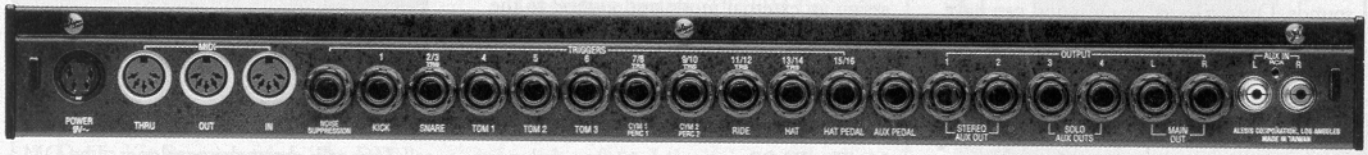

Crash Test #2

ALESIS DM PRO

by Norman Weinberg

It would be pretty easy to list the features of my dream drum module. I want plenty of everything: trigger inputs, sounds, drum kits, on-board effects, audio outputs, polyphony, a well-written manual, an easy-to-understand operating system, and the ability to edit everything so that I can satisfy my creative side. Well, if this also your idea of the perfect module, you need to check out the new Alesis DM Pro, which was built on the history and success of the D4, DM5 and other Alesis products.

Dream Drum Box

Triggers. The back panel of the DM Pro has 16 trigger inputs. There are four mono inputs (for pads with a single playing surface) and six stereo inputs (for dual zone pads). The manual contains a thorough section on advanced triggering information that explains how to use mono and stereo pads with both types of inputs.

On any drum module, the ability to control the unit's response to triggers is critical. The DM Pro passes the "trigger tweaking" test. One nice feature is a "noise suppression" command that lets you set a general noise floor for the entire 16-trigger setup.

Individual adjustments for each trigger include gain, velocity curve (with 14 very usable curves, including linear, inverted, fixed, and a variety of exponential, logarithmic and s-curve settings), threshold, retrigger, and a very sophisticated cross-talk matrix. This "intelligent" crosstalk control asks you to strike a single pad at a strong dynamic. The module then "listens" to all other inputs and lets you set a crosstalk value to prevent false triggering. Once you follow this procedure for each trigger in your kit, false triggers due to crosstalk should become a thing of the past. Thanks to Alesis for offering four completely different sets of trigger setups. Using the DM Pro, you can simply call up the trigger setup that you need for a particular type of performance. For example, you may have one collection of trigger settings for live gigs that need a high degree of noise suppression, and another studio/practice version that has no noise suppression at all.

Sounds. The DM Pro has tons of 20-bit, on-board sounds. Alesis has stuffed 16MB of samples into the module totaling 1,664 drums. These sounds are divided into 13 banks of 128 sounds each. The banks include acoustic kits, electric kicks, acoustic snares, electric snares, toms, hi-hats, cymbals, acoustic percussion bank 1, acoustic percussion bank 2, electronic percussion, special effects, chromatic, and a bank called "user" — more than enough samples to satisfy the most picky producer. But even if you can't find the sound you're looking for, you can create your own samples!

No, the DM Pro isn't an actual sampler, but it does contain an expansion slot that uses PCMCIA-format cards that can store up to 8MB of additional sounds. The slot and card are 100 percent compatible with the Alesis "SoundBridge" software. The SoundBridge software (and an electronic manual) is included with the DM Pro on a CD-ROM. Also included on the CD-ROM are two banks of programs that take advantage of Alesis's most percussion-oriented cards: the Hip Hop QCard, and the EuroDance QCard.

Believe it or not, you can load samples in a variety of formats from your computer into the SoundBridge software and then write these to the QCard right in the DM Pro itself. You don't need any other hardware or software. Alesis gives you everything (except the card) you need to do the job yourself. That's really pretty amazing!

Programming. The manual does a great job of explaining the module's architecture and how the unit's operating system works. The smallest form of sound is called a "voice," which is a single sample such as a snare drum, a cowbell or a tom. Once that sample passes through one or more of the "synthesizer" functions on the DM Pro — such as changing pitch, amplitude, filter and envelopes — it becomes a "sound." The next step up the evolutionary ladder is called a "drum," which is comprised of up to four "sounds" assigned to a MIDI note number. The highest rung in the hierarchy ladder is the "drum kit." A drum kit can be defined as a collection of 64 drums, 16 trigger assignments and all audio effect settings. Remember that the term "drum" doesn't have to be a drum sound. It could be a cymbal, gong, synth hit or any other timbre from the factory or from your own expansion cards.

Drum Programming. While some folks are content to use internal sounds provided by the manufacturer, more adventurous players feel the need to tweak sounds. You can build sounds from scratch or edit any exist-

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ing drums in the DM Pro's drum programming mode. Remember that each drum can be composed of up to four different sounds, and each sound may have its own unique parameter values.

Programming is fairly simple even though the system is plenty deep. You first must enable or disable each of the four sounds. Once selected, each sound can have its own values for volume, stereo pan position (only seven) and pitch. The pitch programming options are some of the best I've ever seen. Each sound can be tuned over a four-octave range — two octaves above or below the original. In terms of fine-tuning, each sound can be altered up or down by a half-step in divisions as small as .5 cents (there are 100 cents to each half-step). Such a fine tuning detail is outstanding!

In addition to the "normal" pitch programming mentioned above, the DM Pro has a few other tricks up its sleeve. You can program the range that an external MIDI controller's pitch bend wheel can modify a sound, and the amount that the pitch envelope will affect the sound. These values can also go into the negative range to invert the pitch envelope's power over the sound.

The DM Pro has a programmable low pass filter that can be applied to each sound. If you've never worked with a drum module that has an effective filter, you don't know what you've been missing! The DM Pro lets you set the cutoff frequency, set a "velocity to filter" parameter, adjust the amount that the filter envelope will alter the sounds, and assign an external modulation wheel to the filter's cutoff frequency.

All four sounds have an individually-adjustable velocity curve so each may respond differently to your playing dynamics. The DM Pro contains 13 curves that are organized in an outstanding manner. Along with the "normal" linear and inverted curves, three other sets of curves are designed and pre-configured to be used with composites made up of as many as four sounds. As an example, to build a drum made up of three different conga sounds — closed, open and slap, for example — assign the pre-configured curves to the three sounds, so that the drum's tone steps through the sounds as your playing velocity increases. This makes the creation of expressive and reactive instruments much easier and faster than on some other modules.

SPECS

Model: Alesis DM Pro
Suggested Retail Price: $899.
Features: 1,664 20-bit 48kHz samples, 64 drum kits, 64 voices, three envelopes per voice, 16 trigger inputs, six audio outputs, two audio inputs, built-in audio effects.
Rack Space: One
Weight: 4.4 lbs.

Let's talk about the envelopes. The DM Pro has three per sound (total of 12). As mentioned earlier, its envelopes for pitch and filter can be programmed to effect each of the sounds. An amplitude envelope controls the overall volume of the sound over time. Each envelope has the typical four stages: attack, decay, sustain and release. But this module includes two additional stages: the delay (determining the length of time before the envelope actually begins), and the sustain decay (i.e.: a second decay stage).

Each sound can have it's own modulation matrix. This matrix arranges two addi-

tional modulation sources to two parameters of your choice. So if you want your playing velocity to control the filter cutoff frequency, the DM Pro has that routing built in. But if you want your playing velocity to control the filter envelope decay, you can use this routing matrix. Cool!

In case you haven't gotten the connection so far, I'm going to spell it out to you: All of these flexible routings and envelope parameter settings not only make the instrument more expressive for live drumming, but help to make the DM Pro the perfect drum module for MIDI sequencing.

Drum Kit Programming. The DM Pro holds 64 different drum kits, and building a kit is about as straightforward as can be. A kit holds 64 MIDI note numbers, each of which holds one of the 1,664 drums.

Once you've selected sounds to use in your drum kit, you can tune each drum individually. Fine tuning at this point is in 25 cent steps, and covers a two octave range above or below the root pitch. When combined with the pitch options available when editing drums, the overall range of each instrument is eight octaves!

Each drum kit has a "mix" section where you can change some of the output characteristics of the drum. Much like an outboard audio mixer, you can mute the drum, adjust the volume, the pan position, the output assignment, affect bus assignment and send level.

Two very useful features are the "mute group" and the "drum link" parameters. Using the mute group commands, playing one drum can mute another drum if they are members of the same group. This is perfect for hi-hats, cymbal chokes, guiros and other sounds. The DM Pro has the ability to designate four different groups in a single drum kit. Using the drum link commands, you can trigger another drum when the selected drum is played. With this command, a single stroke can fire a composite of eight different sounds. Can you say "thick textures?" I knew you could!

Effects. Speaking of textures, it's nice to have onboard effects built right into the DM Pro. In fact, I wish more manufacturers would include effects as a standard feature. Alesis has had a long history with stand-alone effect boxes. In fact, some of them — from the older MIDIverb to the newer Quadraverb 2 — are part and parcel of MIDI project studios around the world. With this history, it's no surprise that the DM Pro's onboard effects are outstanding.

The effects side of the DM Pro contains reverb, overdrive (distortion), delay (echo with multiple repeats), pitch (this effect can act as a chorus, resonator or flanger) and equalizer. The unit can serve as a multiprocessor by combining effects, which have the necessary programming parameters to customize your performance environment.

Operating System. The DM Pro's large LCD display is really quite informative. At a glance, you can see the number and name (up to ten characters) of the kit you're playing. At the bottom of the screen is a series of numbers from 1 through 16. When one of the inputs receives a signal, a small circle will appear around the number on the screen. When in edit mode, the number flashes for the trigger being edited.

The front panel is clean, clear and well organized. Four medium-size buttons function as cursor, trigger select, drum edit and kit edit. Eight smaller buttons call up the mix mode, MIDI commands, FX settings and other programming selections.

There is a large value knob for entering data, and a large "preview" button for hearing the sound while you're programming. Like the front panel, the edit screens are clear and easy to understand. At any point of the editing process, the LCD displays the kit being edited or the MIDI note number, the sound, the function, the function's page, the parameter name, and the parameter value. This sounds much more complex on paper than it does when actually looking at the display and editing sounds. The DM Pro has six individual outputs configured as stereo main, stereo aux, and two mono aux outputs. There are inputs for mixing an audio signal, such as a metronome, cassette, or CD, with the DM Pro's sounds.

The Verdict? If you plan to buy a drum module for live performance or MIDI sequencing, you've got to go listen to this unit. In my opinion, there are only a couple upgrades that would improve the DM Pro. The choice of only seven different positions in the stereo field is pretty skimpy. With such a sophisticated machine, one might expect a finer resolution in this area. It would also be cool if Alesis could use the modulation matrix to route velocity or another modulation source to stereo placement (a minor complaint at worst).

All in all, though, the DM Pro is very impressive. Check it out and see if you agree. ■