P PIN JACK(WHIT)
P12	066 L4TR-2487#7	1P PIN JACK(RED)
Q601-606	033 LT2SC2362KAA-FG	TRANSISTOR
Q607-612	033 LT2SA1016KAA-FG	TRANSISTOR
Q613,614	033 L2SA1209-ST	TRANSISTOR
Q615,616	033 L2SC2911-ST	TRANSISTOR
Q619,620	033 T2SC3478T-LKU	TRANSISTOR
Q621,622	033 T2SA1376T-LKU	TRANSISTOR
Q801-803	033 LT2SC2362KAA-FG	TRANSISTOR
R601,602	054 LEE10-102	R, METAL 1K
R603,604	054 LEE10-333	R, METAL 33K
R605,606	054 LEE10-471	R, METAL 470R
R607-610	054 LTMK201K5FECZ	R, METAL 1% 1.5K
R611,612	054 LTMK2220RFECC	R, METAL 1% 220R
R613,614	054 LTMF1/4-5600F	R, MRS25 560R
R615-618	054 LTMK201K5FECZ	R, METAL 1% 1.5K
R619,620	054 LTMK2220RFECC	R, METAL 1% 220R
R621,622	054 LTMK2047KFECC	R, METAL 1% 47K
R623,624	054 LTMK2100RFECC	R, METAL 1% 100R
R625,626	054 LTMF1/4-6801F	R, MRS25 6.8K
R627,628	054 LTMF1/4-3901F	R, MRS25 3.9K
R629,630	054 LTMK2100RFECC	R, METAL 1% 100R
R631,632	054 LTMK2001KFECC	R, METAL 1% 1K
R633,634	054 LTMK2047RFECC	R, METAL 1% 47R
R635-646	054 NIR2-0.22JF	R, METAL 2W 0.22R
R647,648	054 2W5101F	R, METAL 2W 10R
R651,652	054 LTMK2018KFECC	R, METAL 1% 18K
R653,654	054 LTMF3300	R, METAL 330R
R655-658	054 LTMK2220RFECC	R, METAL 1% 220R

## Adjustment

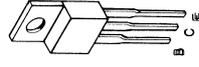
Instruments : DC milli-voltmeter

Notes : Prior to Bias Adjustment, run about 5minutes with rated output(8ohms) and warm up Power Transistor and Heat Sink. Set input off.

Step	Coupling		Location	Adjust	Adjust for
	Plus Lead	Minus Lead			
1	TP1-1	TP1-2	X-1240-01 PCB	VR601	DC milli-voltmeter reads 5mV
2	TP2-1	TP2-2	X-1240-01 PCB	VR602	



2SA1376  
2SC3478  
2SA1209  
2SC2911  
2SA1016K  
2SC2362K



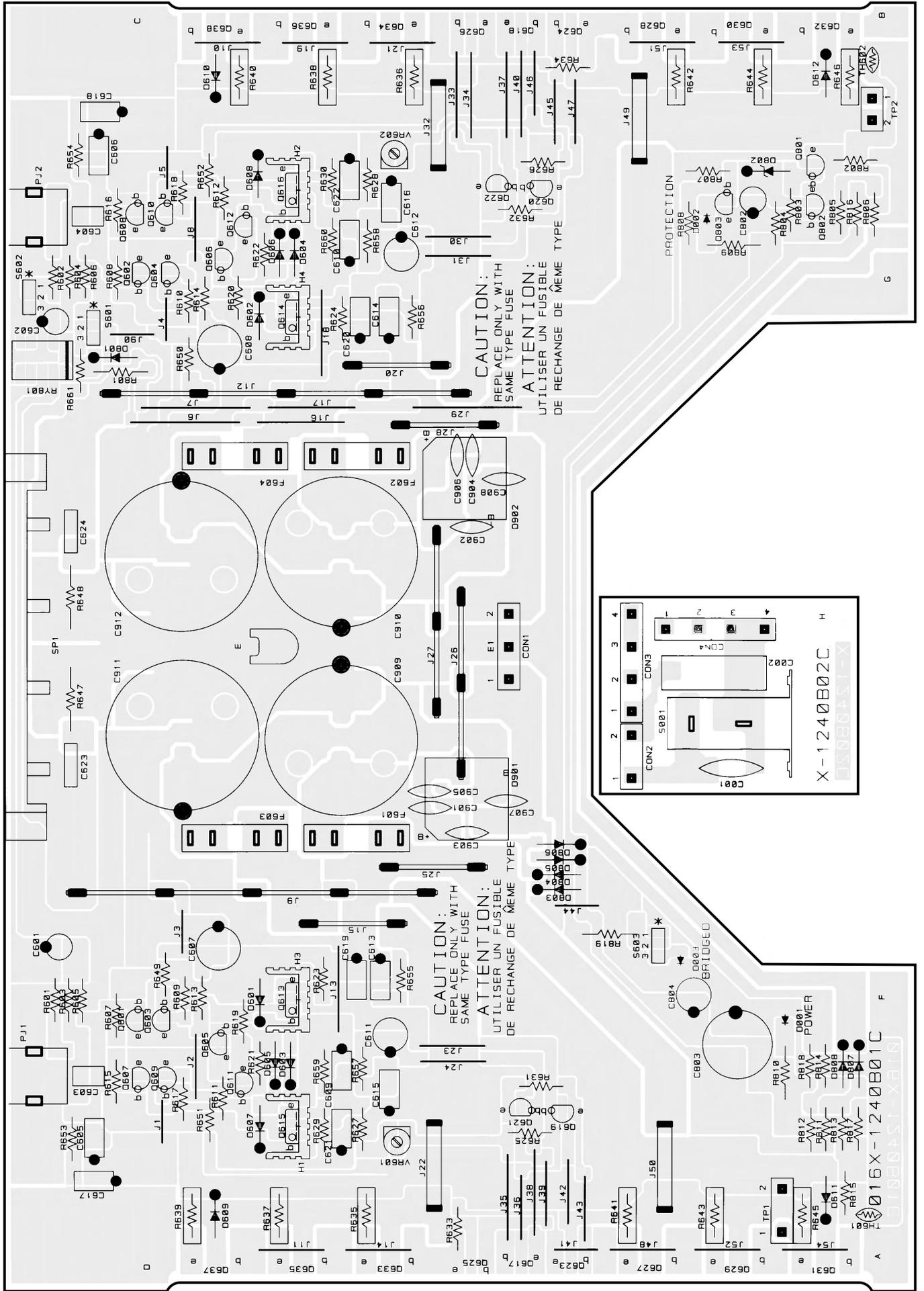
2SA1667  
2SC4681



2SD1953



2SA1492  
2SC3856



Schematic Diagram

