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The Mackie 1642-VLZ3— The 1604 evolves again!

BY PAUL VNUK

In 1990 Mackie introduced the CR-1604 (reviewed April 1991), a 16-channel compact mixer, housed in a 16" x 19" Tonka-tough steel chassis. It boasted a feature set typically found only in larger consoles of the time and set the new standard for small-format mixing boards; a smaller 12-channel version, the CR-1202, soon followed.

In 1996, an evolution of cosmetic and functional changes altered the body, eq, routing and fader sections and the CR series now became the VLZ (Very Low Impedance) series (reviewed March 1996 and February 1997). With the addition of the 14-channel, 1402, the DNA of the VLZ mixers was set.

The VLZ Pro Series arrived in 1999, and the sonic evolution began with the addition of new high-quality XDR mic pres (reviewed March 2001). An alternately configured 16-channel mixer, the 1642, was also added. With a new color scheme, the model line complete and the improved sound, the VLZ Pros stayed at the head of the compact mixer race.

In 2004 Mackie introduced the Onyx Series, a step-up line that looked similar to the VLZ Pros, but introduced "boutique" mic preamps, British eq, architectural enhancements, and optional FireWire connectivity (reviewed in the March 2005 issue).

And while it seemed the mighty VLZ might finally have been



replaced... three years later, the evolution continues! At Winter NAMM 2007, Mackie introduced the first changes to the VLZ line in almost eight years with the coming of its new VLZ3 series. Sonically, the VLZ3 features newly designed XDR2 mic preamps and a redesigned eq section. Cosmetically it has undergone the most significant change in the line since the CR gave way to the original VLZ. Functionally everything else has

stayed the same, so we hope to sum up the new features in this instalment of Reviewed and Revisited.

I have owned a CR-1604, CR-1202, 1202-VLZ, 1402-VLZ, 1604-VLZ and a 1604-VLZ Pro, as well as working with (and reviewing) the Onyx 1220. Now the circle is complete as I was sent the 1642-VLZ3 for review. It's one of four new mixers, the other three being updates to the 1202, 1402, and 1604 designs.

Let's check it out

This mixer looks solid, futuristic and impressive. Pictures do not do it justice—many an Internet dweller has queried, "What's with the white plastic strip on the bottom?"

It's not plastic. It's actually an extruded-aluminum end cap that is hollow underneath and doubles as a convenient handle. The VLZ3's sides and underbelly are one curved, continuous piece of this same metal, with a look that would not seem



out of place on the bridge of the Starship *Enterprise*. (Note: Unfortunately, the 1604-VLZ3 has to forgo the rounded back and sides because of its "Roto-Pod" feature—the ability to detach and rotate the rear panel of the mixer into a position better suited for rack mounting.)

Unlike the minimal black and blue scheme of the VLZ Pro's knobs, those of the VLZ3 (new and adapted from the Onyx line) are tastefully color-coded by section (reds, oranges, blues, blacks and whites). There are even two colors on the aux sends to differentiate those usually used for monitor sends and those used for effects. Additionally, each section's surface is alternated in dark gray and black with new larger screened letters. These changes are well thought out and help tremendously with legibility and to differentiate the sections in a darkened studio or club.

Channel surfing

Normally in a review this is where I would go into great detail about the order and layout of each channel and section, but since this mixer has not changed one bit from its eight-year predecessor (the other mixers have not changed either), I'll just summarize.

The 1642-VLZ3 has 8 mono mic/line channels and 4 stereo line input channels (two double as additional mono mic inputs). Each channel has 4 aux sends and the new improved eq section with a sweepable mid, except the stereo channels which have 4-band fixed eq. Suffice to say there are plenty of routing options with four busses, direct outs and inserts on channels 1-8 and plenty of returns, and so on.

Two things exclusive to the 1642 are dual headphone outputs and separate headphone and control room level controls (on the other VLZ3s this function is shared by one knob).

The new XDR2 pres in use

The big news on this mixer is the new XDR2 mic pres. The original XDR mic pres garner much respect and are an industry staple (I have tracked full projects on them), and Mackie's newer Onyx pres are proving themselves as a character-filled step up from these, so what's up with the new kid on the block?

That's what I aimed to find out. Luckily I still have a rackmount multichannel Onyx preamp handy, and my good friends at Music Go Round in Greenfield, WI were nice enough to lend me a VLZ-Pro they happened to have in stock, so the testing began.

I chose 3 mics I know well: an Audix CX-111 large-diaphragm condenser, a Shure SM57 dynamic, and a

Neumann KM84 small-diaphragm condenser. I set each mixer to unity gain and recorded a variety of sources (male vocals, tambourine, kick, snare, and acoustic guitar) to give me a good taste of what these pres could do.

On vocals the original XDRs were, as I expected, good and clean, but they were slightly harsher in the upper mid range when compared side by side with the new XDR2s, which were smoother, more present and brought the vocals slightly forward. The Onyx was the warmest of the three, with slightly more color and thickness than the other two.

On tambourine tests the original XDR was again clean and usable, but the VLZ3 made the jingles sound more open and three-dimensional. Interestingly, on high, metallic sources the difference between the XDR2 and the Onyx was barely discernable.

On drums, the XDR2s again had a better presence and clarity than the original and here I preferred the XDR2 to the Onyx for a nice open poppy snare tone. On kick, the "pillow" thickness of the Onyx was a better choice for fatness, but the XDR2 had a better punch. Using the XDR2 on the inside of the kick and the Onyx on the outside was a nice convincing combo.

Acoustic guitar through the original XDR sounded slightly brittle when compared to the XDR2, which nicely highlighted the mid punch and strum of the instrument. This would be nice for high, forward acoustic rhythms in a track, while, the Onyx on this acoustic guitar had a touch more fullness and warmth, and could be better on solo acoustic tracks.

Essentially, as is true with any mic pre comparison, each one has sources it favors, but all in all the XDR2 clearly improves on its earlier version by keeping the cleanliness and clarity, but by tempering it with a touch of warmth and presence. The Onyx has more of a rich sound with more color than the XDR2, but I could easily get pleasant results with either.

Equalization and improved sonics

While the VLZ3's eq frequencies have not changed—Low at 80 Hz, sweepable Mids at 100 Hz to 8 kHz, 4-band fixed Mids at 400 Hz and 2.5 kHz, and High at 12 kHz—Mackie claims to have improved the way these eq frequencies overlap and react to each other. It sounded to my ears like this was accomplished through changes made to each frequency's Q (bandwidth), but Mackie

tells us that the fix is actually under the hood—adjacent bands now use separate op amps, so unwanted interactions are reduced.

I tested the eq of the VLZ3 with my own mixes and well-known program material, and I agree the new eq is an improvement. Compared to the VLZ Pro, the VLZ3's eq was less aggressive, with a smoother glide between frequencies, and was more enjoyable to listen to. Both the sweepable and fixed mids were better at cutting than boosting, and I especially liked how far I could push the bass without it becoming "tubby".

Also noticeable was the improved headroom and lowered noise floor of the new VLZ3. When tracking in headphones, the VLZ3 was almost dead quiet, especially when compared to hi-air-hiss of the older model. Mackie claims this is due to an improved "negative summing buss structure" and although I was unable to push the headroom issue with a full, heavy 16-channel band mix, I am prepared to take their word for it... and did I mention this thing is very quiet?

Some final thoughts

Well, in evolutionary terms this is survival of the fittest, and the VLZ3 line still rocks! In my opinion, the cosmetic and sonic choices made by Mackie were the right ones, and even though the mic pre industry is bigger now than it was a decade ago, to get better quality than what is found in the VLZ3's XDR2 preamps, you will have to step up to mixers costing almost twice as much, get an arsenal of expensive outboard pres or at least get an Onyx (which may or may not be "better", just different). What worked in these mixers before still works now, and some things work better.

With the sheer number of compact mixers at budget prices on the market, the VLZ3 may seem on the expensive side. But of all the mixers I have tried, none of them are built this well, or honestly sound this good. Mackie, let the evolution continue. ☺

Prices: 1202-VLZ3, \$389.99; 1402-VLZ3, \$519.99; 1604-VLZ3, \$1099.99; 1642-VLZ3 (as reviewed), \$779.99

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