

# Blueberry



*Classic microphones, made without compromise*



BALTIC LATVIAN UNIVERSAL ELECTRONICS

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## Warranty

This Microphone or related part is warranted under the conditions outlined below to its original, registered owner, provided the purchase was made from an authorized Baltic Latvian Universal Electronics (BLUE) dealer. This Microphone or related part is guaranteed to remain free from operating defects for one year from the date of purchase. In the event that service is required, all necessary parts and labor will be furnished free of charge during this period except for tubes, which are guaranteed for 90 days against defects. This warranty is void if the serial number has been altered, removed or defaced. The warranty is void if the equipment is altered, misused, mishandled, maladjusted, or is serviced by any parties not authorized by Baltic Latvian Universal Electronics (BLUE). The warranty does not include transportation costs incurred because of the need for service unless arranged for in advance. Baltic Latvian Universal Electronics (BLUE) 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. This warranty is in lieu of any or all expressed or implied.

## Blueberry





## Technical Data

Microphones	Blueberry	Mouse	Dragonfly	Kiwi	Cactus	Bottle (w/B6)
Acoustical operating principal	Pressure gradient					
Directional Pattern	Cardioid	Cardioid	Cardioid	multipattern	Cardioid	Cardioid
Frequency range	20Hz – 20KHz					
Sensitivity at 1 kHz into 1 kohm	20mV/Pa	21mV/Pa	21mV/Pa	19mV/Pa	18mV/Pa	20mV/Pa
Rated impedance	150ohms	150ohms	50ohms	150ohms	150ohms	200ohms
Rated load impedance	Not less than 1kohms					
S/N ratio CCIR468-3	75dB	76dB	76dB	76dB	71dB	76dB
S/N ratio DIN/IEC 651	86dB-A	87dB-A	87dB-A	87dB-A	82dB-A	87dB-A
Noise level DIN/IEC 651	8dB-A	7dB-A	7dB-A	8dB-A	10dB-A	7.5dB-A
Maximum SPL for THD 0.5%	133dB	134dB	132dB	133dB	130dB	134dB
Dyn. range of the mic amplifier	95dB	96dB	96dB	95dB	97dB	98dB
Supply voltage	48V phantom powered					
Weight	520g	980g	630g	880g	800g	1700g
Dimensions (mm)	235x50x30	165x65	165x60	220x60	230x50x30	390x90

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

For a “big” vocal sound with maximum presence, get the vocalist within one to three inches of the capsule. There is no need to worry about overloading the microphone capsule, but be sure to use a mesh windscreen or the BLUE W1 pop filter! Mount the Blueberry on a boom stand, and tilt the capsule 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*

Large diaphragm mics require careful placement when used on acoustic guitar, but the Blueberry's transparency and superb transient response are well-suited to this job. For a balanced sound with plenty of sparkling high end, position 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 end detail, move the Blueberry farther from the guitar, either at the same neck position, or above the instrument up by the guitarist's head.

#### *Electric Guitar*

The Blueberry is an excellent mic for any clean amp sound, especially on bright rhythm chords and single-note lines. When close-miking, aim the mic at the center of the speaker to capture more highs, or move it toward the edge of the cone for a fuller sound with more low end. Position the Blueberry a foot or more away from the amp to add a little room sound and soften the extreme high end.

#### *Percussion*

On tambourine, shaker, bells, clave, and orchestral percussion the Blueberry offers astounding clarity and realism. And unlike most large diaphragm microphones, the Blueberry can be positioned quite close to a percussive source without distortion or undue proximity effect. Start by placing the microphone about a foot from percussive instruments. Moving the mic closer will emphasize detail and tone, as well as decreasing the proportion of ambient room sound on a track. More distant placement will yield a natural, roomy sound that blends easily with other rhythm instruments.

#### *Drums*

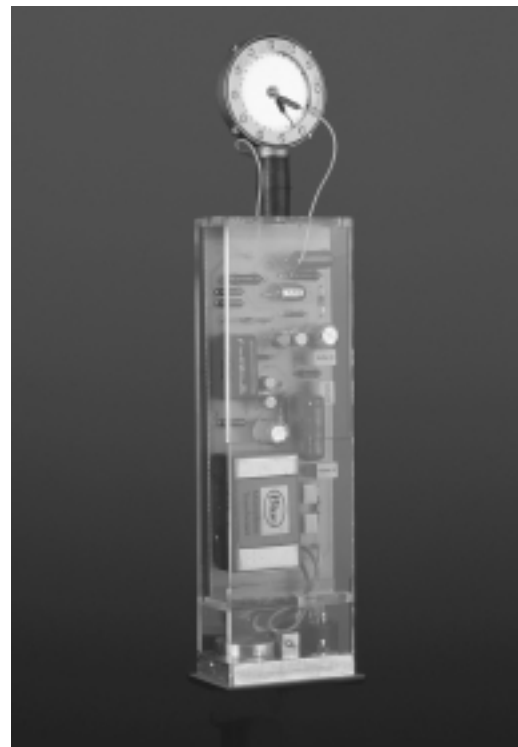
The Blueberry's fast transient response, crisp highs, and ability to handle high sound pressure levels make it an ideal mic for recording drums. For kit and hand drums, begin by placing the microphone two to four inches above the rim or hoop (where the head is secured to the shell). Angle the capsule 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. 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.

Congratulations on your purchase of the the BLUE Blueberry, a classic modern microphone made the old-fashioned way, without compromise. Like its tasty namesake, this Blueberry is sweet, non-fattening, and hand-picked at the height of perfection. But it's not recommended for use in pies or pastries. In order to familiarize yourself with this microphone's specialized features, please take the time to read this manual, and be sure to try the suggested recipes... uh, recording tips.



The Blueberry is a pressure-gradient cardioid condenser microphone, employing the BLUE single-membrane, tunable large diaphragm capsule. For this hand-crafted diaphragm we have selected a 6-micron mylar film, sputtered with a mixture of pure gold and aluminum, and tensioned to our own hand-built brass backplates. The end result of this painstaking process is a precision recording tool with superb transient response and an bright, airy top end emphasis.

First and foremost, the Blueberry has been designed to provide the commanding, intimate presence associated with the world's best (and most expensive) vintage vocal microphones. With its shimmering, detailed highs, smooth midrange, and minimized proximity effect (a bass boost inherent in all unidirectional mics), the Blueberry excels at delivering a vocal



*Inside the Blueberry*

right to the front of the mix where it belongs. When processed with limiting and/or compression, as is standard practice for most pop vocals, tracks recorded with the Blueberry will be free of pumping, low end thumps. Acoustic guitar, hand percussion, drums, and other critical high end sources also shine in front of the Blueberry, gaining an extra measure of pres-

ence that enables the most delicate sounds to cut through a mix, even at very low levels.

The microphone's MZ02 solid-state electronics are based on a Class A, fully discrete circuit. In plain English, this means that the sound which arrives at the diaphragm is transduced (converted to electrical energy) as accurately as possible, with no integrated circuits (a.k.a. "IC's") in the signal path. To get the most out of this, or any quality microphone, it is essential to pair it with a good microphone pre-amplifier. Most professional recordists prefer to have outboard preamps on hand, and will choose solid-state or vacuum tube models based on their unique characteristics. To maintain the integrity of your signal, use the Blueberry high-definition mic cable going into the mic preamp. And, whenever possible, connect the mic preamp output directly to your recorder or A/D converter, bypassing the mixing board and any unnecessary components.

For mounting the microphone on a stand, a recessed, threaded socket is built into the Blueberry body, next to the XLR output jack. Optional Series One or Series Two shockmounts offer alternative mounting systems to enhance positioning and isolate the microphone body from low frequency vibrations conducted through the stand. The Series One cradle mount includes a mounting bracket which also



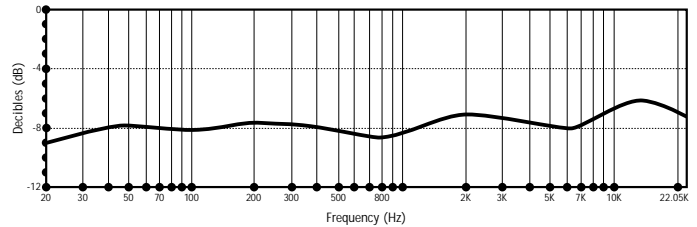
The Blueberry with optional shockmounts and W1 POP Filter

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functions as a base for the W1 wire mesh pop filter; to fit the Blueberry into this bracket you must first remove the four knurled nuts on the side of the microphone. If a pop filter is not required, the Series Two yoke mount is recommended. Its elastic bands attach easily to the knurled nuts on the side of the microphone.

Whether you are using the microphone on its own, or with a shockmount, you may find it easiest to 1) loosen the boom stand arm or threaded end of the mic stand, 2) grasp the mic or shockmount assembly

## Blueberry Capsule Frequency Response



This frequency chart of the Blueberry 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.

in one hand, and 3) screw the mic stand threads into the appropriate mount, without over-tightening. This procedure will assure that the elastic shockmount bands stay in place, and eliminates any possibility of damage to the mic. The angle of the swivel mount can be adjusted with the large thumbscrew.

The Blueberry requires 48 volt phantom power, which is provided by most mic preamps, mixing consoles, or separate phantom power supplies. It is important to note that some units, though rated at 48 volts, may supply insufficient or unstable phantom power, which can result in distortion and/or degraded performance when used with this microphone.

To avoid damage to audio components when connecting phantom power, follow this simple procedure: 1) turn down the mic preamp gain, headphones, and your studio monitors, 2) connect microphone cable to the Blueberry and microphone input jack, 3) turn on phantom power, 4) turn up the mic preamp gain, etc. To disconnect or re-route the Blueberry, 1) turn down the mic preamp gain, headphones, and your studio monitors, 2) turn off phantom power and wait 10 seconds before disconnecting the mic.

Once the Blueberry is on the stand and powered up, make sure that the active, on-axis side of the capsule (the side of the mic with the BLUE logo) is facing the desired source. The Blueberry is a cardioid microphone, and is designed to reject off-axis sound arriving at the back of the capsule. And now, here are some recording tips that will allow you to get the most out of the Blueberry!!

### Vocals

Here's a little-known secret—vocalists love singing into unique and impressive mics. And in addition to its good looks, the Blueberry was developed especially to enhance the airiness and detail in any voice, while diminishing the proximity-induced lows which can cloud a mix or produce compression artifacts. Put it in front of any singer and you are guaranteed to get a 110% inspired performance that sits perfectly in the mix with little or no additional equalization. The Blueberry is also an outstanding choice for narration and voiceover work.

