

# TECHNICAL READOUT

**Acoustical operating principal:** Pressure gradient or pure pressure (*depending on capsule*)

**Directional pattern:** Cardioid, omnidirectional, figure of 8 (*depending on capsule*)

**Frequency response:** 20Hz – 20kHz

**Sensitivity (1kHz into 2.5kΩ):** 27mV/Pa  
(+/-10mV *depending on capsule*)

**Rated impedance:** 50Ω

**Rated load impedance:** Not less than 1kΩ

**Noise level a-weighted (iec 651):** Not more than 7.5dBV  
-14dBV (*depending on capsule*)

**Max output (1% thd into 2.5kΩ):** +12dBV = 3.1 Vrms

**Max spl (1.0% thd into 2.5kΩ):** 138dB

**Dynamic range (2.5kΩ load):** 130dB

**Supply voltage (IEC 268-15):** +48V phantom power  
(+35V min.)

**Current draw: (typical AI+48V):** 1.8mA



## WARRANTY

Blue Microphones warrants its hardware product against defects in materials and workmanship for a period of THREE (3) YEARS from the date of original retail purchase, provided the purchase was made from an authorized Blue Microphones dealer. This warranty is void if the equipment is altered, misused, mishandled, maladjusted, or is serviced by any parties not authorized by Blue Microphones. The warranty does not include transportation costs incurred because of the need for service unless arranged for in advance. Blue Microphones reserves the right to make changes in design and improve upon its products without obligation to install these improvements in any of its products previously manufactured. For warranty service or for a copy of Blue's Warranty Policy including a complete list of exclusions and limitations, contact Blue at 818-879-5200.

In keeping with our policy of continued product improvement, Baltic Latvian Universal Electronics (BLUE) reserves the right to alter specifications without prior notice.



Microphones

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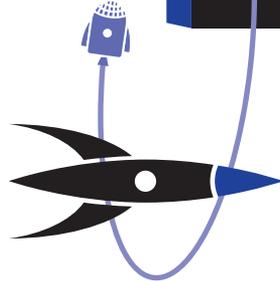
**BOTTLE  
ROCKET** 

**STAGE  
ONE**



**CLASS A SOLID STATE MICROPHONE**

**BOTTLE  
ROCKET**



**STAGE  
ONE**

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**BLAST OFF**

# STAGE ONE



Congratulations on your purchase of the Bottle Rocket Stage One microphone. The Stage One Class A discrete solid state mic system is an innovative and unique solution for virtually any recording need. The Stage One combines low noise and superb transient response along with the ability to use a variety of interchangeable capsules, like Blue's Bottle Caps.

Precision-designed and hand-assembled, the Stage One is crafted for a lifetime of use. Compared to similar microphones, the Stage One has a very low self noise specification (<7.5dB) and an very high output level (+12dBV), making it the perfect choice for today's high sample rate/deep word length digital platforms. Instead of integrated circuits (chips), the Stage One employs a transformerless Class A discrete amplifier circuit to ensure the most accurate and noise-free signal possible, with minimal distortion and coloration. The Stage One is an ideal microphone for recording virtually any sound source.

The Stage One comes complete with Blue's popular and versatile B8 capsule and custom spider shockmount. We recommend one of Blue's high-fidelity mic cables (sold separately) to get the most out of your Bottle Rocket setup. Check out Blue's complete line of cables and mic accessories at [www.bluemic.com](http://www.bluemic.com).

In order to familiarize yourself with the Stage One's specialized and unique features, please take the time to read this manual and be sure to try the suggested

## CAPSULES DESIGNED FOR ANY MISSION · the bottle caps ·

- B0 Capsule** • Airy top end, silky vocal sound
- B1 Capsule** • Ultimate for acoustic instruments
- B2 Capsule** • Vintage rich ribbon sound with muted top end & detailed midrange
- B3 Capsule** • Accurate, neutral sound
- B4 Capsule** • Live & orchestral applications
- B5 Capsule** • Dramatic top & bottom
- B6 Capsule** • The renowned Blue sonic signature—smooth, liquid presence
- B7 Capsule** • Today's vintage sound
- B8 Capsule** • All-purpose — our "TPO" (The Popular Opinion) sound!

recording tips. With proper care and use, the Stage One will reward you with many years of recording enjoyment.

To get the most out of your Stage One, we recommend you check out the Bottle Caps, Blue's series of interchangeable capsules (*listed on the previous page*). Each Bottle Cap capsule has been engineered to capture a different tonal characteristic and pickup pattern, from airy highs to larger-than-life lows—and everything in between. In an instant, you can change these bayonet-mount capsules for a stunning variety of tonal characteristics and pickup patterns without shutting off the power!

**DANGER! DANGER!**  
Forceful positioning of the shockmount without loosening the thumbscrew can result in damage not covered by warranty.

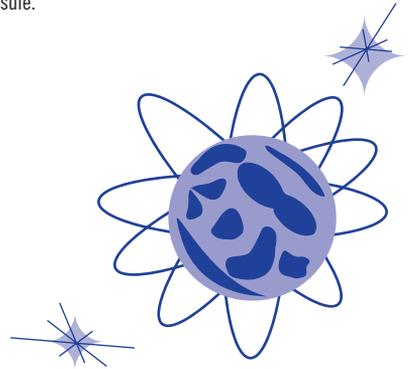


The Stage One requires +48V phantom power, which is provided by most mic preamps and mixing consoles. If your preamp or console input does not provide phantom power, you will need to purchase a separate +48V power supply. It is important to note that some units, though rated at +48V, may supply insufficient or unstable phantom power, which can result in distortion and/or degraded performance when used with a condenser microphone. Because of this, we have designed the Stage One to deliver outstanding performance with a power supply as low as +35V!

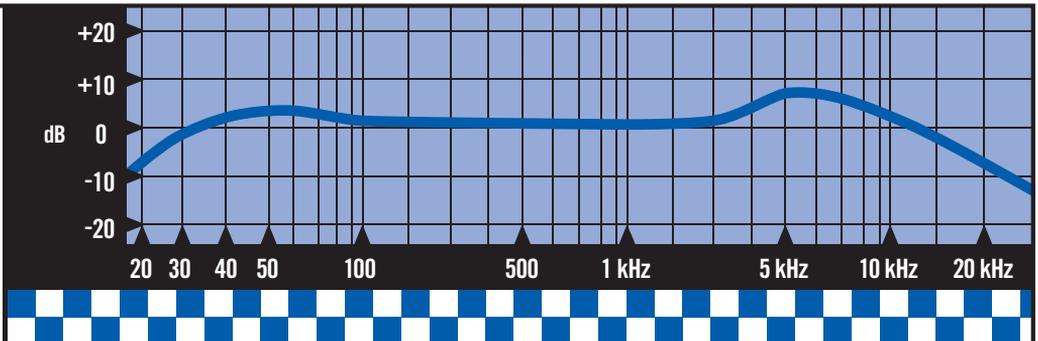
To avoid damage to audio components when connecting the Stage One to your microphone input, we recommend the following procedure:

- 1 Set mic preamp gain to its nominal position (“off”).
- 2 Mute console master, stage monitor and mains feeds, headphones or foldback sends, and studio monitors.
- 3 Connect the female end of your balanced XLR microphone cable to the Stage One’s output jack. Connect the male end to your balanced console input or balanced mic preamp input.
- 4 Switch on phantom power.
- 5 Un-mute all previously muted signal paths and adjust mic preamp gain as necessary.

Once the Stage One is on the stand and powered up, make sure that the active, on-axis side of the capsule (the side aligned with and directly above the Blue logo) is facing the desired source. The Stage One is a cardioid mic, and is designed to reject off-axis sound arriving at the back of the capsule.



FREQUENCY RESPONSE



*This frequency chart of the Stage One B8 capsule is only a start. It gives the recordist a basis of the sound provided. How the microphone reacts in a particular application will differ greatly because of many variables. Room acoustics, distance from sound source (proximity), tuning of the instrument and microphone cabling are only a few of the interacting issues. For an artist or engineer, how the microphones are used creates the basis of the sound.*



## STANDARD OPERATING RECORDING PROCEDURES

Following are some application tips that will help you to get the most out of the Stage One with its included capsule.

### Vocals

Here's a little-known secret—vocalists love singing into unique and impressive mics like the Stage One. For a “big” vocal sound, position the vocalist within one to four inches of the capsule. There's no need to worry about overloading the microphone, but be sure to use a high quality wind screen or pop filter to protect the diaphragm. Tilt the microphone upward (toward the forehead) for more projection and head tone, straight on at the mouth for maximum brightness and intelligibility, or down toward the chest for more robust full lows and smoother highs.

### Electric Guitar

Because of its robust characteristics, the Stage One is an excellent mic for any clean guitar sound. Position the capsule toward the center of the speaker to capture more highs, or toward the edge of the cone for a fuller sound with more bottom end. For overdriven or distorted tones, move the mic towards the outer edge of the cone, or back it away from the amp a foot or more to add a little room sound and soften the extreme high end. Give the Stage One a try on electric bass, blues harmonica, and organ too!

### Acoustic Guitar

Large diaphragm mics require careful placement when used on acoustic guitar, but the Stage One's shimmering high end is well-suited to this job. For a balanced sound with plenty of sparkling high end, place the microphone facing the guitar neck, right where the neck joins the body (usually around the 12th – 14th frets). For starters, keep the mic as close as possible, and tilt the capsule toward the soundhole to capture a blend of low end and pick sound. If you need more lows, move the microphone closer to the soundhole. For more high frequency detail, move the Stage One farther from the guitar, either at the same neck position, or above the instrument up by the guitarist's head.

### Strings

Because of its natural highs and soft midrange characteristics, the Stage One is an excellent choice for miking

all members of the bowed string family. In general, the capsule should be positioned toward the instrument's bridge to pick up a blend of resonance and bow sound. On bass and cello, placement from 3 to 6 inches in front of the bridge is usually ideal. For violin and viola, it is preferable to position the microphone 1 to 2 feet above the instrument. Angle the capsule toward the bridge for more bow sound and low tones, or move the microphone toward the tuning pegs to capture a more diffuse, bright, and blended sound.

### Drums

The Stage One's slim profile and fast transient response offer numerous advantages when recording drums. For kit and hand drums, begin by placing the microphone two to four inches above the rim or hoop (where the head is secured to the shell). Angle the capsule toward the player's stick or hand to pick up more attack and definition. Positioning the capsule toward the shell will soften the sharp attack of a hand drum, or pick up more of the bright, crackling buzz from a snare. Moving the microphone closer to a drum generally increases the low end, shell resonance, and separation from other sound sources, while more distant placement emphasizes the interaction of the drum and the environment, producing a blended, airier sound.

### Saxophones, Flutes and Reeds

The extended high end response of the Stage One makes it an ideal choice for modern tonality when miking saxophones and other wind instruments. For soprano sax, clarinet, and related instruments, position the capsule directly above and in front of the keys between the middle of the horn and the lowest pads. Try moving the mic up or down along the length of the body to adjust the balance of airy highs (toward the mouthpiece) and cutting midrange (toward the bell). On flute, start by placing the Stage One above the middle of the instrument, and move the capsule closer to the mouthpiece if more highs and breath sound is desired. For other members of the saxophone family, start by placing the Stage One about two to six inches in front of the lip of the bell. Angle the capsule up toward the mouthpiece to capture more air, brightness, and high notes. For a mellower sound, orienting the capsule toward the floor emphasizes the low range of the sax, and tames the biting upper mids that project straight out of the bell.

We hope you enjoy your purchase and find the Bottle Rocket Stage One to be an ideal mic for a wide spectrum of instrumentation and recording needs.