



RockCrusher Recording

Congratulations and welcome to the Rivera® family of outstanding products! We hand-build this fine product in our facility in Burbank, California, USA, using the most robust, finest quality components from North America, Germany, and Japan. With correct use and care, you will experience many years of enjoyment with the RockCrusher Recording. It is an invaluable tool on stage as well as in the studio.

WARNINGS! PLEASE READ BEFORE USING!

YOU MUST HAVE A LOAD OF THE PROPER IMPEDANCE CONNECTED TO THE SPEAKER OUTPUTS OF THE ROCKCRUSHER WHEN OPERATING IN THE BYPASS POSITION! IF NOT, YOUR AMPLIFIER WILL POTENTIALLY SEE AN OPEN LOAD CONDITION, WHICH MAY RESULT IN SEVERE DAMAGE TO YOUR AMPLIFIER!

YOU MUST MAKE SURE THAT THE IMPEDANCE OF THE AMPLIFIER'S SPEAKER OUTPUT MATCHES THE SETTINGS ON THE ROCKCRUSHER (8 OR 16 OHM), AND THAT THE SPEAKER(S) CONNECTED TO THE ROCKCRUSHER IS OF THE SAME IMPEDANCE. IF MULTIPLE SPEAKERS ARE CONNECTED (ROCKCRUSHER SPEAKER OUTPUT JACKS ARE IN PARALLEL), THEIR COMBINED LOAD IMPEDANCE MUST MATCH THE SETTINGS ON THE AMPLIFIER AND ON THE ROCKCRUSHER. AN IMPEDANCE MISMATCH CAN POTENTIALLY RESULT IN DAMAGE TO YOUR AMPLIFIER, AND EXCESSIVE HEATING TO THE ROCKCRUSHER INTERNAL COMPONENTS. DO NOT USE THE ROCKCRUSHER ON AMPLIFIERS THAT ARE HARDWIRED FOR 2 OR 4 OHMS, OR DO NOT HAVE 8 OR 16 OHM OUTPUT IMPEDANCE CAPABILITY. DO NOT USE THE ROCKCRUSHER WITH ANY SPEAKER LOAD LOWER THAN 8 OHMS IMPEDANCE.

ON THE BACK OF THE ROCKCRUSHER, YOU MUST USE THE SPEAKER JACK #1, FIRST.

YOU MAY NOT EXCEED THE 120W RMS POWER RATING OF THE ROCKCRUSHER.

DO NOT COVER THE TOP OR BOTTOM OF THE ROCKCRUSHER, AS PROPER VENTILATION IS REQUIRED TO DISSIPATE THE POTENTIAL HEAT GENERATED.

DO NOT EXPOSE THE ROCKCRUSHER TO ANY MOISTURE OF ANY SORT, AS A POTENTIAL ELECTRICAL SHOCK HAZARD OR DAMAGE TO THE ROCKCRUSHER MAY BE POSSIBLE.

EXCESSIVE USE OF YOUR AMPLIFIER'S OUTPUT POWER WILL PLACE THERMAL STRESS ON THE OUTPUT TUBES AND THEIR ASSOCIATED COMPONENTS, AS WELL AS ON THE OUTPUT TRANSFORMER, AND MAY RESULT IN DAMAGE TO YOUR AMPLIFIER. OLDER VINTAGE AMPLIFIERS MAY HAVE CRITICAL COMPONENTS WHICH HAVE DETERIORATED, SUCH AS COUPLING AND FILTER CAPACITORS, WIRING INSULATION, TUBE SOCKETS, GRID RESISTORS, AND THE INSULATION PROPERTIES OF THE OUTPUT TRANSFORMER WINDINGS. THESE COMPONENTS MAY BE EXCESSIVELY STRESSED WHEN SUSTAINING HIGH POWER LEVELS OVER A PERIOD OF TIME AND MAY FAIL. ASIAN- AND EASTERN EUROPEAN-BUILT AMPLIFIERS ARE FOR THE MOST PART NOTORIOUS FOR POOR QUALITY COMPONENTS, AND SUCH COMPONENTS MAY EASILY FAIL IF STRESSED.

PLEASE CHECK THE CONDITION OF YOUR OUTPUT TUBES, AND REPLACE THEM IF THEY ARE OLD OR FRAGILE BEFORE USING THE AMPLIFIER AT HIGH POWER LEVELS WITH THE ROCKCRUSHER. WEAK AND OLD OUTPUT TUBES ARE THE LINK THAT CAN EASILY BREAK WHEN STRESSED. IF THERE IS OUTPUT TUBE FAILURE, OTHER ANCILLARY COMPONENTS MAY BE DAMAGED AS WELL.

BY RESPECTING THE CORRECT USE OF THE ROCKCRUSHER, YOU WILL AVOID POTENTIAL DAMAGE TO YOUR AMPLIFIER AS WELL AS THE ROCKCRUSHER.

ROCKCRUSHER IS NOT INTENDED FOR USE WITH SOLID STATE AMPLIFIERS THAT USE CURRENT FEEDBACK AND AN UNGROUNDED OUTPUT. AS THE LINE OUTPUT GROUND IS DIRECTLY CONNECTED

TO THE AMPLIFIER INPUT GROUND, OSCILLATION WILL OCCUR WITH POTENTIAL DAMAGE TO THE AMPLIFIER. IT IS ALSO NOT INTENDED FOR USE WITH CLASS D OR PWM AMPLIFIERS.

RIVERA AMPLIFICATION IS NOT RESPONSIBLE FOR ANY DAMAGE TO YOUR AMPLIFIER THAT MAY OCCUR THROUGH ANY USE OF THE ROCKCRUSHER.

Rivera Amplification. Burbank, California, USA

Attenuator Functions



Function Switch: In the Bypass position, the RockCrusher is not loading the amplifier, and the Speaker jacks on the rear panel of the RockCrusher are directly connected to the Amplifier Input jack. Thus it is imperative to have speakers connected to the RockCrusher if it is used in the Bypass position, otherwise an open load condition will exist and damage to your amplifier may result. In the Attenuate position, the RockCrusher is now connected internally to the Amplifier Input, and can function as a Load Box if no speakers are connected, or as an Attenuator if speakers are connected to the RockCrusher.

Input Impedance (Z) Switch: Set this switch to match the setting or requirement of your amplifier and the impedance of your speaker load. For example, with one 16 Ohm Speaker Cabinet, you would set the RockCrusher to 16 Ohms, and your Amplifier to 16 Ohms. With two 16 Ohm Speaker Cabinets, the Speaker Jacks are in parallel, so you would select 8 Ohms on the RockCrusher as well as your amplifier. In Load Box mode, select which Impedance matches your amplifier. The 16 Ohm position has the most power handling for the Load Box function, and is recommended for extended Load Box use. Do not use the RockCrusher on amplifiers that are hard-wired for 2 or 4 ohms, or do not have 8 or 16 Ohm Output impedance capability.

Equalization Edge and Warm Selectors: Use the Edge switch to add high-frequency brilliance to the signal, and use the Warm switch to restore bottom end when the signal is attenuated. These do not work if the Rockcrusher Recording is used only as a load.

Attenuation: Select the appropriate level you desire. The increments in A-E values are for reference only, and have been internally adjusted for a pleasing difference in level between the 6 Positions. In the last position to the right, Studio is selected, and now the Studio Level control will function.

Studio Level: This function is only active when the Studio position is selected on the Attenuation selector. It controls low levels and functions like a volume control, with a range that is perfect for low-level playing, like in your home.

Line Out Level: For controlling the level of Balanced XLR and Unbalanced Line Output jacks on the rear panel of the RockCrusher. Adjust this level to match the requirements of your equipment that you have connected. It is preferable to utilize Line Level inputs with the RockCrusher, versus Mic Level inputs.

Speaker Emulator Functions

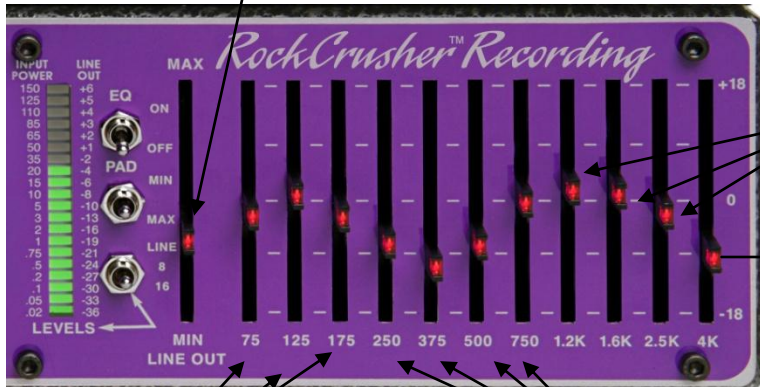


EQ on/off switch allows you to bypass the 11 band EQ.

PAD Switch
Min=no pad
Middle position=-5DB pad
Max=-10DB pad

LEVELS meter can be assigned to 8 or 16ohm input power or Line out level.

LINE OUT controls output volume with EQ in or Bypassed.



Upper end voicing-Tailor chime, honk and top end by using the 1.2-4K controls

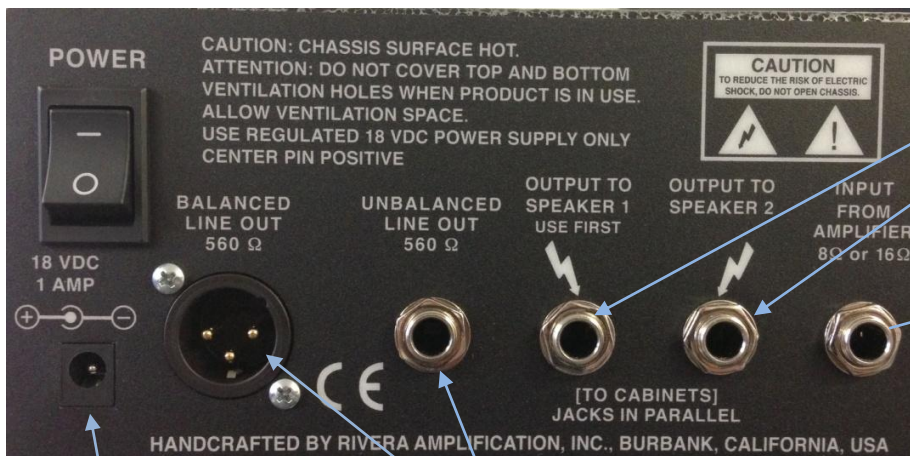
4K-allows you to fine tune your overall presence and shimmer

Low end-75-175hz allows you to adjust bottom-end punch and emulate different cabinet resonances.

Midrange voicing- Scoop your tone by lowering the 250-750hz controls or increase the midrange by raising them.

Rear Panel Features and Functions

WARNING-USE CORRECT POWER 18VDC POWER SUPPLY WITH TIP-POSITIVE, RING-NEGATIVE!!!!!!



To speaker cabinet
(No need to connect to a speaker cabinet if using as just a load)

From your amp speaker out
(Use speaker cable)

Use included power adapter with correct polarity (tip positive, ring negative)

To mixer or recording A/D interface

Rear Panel Features and Functions

Input From Amplifier: Connect this jack to the output of your amplifier. Be sure to set the impedance on your amplifier to match the impedance of the RockCrusher Z Selector on the front panel, as well as the speaker(s) connected to the Speaker jacks. Use only proper speaker cables.

Speaker Outputs: For connection to Speaker Cabinets. These jacks are connected in parallel.

Suitable for one 8 Ohm speaker cabinet, or one or two 16 Ohm Speaker Cabinets. Do not connect to lower than a combined load of 8 Ohms maximum. Use Speaker 1 first when connecting speakers. Use only proper speaker cables.

Unbalanced Line Out: For connection to any unbalanced input of recording or PA gear. It can also be connected to a Power Amplifier in order to power additional cabinets. It is always live, and works in either Bypass, Attenuation, or Load Box modes. Use a shielded cable for these connections.

Balanced Line Output: For connection to any balanced input of recording or PA gear. It can also be connected to a power amplifier in order to power additional cabinets. It is always live, and works in either Bypass, Attenuation, or Load Box modes. It is transformer coupled, and should be used for the highest quality connection. Since the signals are floating from ground, it can also help alleviate potential ground loops between the Amplifier and the recording or PA equipment. Use a quality XLR 2 conductor with braided shield cable for these connections.

QUICKSTART-when using as *Power Attenuator*

1. Set your amplifier to the correct impedance to match your intended speaker load impedance.
2. Set the RockCrusher to the same impedance as your amplifier.
3. Connect the Input of the RockCrusher to the speaker output of your amplifier with a 18 Gauge Speaker Cable (recommended minimum is 16 Gauge or larger). Do not use shielded guitar cables ever to connect amplifier outputs to RockCrusher inputs.
4. Connect the Speaker jacks of the RockCrusher to your speaker cabinets with a proper speaker cable (see above). If you wish to use the RockCrusher as a Load Box, be sure the front panel Function switch is set to Attenuator position.
5. Connect the Line Output to your recording or PA equipment.
6. If using as an Attenuator, start by selecting Bypass from the front panel Function switch.
7. Adjust the controls on your amplifier to the desired sound. Now select Attenuator from the Function switch, and adjust the Attenuation Level and your amplifiers levels to obtain the desired sound and output stage distortion.
8. If using as a Load Box, make sure the Function Switch is in the Attenuate position, and monitor the signal coming out of your Line Outputs.

QUICKSTART-when using as *Loadbox*

1. Set your amplifier to the correct impedance to match your intended speaker load impedance.
2. Set the RockCrusher to the same impedance as your amplifier.
3. Connect the Input of the RockCrusher to the speaker output of your amplifier with a 18 Gauge **Speaker Cable** (recommended minimum is 16 Gauge or larger). **NEVER use shielded guitar cables to connect amplifier outputs to RockCrusher inputs.**
4. Connect the Line or XLR Output to your recording or PA equipment.
5. Make sure the Function Switch is in the Attenuate position, and monitor the signal coming out of your Line Outputs.

QUICKSTART-Setting EQ

1. Adjust PAD switch for level matching (example a 5watt amps might need min PAD, 100watt amps might need maximum PAD. This is to avoid clipping the EQ)
2. Set EQ switch to on position and adjust all level controls "Flat" which is at the 0 position.
3. Adjust EQ according to taste.



Here's our shape to emulate the characteristics of a Celestion G12T-75 with an SM57 on the edge of the dust cap. See Rivera.com for more



Here's our shape to emulate the characteristics of a Celestion Creamback with an SM57 on the edge of the dust cap. See Rivera.com for more



Here's our shape to emulate the characteristics of a Celestion G12K-100 with an SM57 on the edge of the dust



Here's our shape to emulate the characteristics of an original Electrovoice EVM 12L with an SM57 on the edge of the dust



Here's our shape to emulate the characteristics of a Celestion G12M "Greenback" with an SM57 on the edge of the dust



Here's our shape to emulate the characteristics of a Celestion Alnico "Blue" with an SM57 on the edge of the dust

Usage Tips:

1. Vintage amplifiers that do not have master volumes can sound flubby when played at maximum levels. Setting the levels for a small amount of output stage distortion can sound much more pleasant, and result in less stress on the output stage itself.
2. When using an amp as a slave with the Load Box function, and sending the Line Output to another amp, the EQ setting on the second amp can be radically different than the first amp's setting. Less accentuation on the high-frequency EQ of the second amp may be better.
3. Using a compressor or sustain effects pedal in between the Line Outputs of the RockCrusher and the inputs of the recording or PA equipment will only pump amp noise and will not sound good.
4. Use of delay effects such as echo or chorus between the Line Outputs of the RockCrusher and the inputs of recording or PA equipment can bring some interesting effects, as well as "Wet" the sound.
5. Using the Balanced Line Output will assist in reducing the possibility of hum-producing ground loops between your amplifier and the recording or PA equipment.
6. Use of Parametric or Graphic Equalizers in between the Line Outputs of the RockCrusher and the inputs of the recording or PA equipment can assist you in obtaining a close approximation of a live microphone and loudspeaker combination versus a direct sound. A speaker is a mechanical filter of sorts, and the actual frequency response and distortion of the speaker will act to color your sound. When you listen to a direct signal from the speaker output of an amplifier, it contains all of the frequencies that would normally be filtered and altered by your speakers. Most of the harshness that can be heard from the direct sound can be favorably altered by judicious use of an external equalizer. A professional grade unit will give the best results.
7. Make sure the RockCrusher ventilator is not blocked on the bottom and top.

ENJOY!