"Old School Quality, Modern Sound" Ear Trumpet Labs Nadine Mic

Ear Trumpet Labs is a microphone company based in Portland, Oregon that markets its products using the following words, which can be found on a card in the envelope that accompanies each microphone:

Look great, sound incredible

Hand-built microphones combining distinctive retro-industrial style with professional sound tailored for live use.

How well they succeed at both of these things is obviously subjective, but in this review, I will attempt to provide both information and audio sound files that will hopefully give the reader more information to go on, with actual sonic results.

At First Glance

hen I was younger, my mother had a canister vacuum cleaner made by Electrolux that looked like a small cylindrical tank on wheels with a vacuum hose attached to the front. It was very heavy to move about, but the moment you laid hands on it you knew you were dealing with a very serious and nearly indestructible piece of equipment. Everything about it screamed "built to last," from the heavy metal casing to the reinforced hose to the overpowered motor built with real metal bearings (it sounded a bit like a jet engine that would never, ever fall from the sky). Fifty years later, my mother still has and uses that same vacuum cleaner.

What is the point of this seemingly random mention of my mother's vacuum? It was the first thing I thought of when unpacking the Nadine and holding it in my hands. The mic is housed in a solid metal box about the size of a small tackle box. Like the mic itself, it feels nearly indestructible — even the clasp and handle of the box are made of metal. Opening the box reveals the Nadine embedded

By Chris Fitzgerald

in heavy foam,
consisting of a solid
brass barrel that literally weighs more than
half a pound all by itself
connected by a very sturdy
heavy duty Mogami cable to a
capsule module that also has brass fittings, although
weighing less than half as much.

The resulting feeling when holding it is, "this thing will outlive me by at least one lifetime" – an extremely rare quality in today's market of disposable audio gear. Anyone who admires old school over-engineering will likely not be able to resist this feeling of physical substance, and for such a person (I am definitely one) it tends to project confidence that whoever designed this thing wasn't kidd-

ing around; the thought readily occurs that if the rest of the design is as solid as the form of the thing, this is going to be a really great microphone.

Mounting on the Bass

The feeling of thoughtful design continues when the user mounts the microphone on the bass. There are three innovative design aspects to the mounting process:

- the separation of the capsule and the mic from the barrel, which allows the capsule to be easily positioned without attaching the weight of the barrel to the afterlength of the strings;
- the heavy rubber gasket that holds the capsule securely between the string afterlengths, allowing the capsule to be mounted either closer to the bridge or tailpiece;
- the heavy stretching Velcro strap and rubber gasket that mounts the barrel of the mic to the outside of the tailpiece with absolutely no vibration whatsoever. This mounting method is an engineering marvel, and speaks to the level of attention to detail in the overall design.

Because of this well thought-out and intuitive mounting method, it is extremely easy to mount the mic on the bass with minimal fuss. Once the standard XLR mic cable is plugged into the barrel, the cable points straight down to the floor and is an optimal position to be out of the bassist's way.

In Practice

The mic is designed for live use, specifically to provide a signal that will be sent to the front of house sound system, rather than fed through an onstage amplifier (attempting the latter results in the usual pitfalls of potential feedback and all that go with it onstage). The specs of the unit read very much like those of a recording mic: large diaphragm (26mm) cardioid condenser design, +48V phantom power required, frequency response of 20Hz to 15kHhz. Since as a primarily jazz bassist I didn't have any performances during the review period that involved FOH support, I created a simulation of the conditions of live playing for this review, as described below.

In a live situation, a microphone is subjected to relatively high volume off-axis sound coming at it, usually from the sides of the pickup pattern from the other instruments and amplifiers on the stage. For this trial, I tried to replicate that sound field by placing the bass at a 90-degree angle to two powered studio monitors with 8" drivers that were pumping out stage-volume level music with the bass part muted, allowing me to play along with the source and send the signal from the Nadine back into Logic to mix with the original track. To show the performance of the mic, three sound files were created:

- One track with the sound of the mic soloed in the mix, which allows the listener to hear the mic'd sound of the bass, plus the amount of bleed from the (very loud) monitors it was near;
- One track blending the signal from the Nadine back in with the original track to allow the listener to hear the overall result of the mic signal in context;
- One track of only the backing track itself with the bass rolled off at about 600Hz, which allows the Nadine signal to be the primary bass sound heard in the final mix.

Check out the audio on our website: https://www.bassgearmag.com/old-school-quality-modern-sound-ear-trumpet-labs-nadine-mic/

I have done this kind of experiment with a number of microphones, and there is usually a significant amount of bleed, especially from large diaphragm condenser mics. In this case, the Nadine performed admirably, rejecting more of the off-axis sound than any other mic I have tried in this scenario. It helps that the capsule is so close to the





top of the bass, and that the diaphragm is so large -it would be nearly impossible to position most large diaphragm mics in this position under the afterlengths in a live situation.

Sound and Analysis

Hopefully the sound files provided will allow the reader to make up their own mind about the effectiveness of both the mic itself and the experimental soundstage. From my perspective, the Nadine did an amazing job of picking up the sound of the bass while rejecting an admirable percentage of the ambient sound around it. I really had the program material I was playing along with cranked up loud to simulate a live situation, and was very pleasantly surprised to discover how little of that ambient "stage" sound was present in the soloed track. I can only image that the mic would be a great first choice for any acoustic setting involving FOH support, even if the band in question was playing at high dB levels onstage.

As for the sound of the mic itself, it is clear and detailed like a studio mic, but like any cardioid mic, it is subject to a fair amount of proximity effect when placed so close to the top of the bass table. I found that I had to use a highpass filter set higher than I expected to tame the lows that the mounting distance included in the signal (I set a steep roll off curve at about 100Hz for the sound files

included here, because I thought that sounded best). Once the high-pass filter was added to the signal chain, I felt the result retained a nice, full "old school" thump, but also enough detail to really allow the bass to speak with a full dynamic range on the part of the player. The sound was punchy but still clear with no EQ other than the high-pass filter, and it is no stretch to imagine that it would be easy to further tailor the sound to taste with a small amount of additional EQ at the board or with an onstage preamp.

Final Thoughts

I don't play the type of shows that the Nadine is designed for often, but if I did, I'd purchase one in a heartbeat. I've heard one criticism of the mic from a player whose opinion I respect, that he worried about putting that much weight on the tailpiece might dampen the vibrations of the bass, but honestly for the kinds of shows and volume levels the mic seems to be designed for, any such dampening might end up actually being a plus, rather than a minus.

That issue aside, what I see in this mic is a superbly over-engineered piece of gear that is more than road-worthy, both in terms of design and sound, and one that - as the ad copy states – looks great while you are using it. A hearty two thumbs up, with the caveat that the player should have provisions for a stage-controllable high-pass filter, if they don't trust the sound person running the



Manufacturer: Loud Technologies Inc.

Model: Nadine

Transducer Type: Condenser, large (26mm) diaphragm

Polar Pattern: Carioid

Claimed Sensivity: -38.9dB

Accessories:: Metal "tool case:" Velcro mount for tailpiece

Weight: 1lb.

Warranty: Lifetime warranty on defects or internal failures (from normal use)

Website: www.eartrumpetlabs.com

Made In: USA

Electronics Type: FET

Claimed Frequency Response: 20Hz to 15kHz

Output Impedance: < 50 Ohm

Dimensions: 8" x 2" x 2" for the body; head is 2" in diameter

