

# Dragonfly



*Classic microphones, made without compromise*



BALTIC LATVIAN UNIVERSAL ELECTRONICS

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## Dragonfly



### 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.





## Technical Data

Microphones	Blueberry	Mouse	Dragonfly	Kiwi	Cactus	Bottle (w/B6)
Acoustical operating principal			Pressure gradient			
Directional Pattern	Cardioid	Cardioid	Cardioid	multi pattern		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	75dB	76dB	76dB	75dB	77dB	78dB
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.

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 farther 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 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.

#### *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.

Limited edition pairs of Dragonfly microphones, packaged in a cherry wood box, are available by special order. These sets, offered in custom colors, are matched and measured in our anechoic chamber to provide a balanced sound for critical stereo recording.

#### TECHNICAL DATA

*Type of mic amplifier:* Solid State Class A Discrete

*Acoustic operating principle:* Pressure gradient

*Directional Pattern:* Cardioid

*Connector:* 3 pin XLR-type

*Frequency range:* 20hz-20,000 hz

*Sensitivity @ 1khz into 1 kohm:* 21mV/Pa

*Rated impedance:* 50 ohms

*Rated load impedance:* not less than 1kohms

*S/N ratio CCIR468-3:* 76db

*S/N ratio DIN/IEC 651:* 87db-A

*Noise level DIN/IEC 651:* 7db-A

*Maximum SPL for THD 0.5%:* 132db

*Dyn. range of mic amplifier:* 76db

*Supply voltage:* 48V phantom powered

*Net weight:* 630g

*Dimensions (mm):* 165 x 60

*Optional Accessories:*

Cranberry (CB) or Kiwi (KB) high definition mic cable

Congratulations on your purchase of the the BLUE Dragonfly, a classic modern microphone made the old-fashioned way, without compromise.

Like its insect cousin, the Dragonfly is fast, maneuverable, beautifully engineered, and wonderful to look at. Fortunately, unlike its namesake, BLUE's Dragonfly won't fly away the moment you open the case, and it doesn't eat mosquitoes. In order to familiarize yourself with this microphone'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 feeding, this Dragonfly will reward you with many years of recording enjoyment.



The Dragonfly is a pressure-gradient cardioid condenser microphone, employing the BLUE single-membrane 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. Enclosed within a rotating spherical grille, the capsule can be positioned and adjusted in the smallest of spaces. This innovative design offers fine-tuning

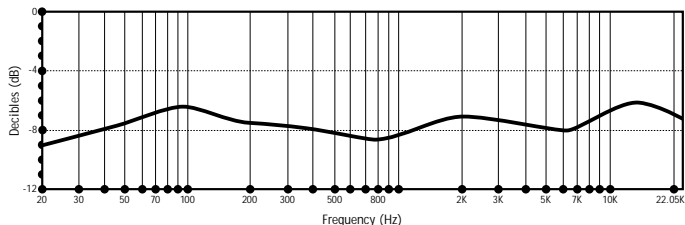


and precise placement to please the most discerning recordist, combined with an ease of use that is without equal among either vintage or contemporary microphones.

The microphone's electronics are class A discrete, with transformerless output. In plain English, this means that the sound which arrives at the diaphragm is transduced (converted to electrical energy) as accurately as possible, with minimal coloration and no integrated circuits (a.k.a. "IC's") in the signal path. In other words, what you hear is what you get! The Dragonfly's overall sonic character is neutral and always 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 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, we suggest using one of our Cranberry or Kiwi, BLUE high definition, top grade microphone

## Dragonfly Capsule Frequency Response



*This frequency chart of the Dragonfly 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.*

cables 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.

Each Dragonfly comes with its own ingenious all-in-one swivel/shockmount. To put the Dragonfly on a 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 large thumbscrew.

To secure the delicate capsule during transport and storage, two brass 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 take the mic out of its case. Remove them before using the Dragonfly, and replace them at the end of a session.

The Dragonfly 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 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 10 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 and its elegant rotating capsule!!

### Vocals

Here's a little-known secret—vocalists love singing into unique and impressive mics like the Dragonfly. Put it in front of any singer and you are guaranteed to get a 110% inspired performance. For a “big” vocal sound, get the vocalist within one to four inches of the capsule (be sure to use a mesh windscreen or pop filter!). 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 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 toward 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

