

Owner's Manual

Revision 1.0

Description

The Rock Block is a 1 watt vacuum tube guitar amplifier that can also be used as a distortion/boost pedal. It provides classic overdriven output tube sound at reasonable volume.

Inputs and Outputs

INPUT: This ¼" mono jack is used to connect to a guitar or the output of an effects pedal.

SPEAKER: This ¼" mono jack is used to connect to a speaker cabinet. The Rock Block can drive speakers of 4 to 16 ohms impedance.

OUTPUT TO AMP: This ¼" mono jack is used to connect to the input of another guitar amplifier or effects pedal.

12V DC: This 5.5/2.5mm jack is used to connect to the supplied external power supply. This supply is 12V DC (center positive) and is regulated and current-limited. Only this type of supply should be used.

Controls

POWER: This is the ON/OFF power switch. Push to the right to turn on the amplifier. The vacuum tubes will glow blue to indicate that the amplifier is turned on. It will take 5-30 seconds for the vacuum tubes to warm up.

GAIN: This knob is used to control the gain of the amplifier.

tone: This knob is used to control the treble response,

Vol: This knob is used to control the output volume of the amplifier.

BOOST: This 3-way switch is used to boost the gain of the amplifier. The left position is the lowest gain, the center position is medium gain, and the right position is maximum gain.

BASS: This 3-way switch is used to control the bass response. The center position is for the least bass, the left position is for medium bass, and the right position is for maximum bass.

OUT VOL: This knob is used when the Rock Block is driving another amplifier to control the volume to the OUTPUT TO AMP jack.

BYPASS: This footswitch is used to bypass the Rock Block when driving another amplifier. If the green LED is OFF the Rock Block is bypassed, and the INPUT jack is connected directly to the OUTPUT TO AMP jack (true bypass).

Operating Instructions

Using the Rock Block as a guitar amplifier

Connect the guitar or effects pedal to the INPUT jack using a guitar cable with a ¼" mono plug. Also connect a speaker cabinet to the SPEAKER jack using a speaker cable with a ¼" mono plug. The ideal speaker impedance is 8 ohms, but 4 and 16 ohm speakers can be used while still providing excellent sound. See the "Vacuum Tube Selection" section for matching the output vacuum tube to the speaker impedance. If a speaker cable is connected to the SPEAKER jack, then a 4-16 ohm speaker should be connected to the speaker cable to avoid possible damage to the amplifier.

Connect the supplied external power supply to the 12 DC jack and plug the AC 3-pronged plug into a wall socket. Turn on the amplifier with the POWER switch. If the green LED is not ON, then push the footswitch to un-bypass the amplifier. The green LED should be ON.

For a clean guitar sound: Turn the VOL knob maximum clockwise. Set the BOOST switch to the left (minimum) position. Adjust the GAIN knob for maximum volume without distortion. Adjust the BASS switch and TONE knobs to taste.

For a "bluesy" or "crunchy" guitar sound: Turn the VOL knob maximum clockwise. Set the BOOST switch to either the left or center position. Adjust the GAIN knob for the desired amount of distortion.

For a "hi-gain" or "lead" guitar sound: Turn the VOL knob maximum clockwise. Set the BOOST switch to either the center or right position. Adjust the GAIN knob for the desired amount of distortion, sustain and feedback.

For reduced volume with high gain: Turn VOL knob counter-clockwise. This will reduce the overall volume of the amplifier. The distortion will transition from output tube to preamp tube distortion as the volume is reduced.

Using the Rock Block as a distortion/boost pedal

Connect the guitar or effects pedal to the INPUT jack using a guitar cable with a ¼" mono plug. Also connect the OUTPUT TO AMP jack to another amplifier or effects pedal using an instrument cable with a ¼" mono plug. Do not plug anything into the SPEAKER jack.

The output volume of the Rock Block, when used as a distortion/boost pedal, is controlled with the OUT VOL knob. The BYPASS footswitch is used to bypass the Rock Block. All other controls are used in the same way as when the Rock Block is used as an amplifier to drive a speaker.

If the Rock Block is driving an amplifier that is grounded (has a 3-prong power cord), then it is best to use the included AC adapter (3-prong to 2-prong) with the Rock Block to reduce hum, especially when the Rock Block is bypassed. Plug the Rock Block power cord into the adapter, and then plug the adapter into the wall socket. If the amplifier the Rock Block is driving is not grounded or if the Rock Block is driving a speaker, then do not use the AC adapter so that the Rock Block is grounded and hum is reduced.

Vacuum Tube Selection

The best vacuum tubes to use for the right position (preamp) are either an ECC83/12AX7 or 5751. A 5751 tube will reduce the gain slightly and produce a slightly different distortion, especially when the VOL knob is turned counter-clockwise.

The only recommended vacuum tubes for the left position (output) are either an ECC82/12AU7, ECC99 or 12AT7. It is recommended to use an ECC82/12AU7 or 12AT7 if the speaker impedance is 4 ohms. An ECC99 is recommended if the speaker impedance is 16 ohms, but the ECC82 will work fine. All three tube types are recommended for 8 or 16 ohm speakers. An ECC99 will result in about 50% more power and more bass.

Make sure that the vacuum tube pins are straight before inserting the tubes into the sockets. Apply a slight pressure but do not force the tubes into the sockets or damage to the sockets may result.

Specifications

	<u>12AT7</u>	<u>12AU7</u>	<u>ECC99</u>
Output Power (clean)	0.2 watt	0.4 watt	0.6 watt
(max)	0.8 watt	1.0 watt	1.5 watt
Speaker impedance	4 - 8 ohms (ECC82/12AU7, 12AT7) 8 -16 ohms (ECC99)		
Input impedance	1Meg ohms		
Output impedance (OUTPUT TO AMP jack)	2.5K ohms		

Warranty and Repair

The warranty period is 2 years. If during the first 2 years the Rock Block needs repair, Surprise Sound Lab will repair or replace the Rock Block at no charge. The vacuum tubes are guaranteed for 90 days. The owner will be responsible for shipping charges. Any problems due to misuse, abuse or modification will not be covered under the warranty. Any repairs outside of the warranty will be performed by Surprise Sound Lab for a reasonable fee. Please email info@surprisesoundlab.com for any repair requests.

Voice Switch

The 3-way switch on the left side of the Rock Block, next to the OUTPUT TO AMP jack, is used to select the type of sound (voice) when the Rock Block is used as a distortion pedal.

The center switch position selects a "vintage" sound, which is the same as the sound when the Rock Block is used as an amplifier.

The position towards the front of the Rock Block selects a "modern" sound.

The position towards the back of the Rock Block selects a "metal" sound.

This switch has no effect on the sound when the Rock Block is used as an amplifier driving a speaker.

Tips for using your Rock Block

Generally keep the VOL control at maximum for output tube overdrive. However, for high GAIN settings, reducing the VOL by about 1/3 to 1/2 will provide more TONE control.

Decreasing the BASS setting as you increase the BOOST and GAIN settings will produce the best distortion.

Only use as much GAIN as needed for the desired distortion and sustain to avoid unpleasant distortion.

For high GAIN settings bridge pickups seem to work especially well.

Recommended Settings

Generally keep the VOL control at maximum for output tube overdrive.

<u>Guitar</u>	<u>Style</u>	<u>Pickup</u>	<u>GAIN</u>	<u>BOOST</u>	<u>BASS</u>
Strat	Clean	any	11 o'clock	min	max
Strat	Blues	any	2 o'clock	min	mid
Strat	Rock	bridge	1 o'clock	mid	mid
Strat	Heavy	bridge	2 o'clock	max	min
Les Paul	Clean	any	8 o'clock	min	mid
Les Paul	Blues	any	12 o'clock	min	mid
Les Paul	Rock	bridge	11 o'clock	mid	min
Les Paul	Heavy	bridge	1 o'clock	max	min