## The Zon Hyperbass



Joe Zon (R) and Michael Manring worked together for more than a year to develop the revolutionary Hyperbass.

Because of the unusual range and technical complexity of his music, Michael Manring has pushed his instruments to their limits—and sometimes beyond.

"As I began to perform more pieces that involved retuning while I was playing, I ran into obstacles," he says. "I was using the tuning keys. Although I got really good at memorizing where certain notes were, the machines weren't very accurate. I could turn the key to exactly the same place, but it wouldn't be the same note."

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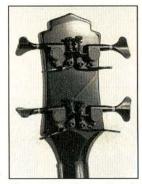
The solution was a new instrument, designed for maximum tuning flexibility and a wider range of tones. "I took my ideas to some builders, but they either booted me out or ran away screaming," says Manring with a chuckle. "Then I met Joe Zon. I gave him my ideas and waited for the door to slam, but

he came right back with even more ideas. Pretty soon, we had started to sketch out what eventually became the Hyperbass."

The Zon Hyperbass was under development for about a year, and it was completed just in time to be used on *Drastic Measures*. Although it shares some characteristics with Zon's standard models, including a graphite neck glued to an alder body, it was essentially designed from the ground up. Obvious at first glance are the unusually long phenolic-resin fingerboard—a full three octaves—and the radical

body shape, which gives Manring complete access to the highest notes. To facilitate quick retunings, the headstock has four custom-made Hipshot machines, and the massive bridge sports two levers, one that raises and lowers all four saddles together, and another that can be "assigned" to one or more saddles with set screws. The bridge was designed by Wolfgang Staab and manufactured in Germany; it is one of two in existence. By flipping the detuners and bridge levers, Manring can choose from dozens of possible tunings—although he actually uses "only about 40." Because many of the tunings are quite high, the D'Addario strings are very light: .020, .032, .042, .052. ("I use special sets of light-gauge D'Addario strings on all my basses," notes Manring, "and anyone who wants to experiment with my tunings should be careful not to try it with heavy strings. It could cause neck damage.")

The Hyperbass's quadrophonic electronics are as revolutionary as its tuning mechanisms. The single magnetic pickup was custom-wound by Bartolini to Manring's specifications, and it's connected to Zon's standard onboard preamp. ("The only other stock items," says Joe Zon, "are the knobs.") Invisible to the eye are four Fishman transducers mounted inside



Mounted on the headstock are four custom-made Hipshot machines with detuning levers.



The German-made bridge has two retuning levers and a fine-tuning knob for each string. Note the 8-pin quadrophonic output jack, just to the right of the bridge

the instrument: one is in the neck, between the nut and the first fret, and the others are mounted in the body

just beneath the 1/4" curly-maple top. Each transducer has a volume pad for reducing its signal level, and the four outputs run into a Bartolini TQB buffer. The bass is wired with a quad/mono output option, controlled by a mini-toggle switch. In mono, the combined pickup/transducer signal runs through the Zon circuit to a 1/4" jack; the quad option bypasses the preamp and sends all output directly to an 8-pin connector. "We did that so Michael can record all of the outputs direct," says Zon. "He's also going to put together a quad system for concerts, with a separate channel for each string."

Manring says he's still learning how to play the Hyperbass: "I only did a little bit of retuning during the performance of the pieces on *Drastic* 

Measures, because I'd just gotten the bass. But now I'm writing several solo tunes especially for the Hyperbass—one of them has retunings in just about every measure." Manring and Zon have also begun to design another instrument. No details are available, but Zon hints this one might be a 6-string with even more possibilities for retuning—perhaps as many as six notes per string. (For extra credit, determine the number of tuning combinations possible on a 6-string bass capable of six different notes per string. For the answer, see the bottom of page 57.)