spark SL

LARGE-DIAPHRAGM STUDIO CONDENSER MICROPHONE

CONGRATULATIONS ON YOUR PURCHASE

Congratulations on your purchase of the Spark SL from Blue Microphones. The Spark SL is a cardioid, solid-state condenser microphone designed to help you achieve professional-quality recordings in any creative environment. We designed the Spark SL's acoustic performance to ignite your inspiration and passion for recording, and we think you'll find its unique look and quality construction to be inspiring as well!

The Spark SL combines Blue's unique condenser capsule with Class-A electronics to produce stunning recordings.

In addition, the Spark SL microphone ships with Blue's custom-designed shockmount and a stylish wood case for easy transport. Spark SL provides everything you need to make professional recordings.

The Spark SL's electronics are Class A with a transformerless output. Simply put, this means that the sound which arrives at the diaphragm (mic capsule) is converted to electrical energy (transduced) is then amplified as accurately as possible. Featuring a -20dB pad and 100Hz high-pass filter, Spark SL's overall sonic character is superbly detailed and pleasing to the ear. It's an ideal microphone for recording vocals, drums, guitars, pianos, brass, woodwinds, and just about anything else that you can throw onto the fire.

In order to familiarize yourself with the Spark SL's specialized and unique features, please take the time to read this manual and be sure to try the suggested recording tips. With proper care and use, the Spark SL will reward you with many years of recording enjoyment.

Spark SL includes a custom shockmount designed to isolate the microphone body from low frequency resonance (rumble). Spark SL requires +48V phantom power and works great with audio interfaces, mixers and mic most mic preamps. For best performance and to avoid damage to the microphone's audio components, we recommend the following procedure:• Set mic preamp gain to its nominal position ("off").

- *Mute the input channel in your DAW or mixing console.*
- *Connect the female end of your balanced XLR microphone cable to the Spark SL's output jack. Connect the male end to your balanced console input or balanced mic preamp input.*
- *Switch on phantom power.*
- *Un-mute all previously muted signal paths and adjust mic preamp gain as necessary.*

Spark SL is a cardioid mic, and is designed to reject off-axis sound arriving at the back of the capsule. Once Spark SL is on the mic 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 sound source. Engage the -20dB pad if you're recording a loud sound source with sharp transients like a snare drum, toms, electric guitar amp, or a powerful vocalist. Unless you're recording a very low frequency instrument, like a kick drum or a bass amp, it is typically good practice to engage the 100Hz high-pass filter to make sure that very low frequency and subsonic rumble or peaks don't compromise the headroom of your recordings.

RECORDING APPLICATIONS

What do you want to record with your Spark SL? Whatever it is, we have some great tips for you, and some interesting techniques to experiment with. The Spark SL will excel in recording a wide range of different sound sources, so check out the sections and below for the straight story on recording each of these sources with your Spark SL mic.

VOCALS

A little-known secret in the recording world is that vocalists love singing into beautifully engineered microphones like the Spark SL. Put it in front of any singer and you're guaranteed to get a truly inspired vocal performance. Position the vocalist at the front of the Spark SL microphone (the side with the Blue logo) from one to twelve inches from the microphone. The closer you get to the Spark SL, the more present and intimate the Spark SL will sound. For a "big" vocal sound with maximum presence, get the vocalist within one to three inches of the capsule. Engage the high-pass filter as necessary to make sure low frequency and subsonic rumble don't compromise the headroom of your vocal track. For a livelier sound, such as a rock or pop vocal, place the Spark SL a further from the vocalist. Tilt the Spark SL up (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 lows and smoother highs.

ACOUSTIC GUITAR

For a balanced sound with plenty of sparkling high end, position the Spark SL microphone head facing the guitar neck, right where the neck joins the body (usually around the 12th–14th frets). For starters, keep the mic as close to the guitar as possible and tilt the capsule (microphone head) toward the soundhole to capture a blend of low-end and pick sound. If you need more low-end sound, move the microphone closer to the soundhole. For more high-end detail, move the Spark SL farther from the guitar, either at the same neck position, or above the instrument up by the guitarists head. To make your acoustic guitar recordings sound thick, rich, and luxurious, try double tracking, a process of recording the same part twice (or even more times), on separate tracks. Experiment with panning the different tracks to different sides of the mix to find a sound that's just right for your artistic needs. Engage the high-pass filter as necessary to make sure low frequency and subsonic rumble don't compromise the headroom of your guitar track.

ELECTRIC GUITAR

To create a clean recorded electric guitar, such as those used in genres like country and jazz, position the Spark SL capsule in the center of the speaker cone to capture more highs, or move the capsule toward the edge of the cone for a fuller sound with more low-end frequencies. For overdriven or distorted tones, used in genres such as rock or metal, place the Spark SL close to the amplifier and move the mic toward the outer edge of the cone. Engage the high-pass filter and/or -20dB pad as necessary. Or, for a more lively sound, back the Spark SL away from the amp a foot or more to add in a little room sound (room sound is the inherent reverberation you get from the room, which adds liveliness) and soften the extreme high-end frequencies.

DRUMS

The Spark SL's fast transient response, crisp highs, and high-pass filter make it an ideal mic for 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 front of the capsule toward the player's stick or hand to pick up more attack and definition. Turning 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. Engage the high-pass filter and -20dB pad as necessary. 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 and airy sound.

SAXOPHONES, FLUTES, AND REEDS

For soprano sax, clarinet, oboe, and related instruments, position the Spark SL directly above and in front of the keys between the middle of the horn and the lowest pads. Engage the high-pass filter as necessary. Try moving the Spark SL 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 Spark SL above the middle of the instrument, and move the diaphragm closer to the mouthpiece if more high frequencies and breath sounds are desired. For other members of the saxophone family, start by placing the Spark SL two to six inches in front of the lip of the bell. Angle the Spark SL upward toward the mouthpiece to capture more air, brightness, and high notes. For a mellower sound, orienting the diaphragm toward the floor will emphasize the low range of the sax, and will tame the biting upper midrange that projects straight out of the bell.

PIANO

Pop and jazz piano recordings are usually accomplished with a pair of microphones placed inside a grand piano– either close to the hammers for a defined, percussive sound, or roughly in the middle of the piano body to get a more resonant and blended tone. When using these methods, it's conventional to employ a coincident stereo pair of microphones, with one microphone capsule oriented to pick up the treble strings, and the other focused on the bass range of the instrument.

VIOLINS, VIOLA, CELLO AND BOWED INSTRUMENTS

When recording bowed instruments, especially violin, room conditions become even more important. Since violins tend to be very bright, recording them in a lively room can leave you with a harsh sounding recording. For starters, try hanging a blanket or two on the surrounding walls to slightly dampen the room's natural reverb. Once you've taken control of the sound of the room, place the Spark SL about one or two feet in front of the bridge of the instrument. If you're recording a violin or viola, this means you'll need to place the Spark SL above the person playing, pointed down toward the bridge of the violin or viola. If the instrument sounds harsh (too much high end), try moving the Spark SL microphone slightly toward the side of the instrument and away from the "f" holes. If you are recording multiple string or bowed instruments, simply place the Spark SL about 3-6 feet above and in front of the instruments, pointed toward the players. Try and arrange the players evenly in front of the Spark SL, as to avoid picking up one instrument more than all of the others.

ACOUSTIC AND ELECTRIC BASS

Recording acoustic bass (upright bass) and electric bass are very different tasks, but the Spark SL will help you to achieve great results for both instruments. For acoustic bass, start by placing the Spark SL about 8-18 inches away from the front of the instrument, and point the Spark SL in between the bridge and the fingerboard to capture a nice balance of low-end frequencies and string attack. If you want to capture more of the low-end thump of the bass, and less of the attack of the strings, position the Spark SL about 3-8 inches away from the bass, and aim it about halfway between the bridge and the tailpiece. The most important thing to do when recording acoustic bass is to listen to the bass while it is being played, and determine a microphone position that suits the particular bass and use case.

When recording electric bass, it is important to have a decent amount of available space to record in. The sound waves a bass amplifier creates have a much longer wavelength than most instruments, and as a result require a little bit of space to fully develop. Start by placing the Spark SL about 2-12 inches away from the speaker, directly in front of the center of the speaker cone. For less punch and more of a smooth low end, position the Spark SL between the center of the speaker cone and the edge of the speaker cone. Engage the -20dB pad as necessary.

RECORDING IN STEREO WITH SPARK SL

Another great use for your Spark SL microphone is recording in stereo. For this use, you'll need two Spark SL microphones. Stereo recording is often the preferred method for many different recording situations, from acoustic guitars to orchestras, because stereo recording provides the listener with an even more realistic listening experience.

Stereo recording works much like the way we hear. Our ears are pointed approximately 110 degrees in different directions, which allows us to comprehend where a sound comes from. Stereo recording involves using two microphones pointed in different directions ranging from 90 to 180 degrees, or two microphones pointed at the same instrument from different directions. Because the microphones are pointed in different directions, you are able to capture realistic spacing and depth in your recordings, similar to the way we hear. In essence, two microphones positioned in this way will better capture the reflections and formation of the sound in the room.

There are several different ways to record in stereo with your Spark SL microphones. Start by placing two Spark SL microphones about 4-10 feet apart, and point both of them toward an instrument (or instruments). As a starting point, it is ideal to form an equilateral triangle between the two microphones and the instrument (one point of the triangle being the instrument, the other two being the Spark SL microphones) but just listen to what is being recorded, and decide for yourself what the ideal positioning of your Spark SLs might be. This technique is great for recording drums, an orchestral ensemble, or a full band recording.

For a more intimate stereo sound, place one Spark SL on a stand as you would normally. Next, place a second Spark SL upside down, directly above the first Spark SL, and point them 90 degrees apart (perpendicular) from one another. Now, position the instrument (or instruments) you wish to record directly in front of the intersection of the two microphones' polar patterns, about 6-24 inches away from the Spark SLs. The larger you make the angle, the wider the stereo image will be. This technique is great for recording acoustic guitars, banjos, upright pianos, drums, or just about any other acoustic instruments.

ADDITIONAL APPLICATIONS

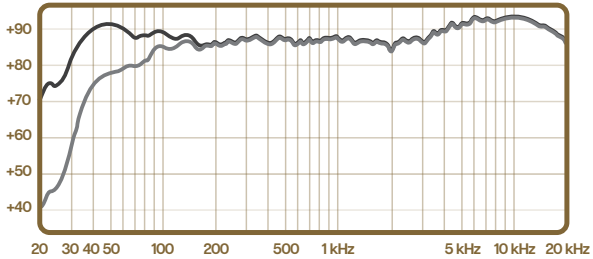
The Spark SL is not just for instruments and singers! Spark SL is an ideal desktop microphone for applications such as dictation, voice recording and Internet telephony, and of course, podcasting! You'll also love it for looping dialog over your professional or home movies. You can connect the Spark SL to your computer with Blue's Icicle XLR to USB adapter, or other USB audio converters.

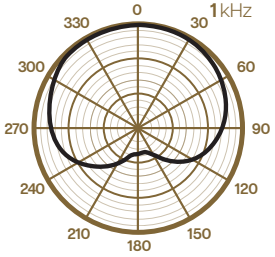
OK, we've lit the fuse–now it's time to light up Spark SL and create some professional-quality recordings!

We hope you enjoy your purchase!

TECHNICAL SPECIFICATIONS:

- Transducer Type: Condenser, Pressure Gradient
- Polar Pattern: Cardioid
- Frequency Response: 20Hz-20kHz
- Sensitivity: 34.9 mV/Pa at 1 kHz (1 pa = 94 dB SPL)
- Output Impedance: 50 ohm
- Rate Load Impedance: not less than 1k ohm
- Maximum SPL: 136 dB SPL (1k, THD 0.5%)
- S/N Ratio: 73 dB-A
- Noise Level: 16.4 dB-A
- Dynamic Range: 119.6 dB
- Power Requirements: +48V DC Phantom Power
- Weight: 336g
- Dimensions: 220.5mm x 45mm
- HPF: 100Hz, 12dB per octave
- PAD: -20dB





WARRANTY

Blue Microphones warrants its hardware product against defects in materials and workmanship for a period of TWO (2) 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, suffers excessive wear, 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

Designed in USA. Made in China.

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