

There is a constant battle waging in my home studio, as I'm sure it does in yours, and it involves the need for more space. As you can imagine, I am always searching for equipment that offers the best balance between quality, cost, and size. Among my most difficult dilemmas in this conflict has been the search for the perfect mixer.

Until now, what I want has been almost impossible to find. I have been looking for a compact mixer with 8-12 inputs for home studio recording. I also had an as yet unfulfilled need for a 4-6 input mixer to serve the sound interface for my PA system for speaking engagements and seminars. Even when not including cost in as a decision factor, most of the compact solutions I have examined have limited features, limited sound quality, or limited construction quality.

Mackie recently released their new VLZ3 series of professional level mixers. This series raises the bar over competitive offerings with XDR2 preamps, flexible routing options, steel construction, and high-grade controls. The 802 and 402 represent Mackie's most recent introductions in the VLZ3 line and are squarely aimed at the compact mixer market, matching uncompromised VLZ3 quality with an incredible price point. As such, I was really happy when the folks at Mackie elected to send me these two units to review, and promptly put them through the paces. Read on for the details!

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Mackie VLZ3 402 and 802 Compact Mixers

The VLZ3 series represents one of the things I really like about Mackie – they listen to their customers and make incremental improvements to their products based on feedback. VLZ compact mixers in general already own a very respectable following among studio engineers for reliability, versatility, and overall sound quality. Over time, the original VLZ series evolved to the VLZ Pro series and now to the VLZ3 series, which represents the highest performance quality to date coupled with one of the smallest form factors among competing models.

In my opinion, the two highest profile improvements in this series include:

- XDR2 preamps – XDR is an acronym for “Extended Dynamic Range”. The XDR2 preamps offer exceptional frequency response, including a wider low-end response over the original XDR specs and more headroom, better RFI rejection, 60dB of gain per channel, and very low noise.
- Improved EQ – In engineering the VLZ3, Mackie spent considerable time improving the relative interaction among the separate EQ bands. Each channel has a low-shelf at 80Hz, a mid-peak at 2.5kHz and a high-shelf at 12kHz. Mic inputs have 100Hz low cut/high pass filter switches.

Within the VLZ3 series, the 802-VLZ3 and the 402-VLZ3 represent the newest offerings. The 802 and 402 are considered to be “ultra-compact” mixers; however, in reality there is a big difference in features sets between them. The 802 carries most of the features of its big brothers, particularly the 1202-VLZ3. The 402 is a much more scaled down version, eschewing many routing and output features for compactness.

The 802 was an impressive unit from a features standpoint. It offers a nearly identical feature set to the 1202-VLZ3 with the exception of one less XDR2 input, two less stereo-lines, and one less stereo return. If you can live without these differences, you will gain a much smaller form factor plus a free copy of Mackie Tracktion 3 if you buy the 802...and you'll save yourself a

Benjamin (\$100) over the 1202.

I'm not sure that I would even put the 802 and the 402 in the same category because the 402 really serves a different purpose, and is an ideal choice for different applications. The 402 retains two XDR2 preamps and one stereo out (TRS only). In lieu of a pan knob, there is a single button that, when pressed, pans channel 1 and channel 2 left and right, which is perfect for stereo field mic configurations.

EDITOR'S NOTE: I received a correction from Mackie on the Tracktion versions that come with the 802 and 402 VLZ3. Turns out the 802 comes with the T3 Project Bundle as described but the 402 comes with the upgradeable T3 Basic Bundle. Read below - still a great value.

Funny enough, at a street price of about \$100 for the Project version of Mackie Tracktion 3 and, comparably, a street price of about \$100 for the 402-VLZ3 – you are actually better off buying the 402 if you are in the market for Tracktion! It's like getting a free high quality 4-channel mixer with your copy of Tracktion. While 802 retains nearly all of the important professional features you'd want from a desk mixer, the 402 would shine as a field device, where portability and dependability are mission critical.

Where's the common ground? It really rests in construction quality. Both the 802 and the 402 share the same construction features as their big brothers, including an incredibly durable steel chassis (though it does have a molded plastic front bumper); sealed, shock-resistant, co-molded pots; and, fiberglass circuit boards with shock absorbing mounts. Another cool feature for small gigs and field use are the three pre-drilled holes on the back of the units that allow the 802 and 402 to be mounted on a mic stand for even greater versatility. The larger mixers in the series still have the "smooth as silk" sliders that we have all come to know and love from Mackie boards, however, to conserve space, sliders are replaced by level knobs which are somewhat larger than the other potentiometers on the device.



Features at a Glance -- Mackie VLZ3 402

- Ultra-compact 4-channel mixer featuring Mackie VLZ3's signature low noise, high-headroom design
- 2 studio-grade XDR2™ Extended Dynamic Range mic preamps with:
 - Ultra-wide 60dB gain range
 - 130dB dynamic range
 - +22dBu line input handling
 - Extended low frequency response
 - Distortion under 0.0007% (20Hz - 20kHz)

- Phantom power for studio condenser mics
- 4 high-headroom line inputs
- 2 selectable Instrument inputs – no DI box needed
- 2-Band Active EQ (80Hz, 12kHz) and Lo-Cut filter on mic channels
- Phantom power for studio condenser mics
- Dedicated Stereo Line Input and Tape Input channels
- High-resolution 8-segment stereo meters
- Sealed rotary controls to resist dust and grime
- Sleek, rugged steel chassis
- Includes Traktion 3 Basic Bundle for Mac/PC (download required)



Features at a Glance – Mackie VLZ3 802:

- Ultra-compact 8-channel mixer featuring Mackie VLZ3's signature low noise, high-headroom design
- 3 studio-grade XDR2™ Extended Dynamic Range mic preamps with:
 - Ultra-wide 60dB gain range
 - 130dB dynamic range
 - +22dBu line input handling
 - Extended low frequency response
 - Distortion under 0.0007% (20Hz - 20kHz)
 - Phantom power for studio condenser mics
- 8 high-headroom line inputs
- Advanced DC pulse transformer RF rejection
- Aux send, level, pan and PFL solo on each channel
- Selectable Instrument inputs on first two channels – no DI box needed
- Stereo Return for connecting effects processor or other stereo source
- 3-Band Active EQ (80Hz, 2.5kHz, 12kHz)
- 18dB/oct. 100Hz Lo-Cut filter on Mic input channels
- ALT 3/4 stereo bus for added versatility
- Control Room/Phones source matrix
- High-resolution 12-segment stereo meters
- Sealed rotary controls to resist dust and grime

- Sleek, rugged steel chassis
- Includes Tracktion 3 Project Bundle, music production software for Mac/PC

Home Studio Test

As many of you are aware, I have been using a Mackie Onyx 1202 mixer in my home studio as the front end for DAW applications (such as Tracktion and Ableton Live) and other tests, so I was a pretty big fan of Mackie before I even started evaluating the VLZ3 boards.

Which brings me to the only caveat prior to your purchase of the 802-VLZ3 and 402-VLZ3. I love the Onyx board because (with the optional Firewire card) it serves as a high-performance DAW interface as well as a solid mixing board. Unfortunately, the 802 and 402 do not have similar DAW capability, so in order to use these with your computer you will need to either: 1) connect the boards directly to your computers soundcard using an appropriate XLR or TRS to mini-plug Y cable; or, 2) Buy a two channel audio interface (at the minimum) supporting USB 2.0 or Firewire.

Both options will work fine for most home audio and amateur applications; however, if you are looking for professional level audio resolution that maximizes the benefits of the expanded dynamic range XDR2 pre-amps, then you'll need to invest in a good audio interface capable of tracking at that level. Luckily, there are many out there at very reasonable prices. All that said, if you already have a good computer interface then DAW functionality becomes irrelevant. Furthermore, depending on your application (e.g., ProTools) you will need a software-specific DAW, in which case a separate high-quality mixer is paramount. As I mentioned, these are not draw-backs per se, just caveats if you intend on using these mixers for computer recording purposes.

Putting that aside, I compared the sound of 802-VLZ3 directly with the Mackie Onyx 1202. The first thing, and most obvious, that I noticed was that the 802 (and certainly the 402) have a much smaller footprint than the Onyx. This turned out to be preferable to me from a home studio perspective for a couple of reasons. First, in terms of mobility, I could theoretically shove the 802 (or 402), my laptop, and a small audio interface into my backpack and be out the door. I don't think my backpack would hold the Onyx 1202. Second, for home studio applications, the 802 was actually easier to use from an ergonomics perspective. I found that I didn't really miss the sliders as much as I thought I would from the Onyx board. Furthermore, the lower profile of the 802-VLZ3 made it easier to see the unit without having to stand up out of my chair to look down at the unit, which I found myself frequently doing with the Onyx board because of its relative vertical height off of the desktop.

For a sound test, I put the 802-VLZ3 and the Onyx 1202 side-by-side and put both boards through a number of paces which included acoustic guitar direct to the board, electric guitar through a multi-effects, electric guitar through a mic'd amplifier, and various CD and MP3 samples. I ran both mixers through my KRK VXT6 monitors and through studio quality headphones.

I'll admit that I'm not a studio rat, so I wouldn't say that I have a tremendous ear for these things. With that admission, I will say that I was surprised that the VLZ3 was overall an audible improvement over the Onyx board. The VLZ3 demonstrated a crisper high end with a little more body in low end. In comparison though, the Onyx board did seem a little warmer on similar EQ settings. Both of the boards handle high gain signals well, and even though the VLZ3 claims better noise reduction, I could not discern much difference between the two.

I went a different direction in my tests of the 402-VLZ3. I often have opportunities to speak and in that vein do not need a large mixing board for most of my venues. Typically two XLR channels is sufficient for my microphone and an audience microphone. For this test, I set up my PA system and used the 402 to drive a small PA system to simulate a small venue. The 402 shined here both in terms of its amazing portability, but also for clarity. The two channel

EQ was more than sufficient for this application. While this was set up, I unplugged the 2nd mic and ran my Taylor 714CE directly into the open channel. With that 5-minute quick change, I had a nice mini-acoustic-gig PA arrangement going.

Grade- A

Pro's – Construction quality, Dynamic Range, Low noise, Size, Bonus: Mackie Tracktion 3 Project Bundle (\$100 Value)

Con's- Lacks DAW capabilities (e.g., USB or FireWire)

Street Price – \$100 for the 402-VLZ3 and \$200 for the 802-VLZ3

Conclusion

The engineers at Mackie VLZ3 802 and 402 have certainly done an amazing job of shoehorning all of the key features you'd expect to find in a large, high-end board into a sleek little package. I am also impressed that they've been able to do this at this low of a price point without compromising on quality.

The 802-VLZ3 and the 402-VLZ3 are professional quality mixers that include the same XDR2 preamps and other design elements as their larger cousins. Based on my evaluation, I would recommend either of these mixers for home studio or field applications, although the 802-VLZ3 was my favorite simply in that it is more applicable to my most common applications.

Their respective footprints make them desirable when space is at premium and their construction quality makes them desirable for reliability purposes. Regardless of where you decide to use these mixers, I'm more than sure you'll be pleased with the sound quality. For these reasons I am happy to award Mackie the 2008 "Studio Ready" award for their excellent work on the 802-VLZ3 and 402-VLZ3. Furthermore, it continues to demonstrate why GuitarGearHeads.com chooses Mackie as our official choice for mixers and consoles.



Dan Halberg

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NOTES:

Mackie is the official mixing board of GuitarGearHeads.com.

KRK is the official studio monitor for GuitarGearHeads.com.