



Microphones

Step up to the mic!<sup>®</sup>

Blue Microphones  
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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 three years 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.

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

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# Dragonfly



Microphones

# DRAGONFLIES

*of the world\**



*S. flaveolum*



*A. caerulea*



*O. curtisii*



*S. aretia*



*D. cardioidii*



*I. elegans*



*A. mixta*



*A. imperator*

*\*with apologies to entomologists everywhere*

T H E D R A G O N F L Y



**T**hank you for purchasing Blue's Dragonfly microphone, a classic, precision-engineered recording tool combining old world, hand-crafted quality and cutting-edge technology. Like its winged namesake, the Dragonfly is fast, maneuverable, beautifully engineered and wonderful to look at. But unlike the insect version, Blue's Dragonfly won't buzz around the recording studio (and it won't devour mosquitoes).

To familiarize yourself with the Dragonfly's specialized and unique features, please take a moment to read through this manual and also try out the suggested recording tips. With proper care and feeding, the Dragonfly will reward you with many years of exquisite recordings.

To begin with, the Dragonfly is a pressure-gradient cardioid condenser microphone, employing Blue's single-membrane large diaphragm capsule. This hand-tuned and tested capsule is covered by a select 6-micron mylar film, sputtered with a mixture of gold and aluminum. Enclosed within a rotating spherical grill, the capsule can be positioned and adjusted in the smallest of spaces. This innovative design offers fine-tuning and precise placement to please the most discerning recordist, combined with an ease of use that is without equal among either vintage or contemporary microphones.

The Dragonfly's electronics are Class A discrete, with transformerless output. In plain English, this means that the sound which has arrived at the diaphragm and has been converted to electrical energy (transduced) is then amplified as accurately as possible, with minimal coloration and absolutely no integrated circuits (AKA - "IC's") in the signal path. Thus, the Dragonfly's overall sonic character is superbly detailed and pleasing to the ear, making it an ideal microphone for recording vocals, drums and percussion, electric guitar, bass and any acoustic instrument including "difficult" sources like saxophones and stringed instruments.

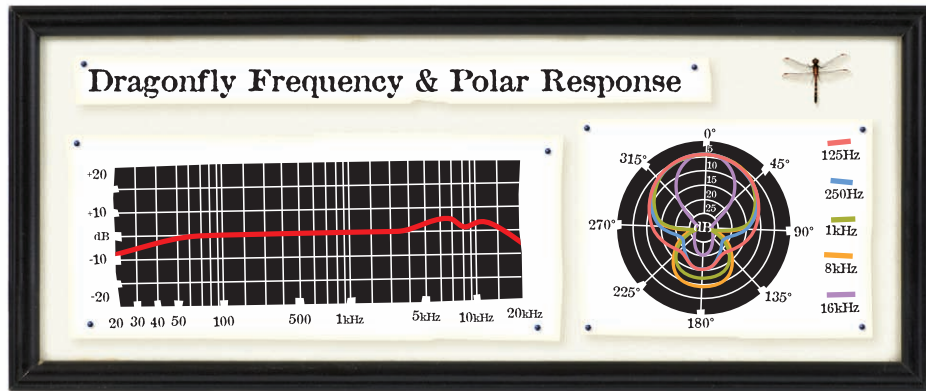




To get the most out of this, or any quality microphone, it is essential to pair it with a good microphone preamplifier. Most professional recordists prefer to have outboard preamps on hand, and will choose solid-state or vacuum tube models based on their unique characteristics. To maintain the integrity of your signal, try using Blue's *Cranberry*, *Blueberry* or *Kiwi* high-definition mic cable along with Blue's outstanding Class-A vacuum tube mic preamp, *Robbie* (left). And, whenever possible, connect your pre's output directly to your recorder or A/D converter, bypassing the mixing board and any unnecessary components.

The Dragonfly includes the Series 2 shock. To mount the Dragonfly on a mic stand, you may find it easiest to 1) loosen the boom stand arm or threaded end of the mic stand, 2) grasp the mic and shockmount assembly in one hand, and 3) screw the mic stand threads into the Dragonfly mount. This procedure will assure that the elastic shockmount bands stay in place and eliminates any possibility of damage to the mic. The swivel mount can be angled over 180° by adjusting the thumbscrew.

To secure the delicate capsule during transport and storage, two set screws are provided. These screws go into the solid metal ring around the circumference of the spherical grille, and should be in place when you first take the mic out of its case. Remove them before using the Dragonfly, and replace them at the end of the session.



These frequency charts are only a beginning. 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 mic cabling are only a few of the interacting issues. For an artist or an engineer, how the microphones are used creates the basis of the sound.

The Dragonfly requires +48V 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 the Dragonfly.

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 Dragonfly and microphone input jack; 3) Turn on phantom power; 4) Turn up the mic preamp gain, etc. To disconnect or re-route the Dragonfly: 1) Turn down the mic preamp gain, headphones, and your studio monitors; 2) Turn off phantom power and wait ten seconds before disconnecting the mic.

Once the Dragonfly is on the stand and powered up, make sure that the active, on-axis side of the capsule (the shiny hemisphere of the grille) is facing the desired source. For example, if you are speaking into the mic, the shiny hemisphere will be in front of your mouth and the solid metal ring around the circumference of the grille will be aligned vertically, with the two screw holes on top. The Dragonfly is a cardioid mic and is designed to reject off-axis sound arriving at the back of the capsule (the dull metal hemisphere).

And now, here are some recording tips that will allow you to get the most out of the Dragonfly.

**Vocals**

A little-known secret in the recording world is that vocalists love singing into beautifully engineered microphones like the Dragonfly. Put it in front of any singer and you're guaranteed to get a truly inspired vocal performance. For a "big" vocal sound, position the vocalist within one to four inches of the capsule (be sure to use a quality pop filter like Blue's *The Pop*). Tilt the capsule up (towards the forehead) for more projection and head tone, straight on at the mouth for maximum brightness and intelligibility, or down towards the chest for more robust full lows and smoother highs.



**Electric Guitar**

The Dragonfly is an excellent mic for any clean amp sound, ranging from bright rhythm chords to warm jazzy tones. Rotate the capsule towards the center of the speaker to capture more highs, or turn the capsule toward the edge of the cone for a fuller sound with more low 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 Dragonfly a try on electric bass, too!

**Acoustic Guitar**

Large diaphragm mics require careful placement when used on acoustic guitar, but the Dragonfly's clarity and superb transient response are 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 end detail, move the Dragonfly further from the guitar, either at the same neck position or above the instrument up by the guitarist's head.



**Drums**

The Dragonfly's slim profile, rotating capsule 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 of the 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 to



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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 and Reeds

The smooth, natural high end response of the Dragonfly makes it an ideal choice for miking saxophones and other reed instruments. For soprano sax, clarinet and related instruments, position the mic directly above and in front of the keys between the middle of the horn and the lowest pads. Try rotating the capsule or 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). For other members of the saxophone family, start by placing the Dragonfly two to six inches in front of the lip of the bell. Turn the capsule up toward the mouthpiece to capture more air, brightness and high notes. For a mellower sound, rotating 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.



## Technical Specifications

Acoustical Operating Principal: **Pressure Gradient**

Directional Pattern: **Cardioid**

Frequency Range: **20Hz - 20KHz**

Sensitivity at 1 kHz into 1k $\Omega$ : **21mV/Pa**

Output Impedance: **50 $\Omega$**

Rated Load Impedance: **Not less than 1k $\Omega$**

S/N ratio CCIR468-3: **75dB**

S/N ratio DIN/IEC 651: **86dB-A**

Noise Level DIN/IEC 651: **8dB-A**

Max SPL (0.5% THD) into 2.5k $\Omega$ : **140dB**

Dynamic Range (2.5k $\Omega$  load): **132dB**

Supply Voltage (IEC 268-15): **48V Phantom (35V min)**

Weight: **630g**

Dimensions (mm): **165 x 60**

## Included Accessories:

- Wood storage box
- Series 2 Shockmount



## Recommended Optional Accessories:

- *The Pop* (brass mesh pop filter)
- *Kiwi*, *Cranberry* or *Blueberry* high-definition mic cable
- *Robbie the Mic Pre* Class-A vacuum tube mic preamplifier

# BLUE MICROPHONES

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