



Technical Manual

STEREO POWER AMPLIFIER RB-980BX

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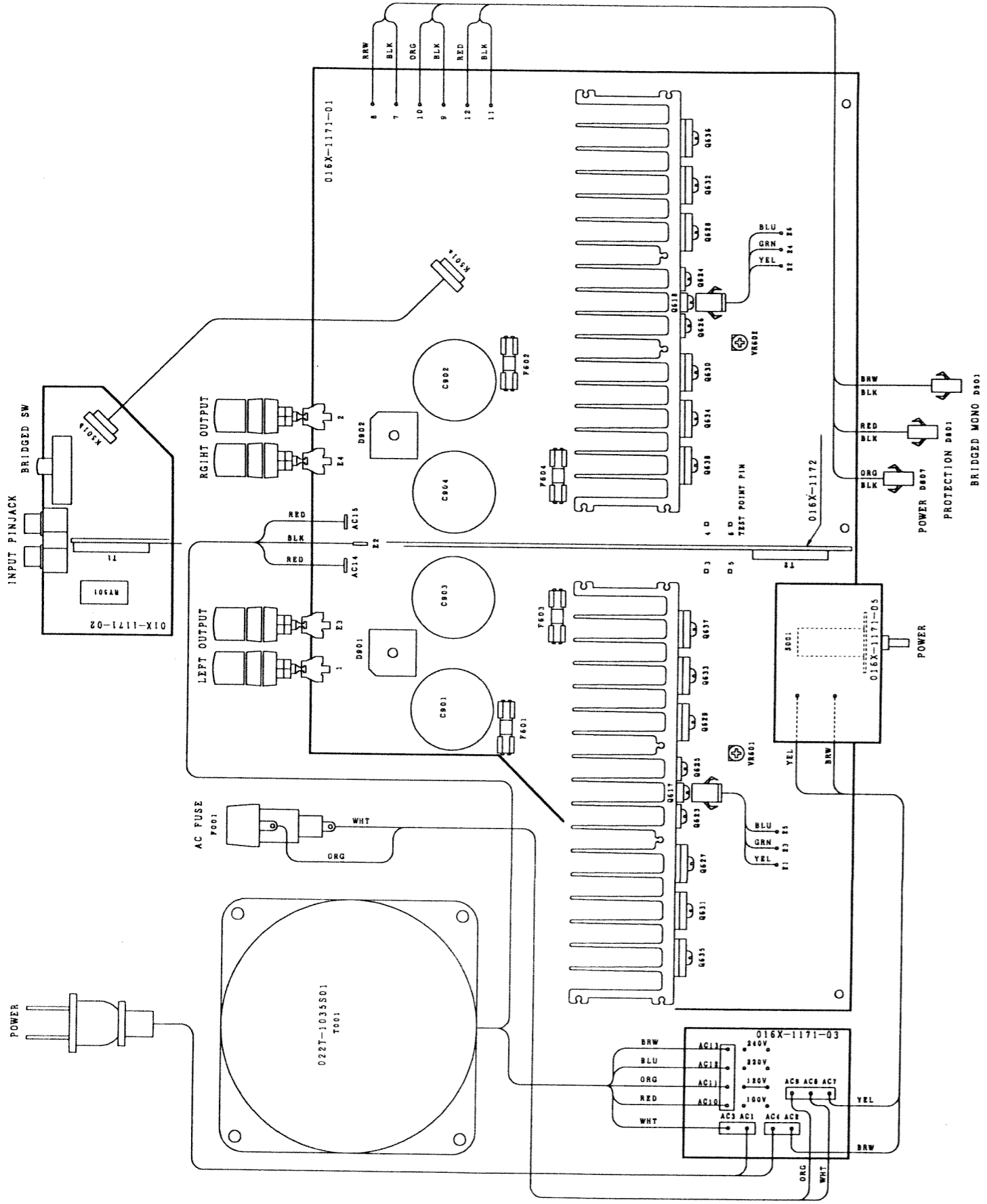
Specifications

Continuous Power Output ...	120 watts* per channel, min. RMS both channels driven into 8 ohms from 20 to 20,000 Hz with no more than 0.03% total harmonic distortion.	Output	Speaker 8 ohms nominal
DIN Power Output	220 watts per channel (1kHz, 4 ohms, 1% THD)	Damping Factor	1,000 (20 to 20,000 Hz, 8 ohms)
Peak Current	80 A (0.1 ohms, 10 μ sec, 1 pulse)	Input Sensitivity/ Impedance	1.0 V/33 kohms
Bridged Power	360 watts (mono) min. RMS driven into 8 ohms from 20 to 20,000 Hz with no more than 0.05% total harmonic distortion.	Frequency Response	4 to 100,000 Hz, +0.5 dB, -3.0 dB
Total Harmonic Distortion (20 to 20,000 Hz)	No more than 0.03% (continuous rated power output) No more than 0.03% (continuous 1/2 rated power output) No more than 0.03% (1 watt per channel power output, 8 ohms)	Signal-to-Noise Ratio (IHF A network)	120 dB
Intermodulation Distortion (60 Hz : 7 kHz = 4:1)	No more than 0.03% (continuous rated power output) No more than 0.03% (continuous 1/2 rated power output) No more than 0.03% (1 watt per channel power output, 8 ohms)	Power Requirement	120 V/60 Hz, 220 V/50 Hz, 240 V/50 Hz or 100 V/50 Hz-60 Hz (depending on destinations)
		Power Consumption	400 watts
		Dimensions (overall)	440 (W) x 120 (H) x 323 (D) mm 17-5/16" x 4-23/32" x 12-23/32"
		Weight (net)	10.2 kg/22.44 lbs.

- Specifications and design subject to possible modification without notice.
- * Measured pursuant to the Federal Trade Commission's Trade Regulation Rule on Power Claims for Amplifiers (applicable to the U.S.A. only).

Serial No.
Beginning

Wiring Diagram



Parts List

SYMBOL	PARTS NO.	DESCRIPTION
X-1171-01 PCB ASSEMBLY		
C601, C602	041 50BGF4R7M	CAP, ELEC. 50V4. 7UF
C603, C604	044 FKP2-100V681H	CAP, FILM 100V680PF
C605, C606	044 #S160V221J	CAP. STYROL 105-062
C607, C608	041 25BGF100M	CAP, ELEC. 25V100UF
C609, C610	041 50BGF10M	CAP, ELEC. 50V10UF
C611, C612	044 #S160V331J	CAP. STYROL 105-063
C613~616	044 #S160V221J	CAP. STYROL 105-062
C617, C618	044 MKT18-100V104K	CAP, FILM 100V0. 1UF
C801	041 U16V100	CAP, ELEC. 16V100UF
C802	041 U63V22	CAP, ELEC. 63V22UF
C901~904	041 NS2G63V10000	CAP, ELEC. 63V10000UF
C905~912	043 500VZF103	CAP, CERA. 500V0. 01UF
C913	041 U63V220	CAP, ELEC. 63V220UF
C914	041 U63V22	CAP, ELEC. 63V22UF
D601~608	034 1N4148	DIODE
D609~612	034 1N4003	DIODE
D801~802	034 SEL1124R	LED
D803, D804	034 1N4148	DIODE
D805, D806	034 RD6. 2EB	ZENER DIODE
D807	034 SEL1124R	LED
D901, D902	034 BR84	BRIDGE DIODE
D903~906	034 1N4003	DIODE
F601~	036 (U)F5A	MINI FUSE for STD
F604	036 (S)T4A	MINI FUSE for CEE
Q601~604	033 2SC2362K-FG	TRANSISTOR
Q605~610	033 2SA1016K-FG	TRANSISTOR
Q611, Q612	033 2SC2362K-FG	TRANSISTOR
Q613, Q614	033 2SA1209-ST	TRANSISTOR
Q615, Q616	033 2SC2911-ST	TRANSISTOR
Q617, Q618	032 2SD1684-S	TRANSISTOR
Q619, Q621	033 2SC3478-LKU	TRANSISTOR
Q621, Q622	033 2SA1376-LKU	TRANSISTOR
Q623, Q624	033 2SC4381-OY	TRANSISTOR
Q625, Q626	033 2SA1667-OY	TRANSISTOR
Q627, Q628	033 2SC3856-OY	TRANSISTOR
Q629, Q630	033 2SA1492-OPY	TRANSISTOR
Q631, Q632	033 2SC3856-OPY	TRANSISTOR
Q633, Q634	033 2SA1492-OPY	TRANSISTOR
Q635, Q636	033 2SC3856-OPY	TRANSISTOR
Q637, Q638	033 2SA1492-OPY	TRANSISTOR
R601, R602	054 MK2475RFECZ	R. METAL 1% 475Ω
R603, R604	054 MK233K2FECZ	R. METAL 1% 33. 2K
R605~612	054 MK201K5FECZ	R. METAL 1% 1. 5K
R613, R614	054 MK2562RFECZ	R. METAL 1% 562Ω
R615~618	054 MK2221RFECZ	R. METAL 1% 221Ω
R619, R620	054 MK247K5FECZ	R. METAL 1% 47. 5K
R623~626	054 MK2100RFECZ	R. METAL 1% 100Ω
R631, R632	054 MK212K1FECZ	R. METAL 1% 12. 1K
R633, R634	054 MK22K74FECZ	R. METAL 1% 2. 74K
R635, R636	054 MK218K2FECZ	R. METAL 1% 18. 2K

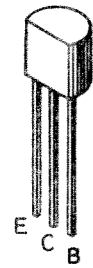
SYMBOL	PARTSNO.	DESCRIPTION
R637, R638	054 MK2001KFECZ	R. METAL 1% 1K
R639, R640	054 MK247R5FECZ	R. METAL 1% 47. 5Ω
R653~664	054 MPC70-0. 22F	R. PLATE 2W 0. 22Ω
R667, R668	054 RSS2X-10F	RESISTOR 2W 10Ω
R801, R802	054 RSS1X-5. 6KF	RESISTOR 1W 5. 6K
R803, R804	053 273J	RESISTOR 1/4W 27K
R805, R806	053 183J	RESISTOR 1/4W 18K
R807, R808	053 104J	RESISTOR 1/4W 100K
R809, R810	053 392J	RESISTOR 1/4W 3. 9K
R811	053 333J	RESISTOR 1/4W 33K
R812	053 104J	RESISTOR 1/4W 100K
R813	053 224J	RESISTOR 1/4W 220K
R814~816	053 104J	RESISTOR 1/4W 100K
R817	053 272J	RESISTOR 1/4W 2. 7K
R818	054 RSS1X-4. 7KF	RESISTOR 1W 4. 7K
R819	054 RSS1X-5. 6KF	RESISTOR 1W 5. 6K
R901~904	054 RSS2X-5. 6KF	RESISTOR 2W 5. 6KF
TH801, 802	034 TD5C350D	THERMISTER
VR601, 602	051 VMGCKPV-2. 2K	SEMI FIXED RESISTOR
	017 PP4-08A00T	HEAT SINKER
	068 C-3963#41	CONNECTOR 2P BRN-BLK
	068 C-3963#42	CONNECTOR 2P RED-BLK
	068 C-3963#43	CONNECTOR 2P ORG-BLK
	068 C-4349A02	CONNECTOR 3P
	069 C-4429A00T	SPEAKER LUG TERMINAL
X-1171-02 PCB ASSEMBLY		
D501	034 1N4148	DIODE
R501, R502	054 MK2001KFECZ	R. METAL 1% 1K
RY501	063 RY24W-KJ	RELAY
S501	064 4TR-2266	SLIDE SWITCH
	066 4TR-2709#3	2P PINJACK
X-1171-05 PCB ASSEMBLY		
C001	044 DE7150F472M	SPARK KILLER
S001	061 C-4176A02	POWER SWITCH
	013 PP4-12A00T	SHIELD COVER
X-1172 PCB ASSEMBLY		
	068 C-4427A07	TERMINAL 8P
OTHERS		
F001	036 (U)F8A	MINI FUSE for STD
	036 (S)T4A	MINI FUSE for CEE
T001	022 T-1035S01	POWER TRANSFORMER
	011 PP2-01A00T	FRONT PANEL
	012 4TQF-15	PUSH KNOB
	014 3TUV-6#6	UPPER COVER
	015 TRP-590	PRINTED REAR CHASSIS
	019 4TSH-19#2	PLASTIC FOOT
	067 4TR-2744#1	SPEAKER TERMINAL (RED)
	067 4TR-2744#2	SPEAKER TERMINAL (BLK)
	069 C-1575	MINI FUSE HOLDER
	072 4TR-670#5	AC CORD for STD
	072 C-2504#3	AC CORD for UK
	072 C-3039	AC CORD for AUSTRALIA
	072 C-3763B01	AC CORD for EUROPA
	081 PP4-15A00	INSIDE CARTON

Adjustment

Instruments : DC milli-voltmeter

Notes : Prior to Bias Adjustment, run about 5 minutes 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	3	5	X-1171 PCB	VR601	DC milli-voltmeter reads 10mV
2	4	6	X-1171 PCB	VR602	



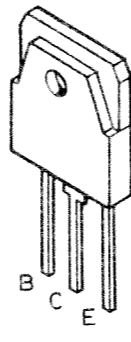
2SA1016
2SC2362
2SA1376
2SC3478



2SA1667
2SC4381



2SA1209
2SC2911
2SD1684



2SA1492
2SC3856

(RESISTORS)

5% TOLERANCE UNLESS OTHERWISE NOTED.

K KILO OHM

(M) FIXED PRECISION METAL FILM RESISTORS. (F): 1% (G): 2%

NON MARK LOW NOISE TYPE CARBON RESISTORS. 1/4W

(CAPACITORS)

(S) POLYSTYRENE FILM CAPACITORS.

(MP) METALIZED FILM CAPACITORS.

(H) ELECTROLYTIC CAPACITORS.

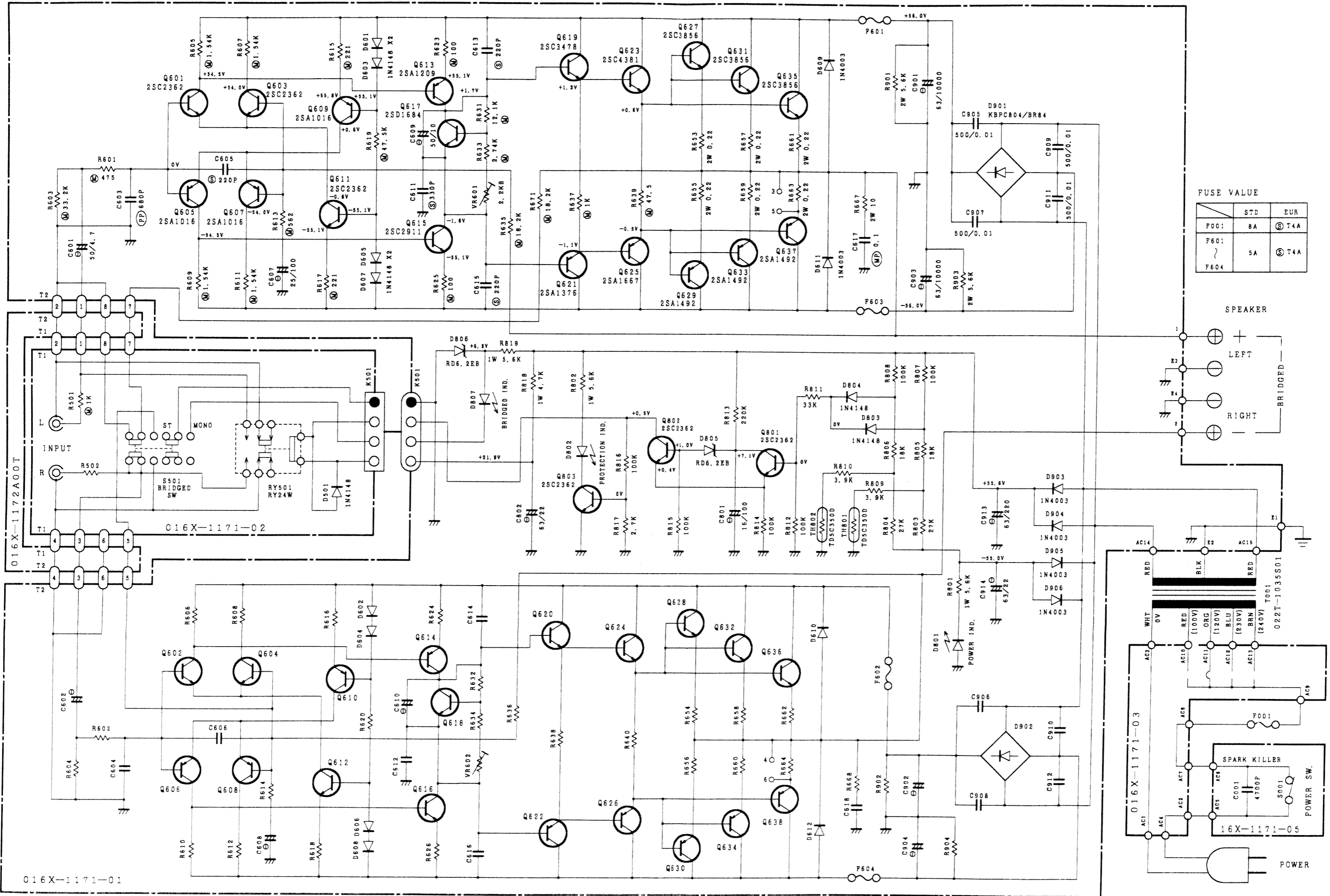
NON MARK CERAMIC CAPACITORS.

: UNLESS OTHERWISE NOTED IN SCHEMATIC ALL CAPACITANCE VALUES ARE EXPRESSED IN MFD.

: VOLTAGE READING WITH VTVM FROM THE POINT SHOWN TO THE CHASSIS GROUND. (LINE VOLTAGE 120 VOLTS)

: VOLTAGE READING MAY 20%

Schematic Diagram STEREO POWER AMPLIFIER RB-980BX



FUSE VALUE

	STD	EUR
F601	8A	T4A
F602	5A	T4A
F603		
F604		

