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Lauten Audio

Eden LT-386

This tube condenser mic offers multiple voicings for increased flexibility in the studio

REVIEW BY PAUL VNUK JR.

We started our look at Lauten ten years ago with their first model, the now-retired Horizon LT-321. In January 2013 we looked at the Atlantis FC-387, a multipattern and multivoice large-diaphragm FET condenser which was the culmination of a 3-way partnership between company founder Brian Loudenslager, mic designer Dr. Charles Chen, and noted engineer/producer Fabrice "Fab" Dupont. This multivoicing control gave the Atlantis the chameleonlike ability to be three mics in one and cover a lot of sonic ground.

So how does a company top this? The answer was revealed in April of 2015 at a Las Vegas studio, when Brian and Fab showed off a sneak preview of the similarly styled tube-based Lauten Audio Eden LT-386.

Welcome to Eden

While the Eden and Atlantis have a similar look and similar controls, the Eden is more than just an Atlantis with a tube. Each model features a differently tuned capsule and each one's sound complements the other very well. The Eden is housed in the same 9 1/2" x 2 5/8" body, but its brass body tube is a golden metallic matte finish with the double-layer mesh head plated in nickel vs. Lauten's usual metallic champagne finish. Below the headbasket, around the mic are a trio of 3-position switches: Pattern (Omni, Cardioid, and Figure-8), High Pass (Kick and Vocal), and Voicing (Forward, Neutral, and Gentle).

Inside the mic is an EF806S 6.3V pentode tube and a custom-designed transformer. The Eden uses one of Lauten's large 38 mm capsules with a side-terminated 31.25 mm dual diaphragm.

Some specs: frequency range of 20 Hz to 20 kHz, 120 dB minimum dynamic range, <200Ω impedance, maximum SPL of 120 dB (0.5% THD @1 kHz), under 20 dBA self-noise, and sensitivity of 16 mV/Pa or -36±2 dB (0 dB=1V/Pa @1 kHz).

The Eden comes in a kit with a large well-made black aluminum case, an external power supply, multi-pin cable, a black felt bag/dust cover, and a unique custom-designed shock mount. This robust chrome shockmount is open on the front, features thick tight rubber gaskets, and is designed to stay permanently

mounted to the mic (although it can be removed with an Allen wrench if need be).

Thanks to said shockmount, the Eden is even heavier than the Atlantis. It's possibly the heaviest mic I have ever used. A robust heavy-duty mic stand is not an option... it's a necessity!

Listen to Eden

With the Eden in its cardioid pattern, on the Neutral setting, and with High Pass set flat, it is a very neutral and natural mic with gently scooped mids around 400 Hz. It has a low end that is solid and full rather than pillowy or boomy, and the top end is clean and clear but gently contoured; there's a controlled slope down from 5 to 10 kHz and then rolling off thereafter. The high end saturates as a source digs in, rather than getting spitty or stabby. Overall it has a sound that is reminiscent of classic mics of the past without trying to claim allegiance to any specific model. In other words, in true Lauten fashion, it has its own sound that could someday be a classic.

While the voicing switches mainly affect the upper mids and highs, it's more like a shelving EQ than a simple lowpass filter... maybe a bit of both, and more. The Forward setting pushes the high mids and top end up and out, think 47-ish but without aping its sound and without being too drastic or bright. Gentle pulls those same frequencies down rather than just cutting them off, giving the mic a darker and thicker overall tone reminiscent of some vintage ribbon mics. Rather than a ribbon smoothness, though, the Eden on Gentle has a saturated tone that still has a beautiful edge.



Singers

I used the Eden most on vocals—not on purpose, but once I put it up on the stand for vocal sessions, it just lived there. It is similar to how I often leave a pair of Atlantis mics up as my main drum overheads. The voicing, pattern, and highpass options make it just too quick and convenient to dial in a sound vs. switching out microphones!

On hard rock vocals I usually favor the Forward setting; it's nice and punchy, but not blunt or biting. When I have vocal tracks that need to lay back in the mix, or want something more suited to an Adele-style female pop track, I prefer the Neutral setting. I also liked the mic in omni mode and a Neutral or Forward setting for backing vocal duties with the singers back a few feet from the mic. Credit where credit is due, I stole this tip from Fabrice Dupont (interviewed below). Thanks, Fab!

Drums and bass amp

I don't usually put large-diaphragm tube mics on the kick drum... okay,

that's just a lie, since kick and floor tom are two of my favored uses for the original Lauten Horizon!

Having said that, since the Eden has a kick-centric highpass setting, I tried it on kick in Forward mode. It did a great job on the kick, similar to how one would use a Neumann U 47 fet or Mojave MA-201fet on kick. This setting was also killer on miked bass cabinet, with the Eden on a vintage 1950s 4 x 10 Fender Bassman amp.

Electric guitar

One of my favorite uses of the Eden was again in Forward mode, this time with the highpass engaged in Vocal position, as a single mic on a guitar cabinet: the exact same Fender Bassman, miked in the same position as for bass tracking (partially out of curiosity, partially laziness). Switching to the Neutral setting was a great way to do guitar layering with the exact same setup.

As with my Atlantis review, Gentle was the setting I gravitated to the least, as it may sound a tad thick for many applications until you engage

the highpass. That filter keeps the upper end rounded, but removes the excessive boom and weight.

Compared side by side with the Atlantis at matching settings, Lauten did a good job of giving the Eden its own sound so as not to step on the Atlantis' toes. Overall the Atlantis is the sharper and tighter of the two, while the Eden is more diffuse and rounded in comparison.

Conclusion

"Versatile" does not begin to describe the Eden. Thanks to its patterns, filters, and voicings, you can dial it in for most anything and everything, all with a depth and sound that holds its own against many high dollar classics. Another Lauten winner.

PRICE: \$2499

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Interview with BRIAN LOUDENSLAGER and FAB DUPONT



Let's start with a quick history of Lauten?

Brian Loudenslager: Prior to founding Lauten Audio, I was the rep for one of the largest contract [mic]

manufacturers in China, and over time I just started seeing a lack of creativity. They didn't want to design new products, they just wanted factories to churn out more of the same to add to their product lines.

So, I had a very good friend of mine, Mike Terry, who was an engineer in LA working with Foo Fighters, and he did The Eagles' *Long Road Out Of Eden* in 2007. I said, "Hey, I'm interested in designing my own microphone. I have the resources to make the product, but I don't have the ears or the experience." We literally holed ourselves up in Elliot Smith's

former studio, which is now New Monkey, and we pieced together the new microphones, which became the Horizons.

He had a U67 and U47, but he was like, "I want to take that kind of element and I want to be able to stick it inside of a kick drum, or stick it on top of a snare, and things like that." That's why the Horizon was designed in the way it was, with the 20 dB pad, but it was still a tube microphone with that kind of character in there. So we went from the Horizon to the Oceanus, the Clarion, and the Torch, all in conjunction with each other.

And then came the Atlantis, which Fab was involved in. How did that happen? How did you guys hook up?

BL: Somebody said "Hey, you need to meet Fab Dupont," and I tracked him down at a trade show. He started telling me some things that he would look for in

a microphone, and I said, "Hey, would you mind if I make a rough prototype, send it to you, and see what you think?" And it just started from there.

Trying the first prototype, he said, "Hm, it's all right, but can you do this, this, and that?" And I sent version 2 and version 3, and at this point he's like, "Hm, OK, can you make a mic that sounds like all three?" The Atlantis came out of that.

Was the Eden originally meant to be a tube Atlantis?

BL: At first, but we built it and... it didn't do it for me. Originally it wasn't all that different, which I felt was kind of silly, so we went back to the drawing board. I looked at the U67 circuit, which has a unique transformer with a double winding, and I wanted that character from that circuit in the mic. It ended up

being a different circuit entirely, but that was kind of the inspiration.



Fab Dupont

What was your design say in the Eden, Fab?

Fab Dupont: I said “no” a lot, that’s all. Which I’m really good at, it’s my birthright. [laughs] What I was aiming for, especially in the neutral setting, was to have what is good about vintage tube microphones, all the transformer saturation and all the beautiful stuff that makes it sound instantly like a classic record, but none of that modern brightness that hurts your eyes. I wanted to be able to put it on a vocal with no EQ and put that on a record. That is pretty much what I did with David Crosby, for example.

I just want to interrupt and let readers know that Fab recorded and mixed David Crosby’s latest album *Lighthouse*, and the Eden was a big part of that.

FD: Yes, he sang into the Eden, flat, and that’s the sound of the record. After one verse, he picked the Eden over his favorite U47 out of Jackson Browne’s mic locker. [The Eden] has what the U47 and the U67 have—they’re all different, of course, but what people like about mics like that is the saturation. It’s not like a mirror, it’s not like a super-clean digital thing. It adds a little bit of control, it’s got that sheen to it.

Brian, you said that the Eden isn’t just a tube Atlantis. What else makes the two different?

BL: A big part is that the Atlantis uses a China-made transformer—we actually have a great company that makes them for us—but for the transient control and the “new old stock” sound that Fab wanted, we went with a really boutiquey guy in the US and it worked out really well. Not that the Atlantis transformer doesn’t control the transients, but when you throw a tube into the circuit, things get a little more difficult to handle.

So, the transformer was one of the key differences. Then it was just tuning

the circuit itself, certain frequencies per Fab’s request. 300 Hz was one of the areas we looked at...

FD: It’s the sound of sheetrock.

BL: Also if I remember correctly, 2–5K?

FD: Right around 3K, that’s usually what most singers can’t control. In the past, we used to get a lot of control and saturation from tape. You’d also have the transformer in the input of the microphone, and six or seven levels of transformers on the console, the inter-stage transformers to the monitor section, the transformer on the input to the tape machine, the tape, the transformer to the output of the tape machine... we’re talking a lot of iron. We no longer have that.

Now we have the cleanest, fastest design on preamps, and the cleanest, fastest design on converters, and microphones have not adapted. Which is why, if you plug a vintage U47 straight into a modern preamp, it sounds nothing like the records we use to listen to.

BL: The signal chain is very simple compared to what it used to be, but people buying a microphone still want it to work and sound the same. That was the thought process behind Atlantis and especially Eden.

FD: It’s very hard to gain-stage with everything being so clean and fast, especially the transients, but there’s a lot of people that convince themselves that it sounds the same, though.

Tell me about the shockmount on the Eden. Whose idea was that?

FD: That’s me. [waves] One day I was setting up a session, and I started taking all the microphones out of the boxes and screwing them onto their shockmounts, and I was like, “When am I ever going to use this microphone without the shockmount? How about ‘never’? Why is it in two separate parts? It’s dumb.” So when Brian asked, “Hey, we’re doing the Eden, anything you want it to have?” I said, “Yes. Please make sure the shockmount and the microphone are the same thing.”

I’ve read a lot about you recording David Crosby’s vocals. I know you love the Eden on vocals at various settings

and distances, like when a singer does their own harmonies using the same mic, in this case the Eden, and then changing the voicing and having them move a few feet back.

FD: It changes the sound and makes sure there are no phase issues.

What are some of your favorite non-vocal uses that you’ve found?

FD: Well, I only have two Edens, one of which is always taken by others for sessions. So I really only have one, and it always ends up on the vocal of whatever session I do. One day when I was able to use both, I put them on the Yamaha C7 piano here, and it was just ridiculous, absolutely gorgeous.

But you know, I’m not very good for the microphone business, because I don’t believe that there is a ‘vocal microphone’ and then there’s a ‘bass drum microphone’ and then there’s... I think, to speak in technical terms, that’s absolute complete bullshit.

I think that there are microphones that sound a certain way. So if you have a microphone that has a very controlled bottom, then that could be a very good microphone for bass drum or not, depending on how fat you want your bass drum to be. The reflex of putting a specialized mic inside a bass drum every single time because it’s been designed to be a bass drum microphone, I find really dumb. It depends on what kind of bass drum sound you need. Right?

Yup.

FD: For example, suppose I need a bass drum sound that has a saturated transient quality to it. I would take a 20" bass drum with two full heads, no [sound] hole, and I would put the Eden in front of it on Forward mode and the first high-pass in, and it would be just *money*.

Would I put the Eden on a snare drum when someone is banging really hard? No, because I would get the whole set. Would it sound good? Yep, but I would get the whole set. If I’m doing a jazz record, that’s awesome. If I’m doing a pop record where I have to have just a snare drum? No.

So rather than a source-specific mic, you’d rather have a good-sounding mic used in the right context.

FD: The Eden will be perfect on anything you want to record where you want kind of a gloss, a sheen, a satin quality to the sound, and control the peaks. The other thing that's badass about it, just like the Atlantis: it's a little bit schizophrenic, so if you don't like it on Neutral, you put it on Forward; if you don't like it on Forward, you put it on Gentle and it never fails. It just never fails.

Do you typically start with the Neutral setting, or...

FD: I start with whatever the assistants will put it in. That's a trick I have personally. If somebody else sets up the session for me, I don't say anything. I just let them do their thing, because maybe they'll do something I would never do and maybe even it would be great, and maybe I'm going to learn something.

Otherwise, you keep doing the same thing over and over again and you keep using the same tricks, which is why people are using a U47 on vocals, session after session for the last forty years, regardless of what kind of sound is coming out of the speakers that day... I feel the time of U47s on vocals is over, unless you have all the gear that came with 47s at the time, which most people don't. And so it's time to move on.

Wow!

FD: I force myself to learn new things, by letting my assistant do their thing, even messing up. I tell them things like, "Please put a 47 on the bass drum," and then they put a 57 on the bass drum because, you know, 47, 57... inflation. But then I listen to it and I'm like, "Oh, I would have never done that."

Is there anything else that you think that readers should know about the Eden?

BL: Don't forget about the High Pass switch. It's an EQ, essentially, but it can really start to create a whole different microphone.

FD: A big mistake people make is that they put the microphone up and then they try and get the fattest possible sound, and the Eden can get a very fat sound. They also get very close, because they love their proximity effect. And then they put it

in the mix and they can't mix the record. Then the first thing you do when you open a vocal in a mix—you highpass, and then you low-shelf it. Why? It's too fat, it doesn't fit in the mix. *Ever.* It just doesn't.

Same thing with the bass drum. Nobody needs the endless ring at 20 Hz. And if you need it, you definitely don't want a natural one because you won't be able to make a loud record with it, it's physically impossible. The first position of the High Pass [switch] is for bass drum. The second is for vocals. You put

that on [when tracking], it will sit in the mix without you having to mess with it for hours. And it's magical, literally magical.

BL: The Eden is not a one-trick pony, there's a lot of tricks in there. It's got a lot of options, it takes a while to figure out how you're going to use it. It's a mic you want to slow down and spend some time with.

FD: You could just put it in Neutral, with the High Pass fully open, and it's like just a "wow!" thing. But then you dig in, and you can do so much... it's wonderful.

BL: It really is. ➤