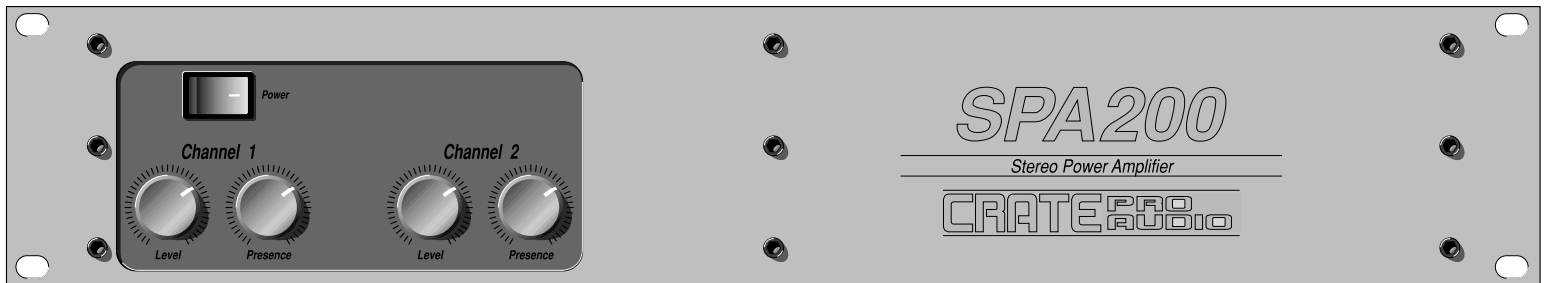


User's Guide

for the

CRATE PRO AUDIO

SPA-200



Rack Mount Power Amplifier

Congratulations. You have selected one of the finest pieces of sound reinforcement equipment available – the Crate Pro Audio SPA-200 Rack Mounted Amplifier. Our many years of experience in high-performance musician's equipment, combined with our extensive research and development procedures, have enabled us to produce an amplifier which provides the highest quality and reliability possible.

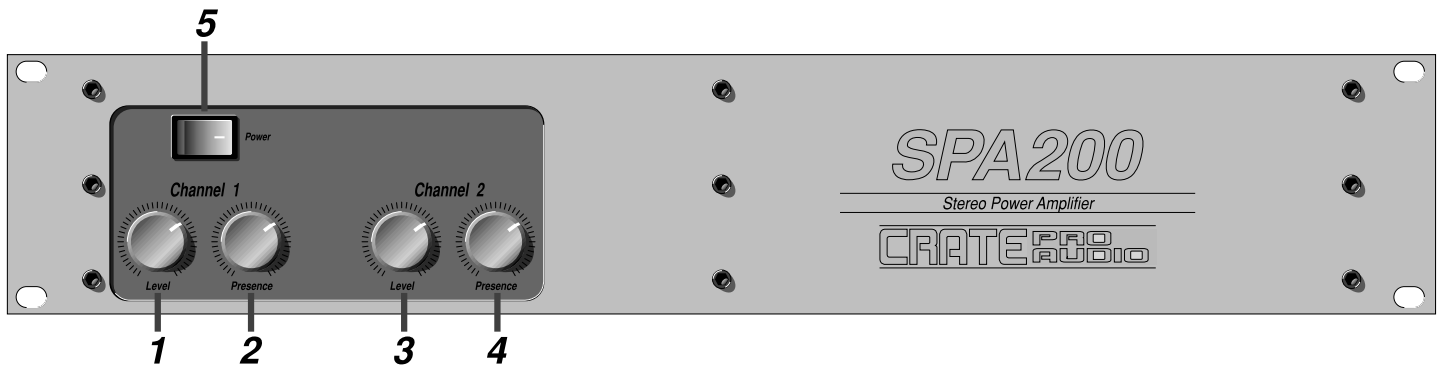
Like all Crate products, your amplifier was Musician Made in the U.S.A., using only the finest components and materials. Each amplifier design must satisfy our team of highly-trained technicians and musicians before it is approved, and each individual amplifier must pass a barrage of bench tests before it leaves the factory. We insist upon this extreme level of quality control to insure that each amplifier produced will provide its owner with years of trouble-free, ear-pleasing performance.

Your new amplifier is a flexible part of any sound system: simple to connect and easy to operate, if you first know how to incorporate it into your application. Several configurations are covered in this manual, along with important information regarding impedance ratings and output power. **In order to get the best performance and highest level of quality and reliability from your new amplifier, please read this owner's manual before operating the unit.**

**CRATE PRO
AUDIO**

CRATE PRO AUDIO SPA-200 Rack Mount Power Amplifier

Front Panel:

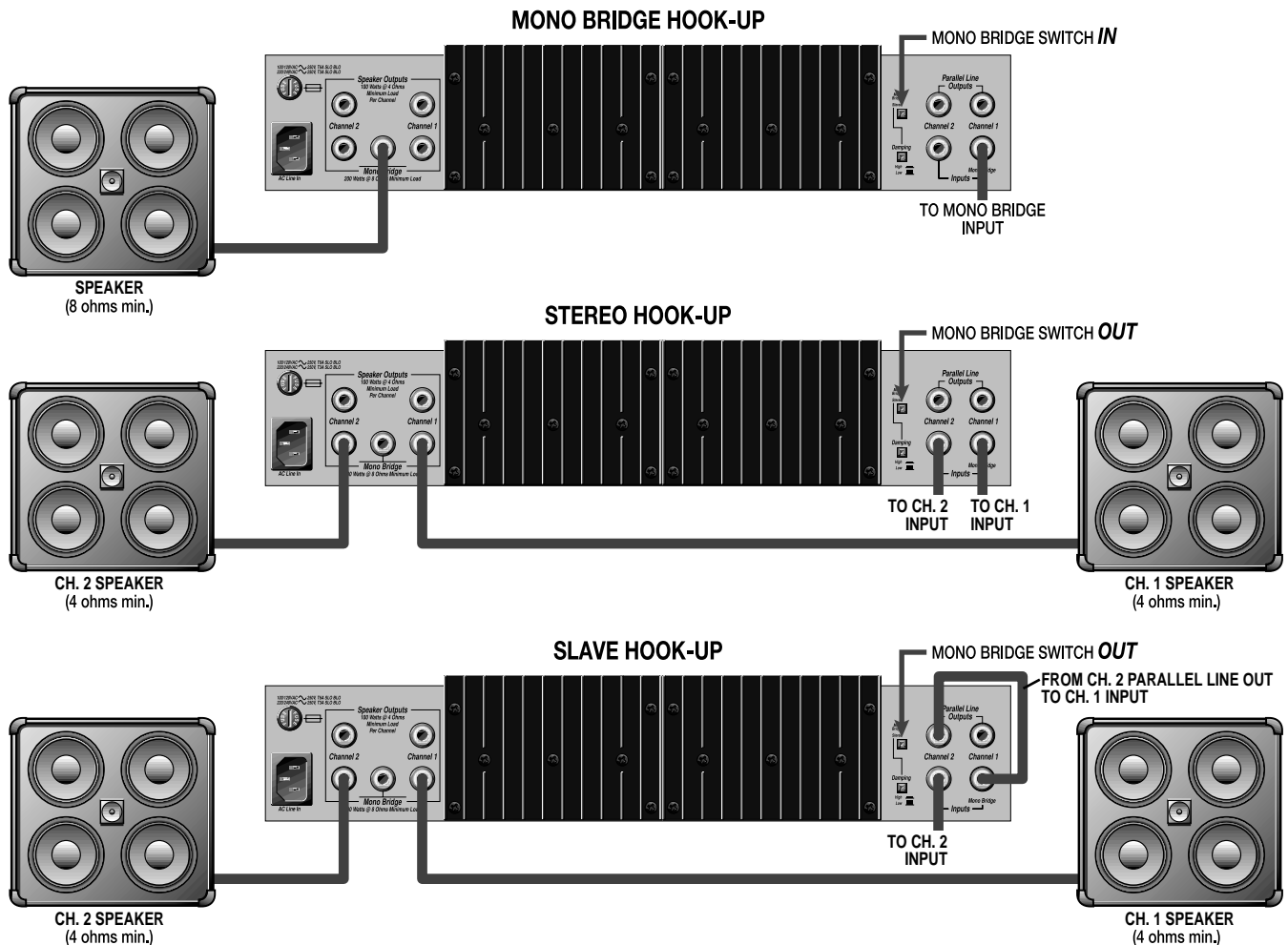


1, 3: LEVEL: These rotary potentiometers control the level or gain of each channel, with the fully-clockwise position of each providing maximum sensitivity.

2, 4: PRESENCE: These rotary potentiometers add emphasis to the upper frequencies, giving increased "presence" to the output.

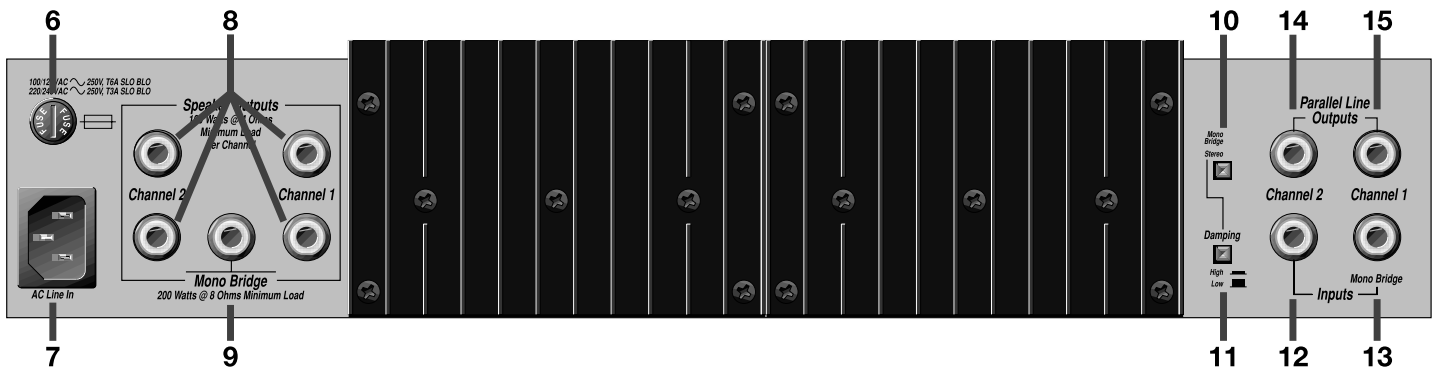
5: POWER SWITCH: This switch turns the amplifier on and off. When AC power is applied to the amplifier the switch will light up.

Some Sample Applications:



CRATE PRO AUDIO SPA-200 Rack Mount Power Amplifier

Rear Panel:



6: FUSE HOLDER: The amplifier is protected from damages caused by a faulty AC power source or other problems. If the fuse blows, replace it **ONLY** with the same size and type as indicated. If the fuse blows repeatedly, check the AC source: if it's okay, contact your Crate dealer for service information.

7: AC LINE IN: This heavy duty power cord must be connected to a properly grounded AC outlet of the proper voltage for the amplifier to operate. **IN ORDER TO AVOID THE POSSIBILITY OF ELECTRIC SHOCK, DO NOT REMOVE OR BYPASS THE GROUND PRONG OF THE POWER CORD!**

8: SPEAKER OUTPUT JACKS: Use these jacks to connect the amplifier to your speakers when using the amplifier in the stereo or slave mode. The minimum load for these jacks is 4 ohms (total). **NOTE: These jacks are NOT used in Mono Bridge mode!**

9: MONO BRIDGE OUTPUT: Use this jack to connect the amplifier to your speakers when using the amplifier in the Mono Bridge mode. The minimum load for this jack is 8 ohms (total). **NOTE: This jack is NOT used in Stereo or Slave mode!**

10: MONO BRIDGE/STEREO SWITCH: This switch selects the operating mode of the amplifier. In the "out" position the amplifier is in the Stereo Mode; with the switch in the "in" position the amplifier is in the Mono Mode. In the Mono Mode, Channel 1 functions as the input channel; Channel 2 input and Level control will be disconnected.

11: DAMPING SWITCH: Operational only in the Stereo mode, this switch varies the performance of the amplifier to best suit its application. In the High Damping position (switch IN) the amplifier is best suited for PA or music reproduction. In the Low Damping position (switch OUT) the amp is best suited for use as a guitar or bass power amplifier.







12,13: INPUT JACKS: These jacks accept unbalanced line level signal sources by means of cables fitted with standard 1/4" phone plugs.

14,15: PARALLEL OUTPUT JACKS: These jacks allow connection to additional power amplifiers, slave operation of both channels, etc., by providing a parallel connection to the input jacks. (This applied to both modes of operation – Stereo and Mono Bridge. In the Mono Bridge mode, only the Channel 1 Output jack will carry a signal.)

CRATE AUDIO SPA-200 Rack Mount Power Amplifier

Technical Specifications

POWER OUTPUT	70 Watts RMS per channel @ 8 ohms 100 Watts RMS per channel @ 4 ohms 200 Watts RMS @ 8 ohms mono bridged
FREQUENCY RESPONSE	±3dB / 20Hz – 20kHz
SLEW RATE	10 volts / microsecond
INPUT SENSITIVITY	0.25 volts RMS @ full power
PRESENCE CONTROL	10dB boost above 1kHz
POWER REQUIREMENTS	DOMESTIC: 120 VAC 60Hz, 260VA EXPORT: 100/115 VAC 50/60Hz, 260VA 220-240 VAC 50/60Hz, 260VA
DIMENSIONS	19" W x 3.45" H x 7" D
WEIGHT	19 lbs.

 CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	 PRECAUCION RIESGO DE CORRIENTAZO NO ABRA	 ATTENTION RISQUE D'ELECTROCUTION NE PAS OUVRIR	 VORSICHT ELEKTRISCHE SCHLAGGEFAHR NICHT OFFENEN																								
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.	PRECAUCION PARA DISMINUIR EL RIESGO DE CORRIENTAZO NO ABRA LA CUBIERTA. NO HAY PIEZAS ADENTRO QUE EL USUARIO PUEDE REPARAR. DEJE TODO MANTENIMIENTO A LOS TECNICOS CALIFICADOS.	ATTENTION: POUR REDUIRE LE RISQUE D'ELECTROCUTION NE PAS ENLEVER LE COUVERCLE. AUCUNE PIECE INTERNE N'EST REPARABLE PAR L'UTILISATEUR. POUR TOUTE REPARATION, S'ADRESSER A UN TECHNICIEN QUALIFIE.	VORSICHT: ZUR MINIMIERUNG ELEKTRISCHER SCHLAGGEFAHR NICHT DEN DECKEL ABENHMEN. INTERNE TEILE KONNEN NICHT VOM BENUTZER GEWARTET WERDEN. DIE WARTUNG IS QUALIFIZIERTEM WARTUNGSPERSONAL ZU UBERLASSEN.																								
THIS EQUIPMENT HAS BEEN DESIGNED AND ENGINEERED TO PROVIDE SAFE AND RELIABLE OPERATION. IN ORDER TO PROLONG THE LIFE OF THE UNIT AND PREVENT ACCIDENTAL DAMAGES OR INJURY, PLEASE FOLLOW THESE PRECAUTIONARY GUIDELINES:	CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT OPEN CHASSIS; DO NOT DEFEAT OR REMOVE THE GROUND PIN OF THE POWER CORD; CONNECT ONLY TO A PROPERLY GROUNDED AC POWER OUTLET.	WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE. CAUTION: NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.	CAUTION: OUR AMPLIFIERS ARE CAPABLE OF PRODUCING HIGH SOUND PRESSURE LEVELS. CONTINUED EXPOSURE TO HIGH SOUND PRESSURE LEVELS CAN CAUSE PERMANENT HEARING IMPAIRMENT OR LOSS. USER CAUTION IS ADVISED AND EAR PROTECTION IS RECOMMENDED IF UNIT IS OPERATED AT HIGH VOLUME.																								
ESTE APARATO HA SIDO DISEÑADO Y CONSTRUÍDO PARA PROVEER AÑOS DE OPERACION SEGURA Y CONFIABLE. PARA PROLONGAR LA VIDA DE ESTA UNIDAD E IMPEDIR DANOS ACCIDENTALES POR FAVOR SIGA ESTAS INSTRUCCIONES PREVENTIVAS:	PRECAUCION: PARA DISMINUIR EL RIESGO DE DESCARGAS ELECTRICAS: (1) NO ABRA LA CUBIERTA. (2) NO ES RECOMENDABLE REMOVER O DESACTIVAR LA PATIA DEL POLO A TIERRA DEL CABLE DE CORRIENTE, CONECTE CORRECTAMENTE A UNA TOMA DE CORRIENTE A TIERRA.	ADVERTENCIA: PARA EVITAR DESCARGAS ELECTRICAS O PELIGRO DE INCENDIO, NO DEJE ESTE APARATO EXPUESTO A LA LLUVIA O HUMEDAD. PRECAUCION: NO HAY PIEZAS ADENTRO QUE EL USUARIO PUEDE REPARAR. DEJE TODO MANTENIMIENTO A LOS TECNICOS CALIFICADOS.	PRECAUCION: NUESTROS AMPLIFICADORES PUEDEN PRODUCIR NIVELES DE PRESION DE SONIDO ALTO. EXPOSICION CONTINUADA A LOS NIVELES DE PRESION DE SONIDO ALTO PUEDE CAUSAR DANO PERMANENTE A SU OIDO. ES ACONSEJADO QUE USE PRECAUCION AL USUARIO Y ES RECOMENDADO PROTECCION PARA LOS OIDOS SI LA UNIDAD ES OPERADA A VOLUMEN ALTO.																								
THE CHART BELOW SHOWS THE U.S. GOVERNMENT'S OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS WHICH WERE IN EFFECT AT THE TIME OF THIS PUBLICATION FOR PERMISSIBLE NOISE EXPOSURE, PER 29CFR1910.95, TABLE G-16:																											
<table border="1"> <thead> <tr> <th>SOUND LEVEL DBA, SLOW RESPONSE</th> <th>DURATION PER DAY IN HOURS</th> </tr> </thead> <tbody> <tr> <td>90</td> <td>8</td> </tr> <tr> <td>92</td> <td>6</td> </tr> <tr> <td>95</td> <td>4</td> </tr> </tbody> </table>	SOUND LEVEL DBA, SLOW RESPONSE	DURATION PER DAY IN HOURS	90	8	92	6	95	4	<table border="1"> <thead> <tr> <th>SOUND LEVEL DBA, SLOW RESPONSE</th> <th>DURATION PER DAY IN HOURS</th> </tr> </thead> <tbody> <tr> <td>97</td> <td>3</td> </tr> <tr> <td>100</td> <td>2</td> </tr> <tr> <td>102</td> <td>1 - 1/2</td> </tr> </tbody> </table>	SOUND LEVEL DBA, SLOW RESPONSE	DURATION PER DAY IN HOURS	97	3	100	2	102	1 - 1/2	<table border="1"> <thead> <tr> <th>SOUND LEVEL DBA, SLOW RESPONSE</th> <th>DURATION PER DAY IN HOURS</th> </tr> </thead> <tbody> <tr> <td>105</td> <td>1</td> </tr> <tr> <td>110</td> <td>1/2</td> </tr> <tr> <td>115</td> <td>1/4 or less</td> </tr> </tbody> </table>	SOUND LEVEL DBA, SLOW RESPONSE	DURATION PER DAY IN HOURS	105	1	110	1/2	115	1/4 or less	
SOUND LEVEL DBA, SLOW RESPONSE	DURATION PER DAY IN HOURS																										
90	8																										
92	6																										
95	4																										
SOUND LEVEL DBA, SLOW RESPONSE	DURATION PER DAY IN HOURS																										
97	3																										
100	2																										
102	1 - 1/2																										
SOUND LEVEL DBA, SLOW RESPONSE	DURATION PER DAY IN HOURS																										
105	1																										
110	1/2																										
115	1/4 or less																										
ACCORDING TO OSHA, ANY EXPOSURE IN EXCESS TO THESE AMOUNTS LISTED ABOVE COULD RESULT IN SOME HEARING LOSS.																											
EXPLANATION OF GRAPHICAL SYMBOLS: EXPLICACION DE SIMBOLOS GRAFICOS:	 = "DANGEROUS VOLTAGE" "VOLTAJE PELIGROSO" "DANGER HAUTE TENSION" "GEFAHRLICHE SPANNUNG"	 = "IT IS NECESSARY FOR THE USER TO REFER TO THE INSTRUCTION MANUAL" "ES NECESARIO QUE EL USUARIO SE REFIERA AL MANUAL DE INSTRUCCIONES." "REFERREZ-VOUS AU MANUAL D'UTILISATION" "UNBEDINGT IN DER BEDIENUNGSANLEITUNG NACHSCHLAGEN"																									

Due to ongoing product development and improvement, the specifications contained herein are subject to change without notice.

CRATE AUDIO

www.crateamps.com

©1999 SLM Electronics, Inc. • A Division of St. Louis Music, Inc.
1400 Ferguson Avenue • St. Louis, MO 63133

47-548-53 • 02/99

