



CA15

Acoustic Amplifier



User's Guide



CA15 Acoustic Amplifier

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CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE. TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

PRECAUCION
RIESGO DE CORRIENTAZO
NO ABRA

PRECAUCION: PARA REDUCIR EL RIESGO DE INCENDIOS O DESCARGAS ELECTRICAS, NO PERMITA QUE ESTE APARATO QUEDE EXPUESTO A LA LLUVIA O LA HUMEDAD. PARA DISMINUIR EL RIESGO DE CORRIENTAZO, NO ABRA LA CUBIERTA. NO HAY PIEZAS ADENTRO QUE EL USUARIO PUEDE REPARAR DE JE TODO MANTENIMIENTO A LOS TECNICOS CALIFICADOS.

ATTENTION
RISQUE D'ELECTROCUTION
NE PAS OUVRI

ATTENTION: PROTEGEZ CET APPAREIL DE LA PLUIE ET DE L'HUMIDITE AFIN D'EVITER TOUT RISQUE D'INCENDIE OU D'ELECTROCUTION. POUR REDUIRE 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.

IMPORTANT SAFETY INSTRUCTIONS

- READ, FOLLOW, HEED, AND KEEP ALL INSTRUCTIONS AND WARNINGS.
- DO NOT OPERATE NEAR ANY HEAT SOURCE AND DO NOT BLOCK ANY VENTILATION OPENINGS ON THIS APPARATUS. FOR PROPER OPERATION, THIS UNIT REQUIRES 3" (75mm) OF WELL VENTILATED SPACE AROUND HEATSINKS AND OTHER AIR FLOW PROVISIONS IN THE CABINET.
- DO NOT USE THIS APPARATUS NEAR SPLASHING, FALLING, SPRAYING, OR STANDING LIQUIDS.
- CLEAN ONLY WITH LINT-FREE DAMP CLOTH AND DO NOT USE CLEANING AGENTS.
- ONLY CONNECT POWER CORD TO A POLARIZED, SAFETY GROUNDED OUTLET WIRED TO CURRENT ELECTRICAL CODES AND COMPATIBLE WITH VOLTAGE, POWER, AND FREQUENCY REQUIREMENTS STATED ON THE REAR PANEL OF THE APPARATUS.
- PROTECT THE POWER CORD FROM DAMAGE DUE TO BEING WALKED ON, PINCHED, OR STRAINED.
- UNPLUG THE APPARATUS DURING LIGHTNING STORMS OR WHEN UNUSED FOR LONG PERIODS OF TIME.
- ONLY USE ATTACHMENTS, ACCESSORIES, STANDS, OR BRACKETS SPECIFIED BY THE MANUFACTURER FOR SAFE OPERATION AND TO AVOID INJURY.
- WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK OR FIRE, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.
- SERVICE MUST BE PERFORMED BY QUALIFIED PERSONNEL.
- 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.



EXPLANATION OF GRAPHICAL SYMBOLS:

EXPLICACION DE SIMBOLOS GRAFICOS:

EXPLICATION DES SYMBOLES GRAPHIQUES:



"DANGEROUS VOLTAGE"
"VOLTAJE PELIGROSO"
"DANGER HAUTE TENSION"



"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"



CA15 Acoustic Amplifier

Introduction:

Congratulations!

You are now the proud owner of one of Crate's latest contributions to the world of acoustic amplification, the CA15. This compact amplifier delivers over 12 watts of musical power and incorporates two inputs (each with its own gain control), three bands of equalization, and reverb. A pair of RCA-type CD Input jacks allows you to practice with your favorite music. A jack for headphones is provided, along with a jack for connecting the CA15 to an external speaker cabinet. A Crate Custom Design 8" woofer delivers smooth clear sound with excellent projection and fidelity.

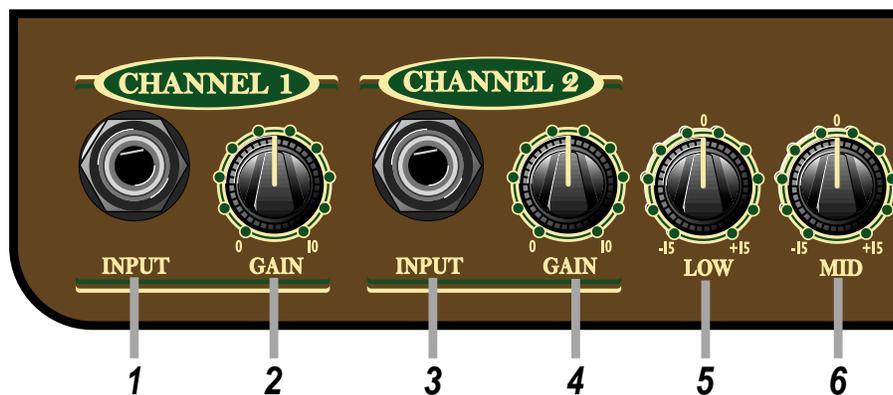
The CA15 features a flip-out locking bar underneath the cabinet which allows you to tilt the amplifier back for increased coverage and projection.

Your CA15 was designed by musicians and built using only the best components. Extensive testing at the hands (and ears) of skilled technicians and musicians insures you that this amplifier is the absolute best it can be.

In order to get the most out of your new amplifier, we strongly urge you to go over the information contained in this manual before you begin playing.

And thank you for choosing CRATE.

The Front Panel:



- 1,3: Input 1, Input 2.** The signal output from your acoustic instrument, tape player, rhythm machine, high-Z microphone or other source may be connected to either or both of these jacks by means of a shielded signal cable. Each of the input jacks is governed by its corresponding gain control (#2 for Input 1, #4 for Input 2). The signals from these two jacks are summed together after their input gain stages.
- 2,4: Gain 1, Gain 2.** Use these controls to set the input gain level for the corresponding input jack. These controls set the level of the input signal and serve as the amplifier's volume controls.
- 5: Low.** This serves as the bass control for both channels. Adjust this control to get the best sounding bass response for your instrument. Excessive boost of the low control can cause an unnatural howling (acoustic feedback from your instrument) and should be avoided.
- 6: Mid.** This serves as the midrange control for both channels. Adjust this control to get the best projection and midrange tones for your instrument.
- 7: High.** This serves as the treble control for both channels. Adjust this control so your high notes and harmonic overtones are lively but not overpowering.
- 8: Reverb Level:** Use this control to adjust the amount of reverberation added to the signal. In the fully counter clockwise position, the signal is dry (no reverb added). As you rotate the control clockwise the amount of reverb increases.

The Front Panel (con't):



- 9: **CD Input.** Use these jacks to connect the output from a CD player, tape deck, or rhythm machine to the amplifier. The CD Input jacks are post EQ and Gain, so use the level control on the CD player (etc.) to adjust the level of the signal at these jacks.
- 10: **Headphones.** Use this jack to connect headphones to the amplifier. The internal speaker is disconnected when this jack is used.
- 11: **External Speaker.** Use this jack to connect the amplifier to an external speaker. The internal speaker is disconnected when this jack is used. The impedance of the external speaker must be 4 ohms or greater. *Do not attempt to use headphones in the External Speaker jack! Permanent hearing damage could result.*

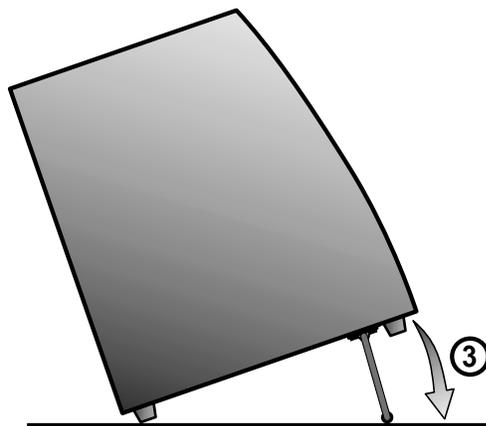
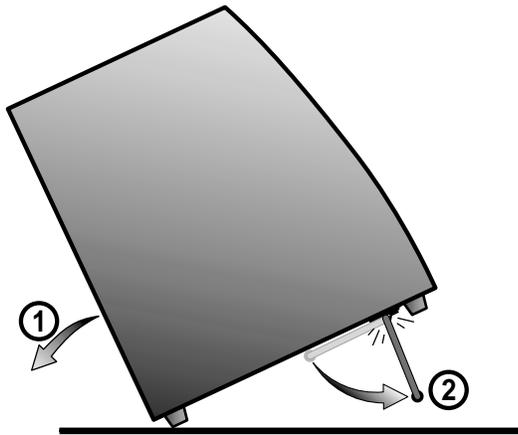
The Rear Panel (not shown):

- 12: **Power Switch.** Use this switch to apply power to the amplifier. The amp is on when the top of the switch is depressed, off when the bottom of the switch is depressed. The switch illuminates when the amp is on.
- 13: **AC Line Cord.** The grounded power cord should only be plugged into a grounded power outlet that meets all applicable electrical codes and is compatible with the voltage, power, and frequency requirements stated on the rear panel. **Do not attempt to defeat the safety ground connection.**

The Tilt Back Feature:

There are instances when you may need to tilt the amplifier back to better project its sound towards your ears (as a near-field monitor) or towards your audience (for better coverage). The CA15 features a tilt back device underneath its cabinet for this purpose. To utilize this tilt back feature, refer to the illustration below and follow these simple steps:

- ① Carefully lean the cabinet back - until the front of the cabinet is several inches off the floor.
 - ② Pull the tilt back bar down (to unlock it from its holder) and swing it forward until it locks into place.
 - ③ Lower the front of the amplifier until it rests on the tilt back bar.
- (To return the bar to its traveling position, reverse these steps)



CAUTIONS:

Avoid trapping your hand under the tilt back bar.



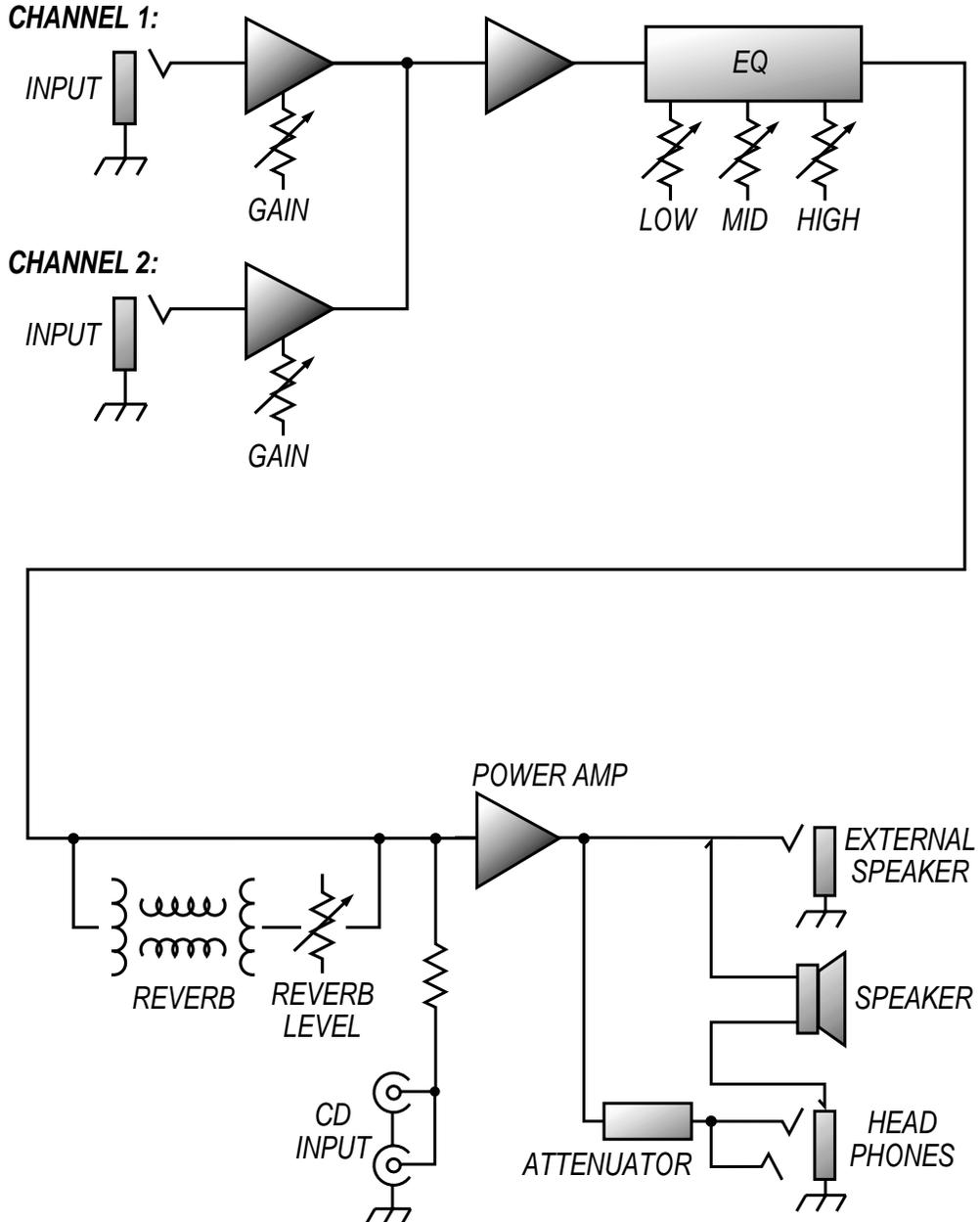
Always make sure the bar is securely locked in place before lowering the amplifier.

Do not sit on or rest your foot on the amplifier when it is in the tilt back position.



CA15 Acoustic Amplifier

System Block Diagram:





CA15 Acoustic Amplifier

Technical Specifications:

Output Power Rating: 12+ watts RMS @ 5% THD, 4 ohm load

Low: ± 15 dB @ 80Hz

Mid: ± 15 dB @ 650Hz

High: ± 15 dB @ 10kHz

Input Impedance: 1.5M ohm

Max Input Signal: 7v peak to peak

Total System Gain: 52dB @ 1kHz

Input Sensitivity: 20mV

Internal Speakers: 8" Crate Custom Design, 4 ohm, 15 watts; Piezo Tweeter

Power Requirements: 120VAC, 60Hz, 30VA
100/115VAC, 50/60Hz, 30VA
230VAC, 50/60Hz, 30VA

Size and Weight: 14"H x 14"W x 12"D, 21 lbs.

Specifications and information in this manual are subject to change without notice.

Declaration Of Conformity

Manufacturer's Name: SLM Electronics

Corporate Headquarters: 1901 Congressional Drive, St. Louis, Missouri, 63146

Primary Production Facility: 700 Hwy 202 W, Yellville, Arkansas, 72687

Product Type: Audio Amplifier

Products meet the regulations for compliance marking under:

ETL standards UL6500 of UL813

CSA standards E60065 or C22.2 No.1-M90

CE safety standard EN60065

CE EMC standards EN55103 or EN55013 and EN61000

FCC standards 47CFR 15.107 and 15.109 Class A

C-tick designation Level 2, ABN #56748810738, ARBN# N222

KETI standard K60065 (limited model approval)

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