

Reviews, Reviews, Reviews—18 of 'em!

NOVEMBER 2007

Electronic Musician®

PERSONAL STUDIO | RECORDING | PRODUCTION | SOUND DESIGN

Recording Drums with Omar Hakim

Beyond Bowie and Miles

■ HOW TO USE
LARGE-DIAPHRAGM
DYNAMIC MICS

■ CREATING DRAMATIC
SPECIAL EFFECTS
FOR FILM AND GAMES

■ VOCAL-PROCESSING
BASICS

■ BUILD MONSTER
SYNTH SOUNDS

Did We Mention Reviews?

Korg M3, Arturia Jupiter-8V,
Moog FreqBox, Dynaudio BM 6A MKII,
and 14 more

A PENTON MEDIA PUBLICATION

\$6.99US \$8.99CAN

11



WWW.EMUSICIAN.COM

apparatus, which includes a sliding post to mount a microphone on, attaches to your mic stand.

Heavy Stuff

After assembly (which is easy), the Reflexion Filter weighs 8 pounds and can easily tip over a conventional mic stand. You can purchase heavy-duty stands from sE that are designed to take the weight, or just put something heavy at the bottom of your stand to keep it balanced. A 10-pound barbell across one of the legs of a tripod stand worked for me.

The curved filter section has a metal post that attaches into a hole in the clamping assembly. The post can be loosened, allowing you to raise or lower the filter to position it. Another post (about 7 inches in height), to which you attach your mic's shockmount or clip, sits on a track inside the curved filter and slides to move the mic closer to or farther from the filter.

That post is threaded in the $\frac{3}{8}$ -inch European standard, and sE includes a $\frac{3}{8}$ -inch-to- $\frac{5}{8}$ -inch (U.S. standard) adapter that screws onto the post. I recommend that you tighten it with a tool such as a wide screwdriver. Why? I initially hand tightened it and found that once I finished with a mic and unscrewed its shockmount, the adapter came off the post with it and was stuck in the mount's threads. It happened

several times, and it always took much effort to unscrew the adapter. I wish that for the U.S. market, sE would change to the $\frac{5}{8}$ -inch thread.

The clamping assembly has three metal handles, which can be loosened to adjust various parts of the filter. Depending on how they're set, the handles sometimes get in each other's way, requiring readjustment. Despite this somewhat clunky design, you get a lot of flexibility for tweaking the height and angle of the filter (see **Web Clip 1**). If you choose not to mount your mic on the sliding post, you can always use a second stand for it. One other issue: the filter is so big that it can block your view of lyrics, a script, or, if you're self-engineering, your recording gear.

Test Case

I tested the Reflexion Filter extensively and found that it definitely reduced room reflections. I tried it with vocals, both sung and spoken, and it gave me a tighter, more focused sound. The effect was subtle when tested in my studio with the mic placed parallel to the filter's edges (as sE recommends). The closer I moved the mic to the filter, the more deadened the sound became. If I got too close, it started to sound harsh and honky. The control of reflections was more noticeable when I used the unit while recording vocals in a reflective hallway (see **Web Clip 2**).

I also used it with success recording acoustic instrument tracks, including guitar and mandolin. Again, unless you're in a really reflective room, the results are subtle. Regardless of the space, I liked the way that tracks recorded with it sounded—they seemed a tad more controlled and consistent.

According to sE, the Reflexion Filter was not designed as a sound isolator. Still, it can help lower the amount of ambient noise (such as the whir of your hard drives) that your microphone picks up.

Reflexions

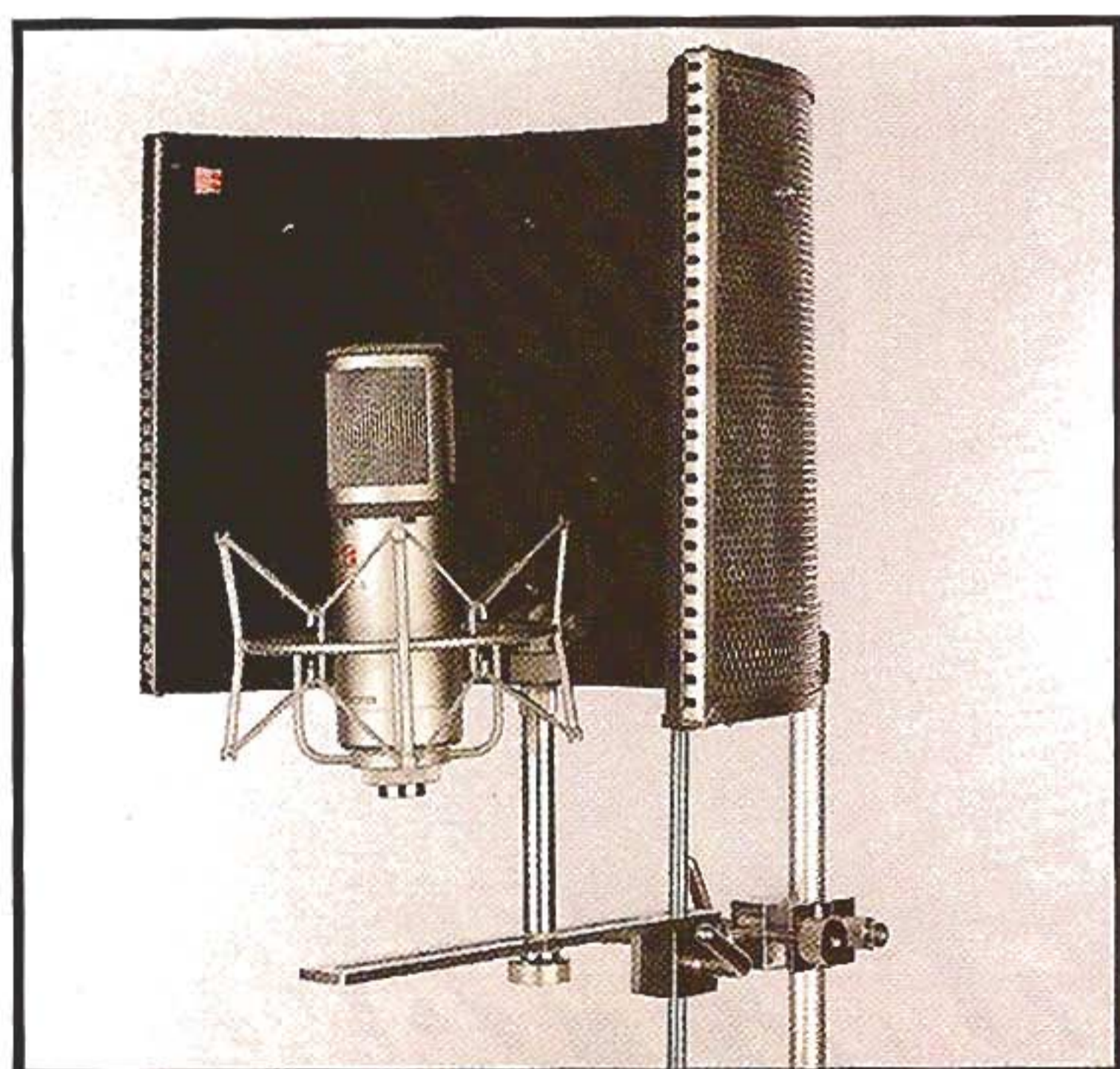
If your studio's acoustics are not what you'd like, the Reflexion Filter may be a good solution. It's not completely user

friendly, nor is it inexpensive (although its cost is low compared with acoustic treatment), but it delivers what it promises and would be valuable in almost any studio. Based on performance, I would have given it a Value rating of 4. However, the mic-stand-adapter problem and the other design issues I mentioned caused me to lower my rating by one point.

sE also makes the Instrument Reflexion Filter (\$199), which is smaller, lighter, and designed specifically for instrument recording. It's mounted on a gooseneck that clips onto a mic stand. It has a hole in the middle to place a cylindrical-shaped mic, such as a pencil condenser (a large-diaphragm mic won't fit). Like its larger sibling, it was effective when recording acoustic-stringed instruments. sE also touts it for miking woodwinds, acoustic piano, guitar amps, and more. **EMWEB CLIPS**

Value (1 through 5): 3

sE Electronics
www.seelectronics.com



The Reflexion Filter is designed to reduce the sound of room reflections when recording.

PRO AUDIO VAULT

Blüthner Digital Model One (Mac/Win)

By Len Sasso

Sampling guru Dan Dean of Dan Dean Productions and sound designer Ernest Cholakis of Numerical Sound have teamed up to form Pro Audio Vault (PAV), a company specializing in virtual instrument design and implementation. Their first release is Blüthner Digital Model One (\$299), a meticulously sampled 9-foot Blüthner Model 1 grand piano recorded at Skywalker Sound.

The piano was close-miked to capture the driest possible image, and damper-pedal-up and -down stereo samples were captured at 12 loudness levels (more than 2,000 samples in all). The result is a 4.5 GB library that runs standalone and as a VSTi, AU, or RTAS plug-in using Native Instruments Kontakt Player 2 (included). Authorization is carried

out online using the NI Service Center application.

The basic piano comes in six dynamic-scaling configurations ranging from the full dynamics of the piano, labeled 100, to the most compressed dynamic range, labeled 45. The chosen scaling makes a huge difference in the sound and feel of the instrument. A little time spent experimenting with different dynamic-scaling choices combined with the Velocity-curve choices on my MIDI keyboards allowed me to dial in the feel I wanted with greater precision than on other sampled pianos I've tried.

Follow Your Impulse

The thing that most sets this piano apart from the competition is its heavy reliance on Kontakt 2's convolution engine. In addition to room ambience and reverb, convolution is used to enhance sustain resonance and, most important, to change the timbre of the piano completely. That last is accomplished by convolving the piano samples with impulse-response curves taken from other pianos, from piano recordings, and, in one of the most interesting twists, from speech.

The purpose of sustain convolution is to better reproduce the complexity of the resonances that occur in a real piano when the dampers are raised. You get two sustain groups (A and B) with five variations each (Crisp, Clear, Dark, Even, and Full). The difference between using pedal-down samples alone and with sustain-impulse convolution is subtle but clearly audible (see **Web Clip 1**).

Seven Timbral Impulse groups—Classical, Custom, Jazz, Pianos, Pop,

R&B, and Vocal—contain a total of 260 impulses. The Classical group is taken from other manufacturers' pianos. The Custom group comes from other Blüthner pianos. The Jazz group represents mostly recent recordings, though several come from older recordings. The Pianos group comes from other sampled and digital pianos. Like the Jazz group, the Pop and R&B groups come primarily from recordings representative of those genres.

The Vocal group is a tantalizing example of how you can use convolution to go way beyond a natural piano sound. The impulses were taken from spoken vocal phonemes, and the results of convolution range from muted to piano-in-a-box to harpsichord-like sounds. Unfortunately, you are limited to the few impulses provided in this category because even when loaded into the full Kontakt 2 sampler, the instruments are locked and cannot be modified. Otherwise, you could use your own impulse samples for convolution. My biggest complaint about this instrument is that you can't get under the hood—probably necessary for security reasons but a shame nonetheless.

All the timbral impulses have a profound effect on the sound of the piano, and as I played this piano more, I came to prefer the unprocessed version. The same was true for the reverb impulses; although they sounded fine, I actually preferred an outboard reverb or none at all. On the other hand, I definitely preferred the sustain with convolution active. The nice thing is, you have lots to choose from in each category, or you can turn them all off and still have a great-sounding piano.

Revolution or Evolution

Blüthner Digital Model One has two other forward-looking features. A clever, variable just-intonation tuning system was devised by Ernest Cholakis. With it you set the root key either by using a second keyboard or, less conveniently, by using MIDI CC 16 together with an octave of the main keyboard.

A complete second set of instruments is included for use with a variable sustain pedal. A variable sustain pedal sends different values with increased pressure rather than simply acting as an on/off switch. It's a much more realistic piano-damper-pedal implementation, and variable sustain pedals are affordable and increasingly available.

There's no question that Blüthner Digital Model One is an excellent sampled piano. It stacks up well with the collection of top-of-the-line sampled pianos EM profiled in the October 2006 feature "Software Eighty-Eights" (see **Web Clip 2**). It's reasonably priced, and if not revolutionary, it's at least



Value (1 through 5): 4

Pro Audio Vault

www.proaudiovault.com

NADY SYSTEMS

TRM-6 Tube Ribbon Microphone

By Karen Stackpole

Nady Systems' latest offering in accessibly priced studio microphones is the TRM-6 Tube Ribbon Microphone (\$499.95), a hybrid that combines a classic ribbon design with an internal tube preamp. The 12AX7A triode provides higher output levels than you would get from a standard ribbon mic, allowing the TRM-6 to be used with any external preamp.

I received a pair of TRM-6s for testing. Each mic came in a vinyl zippered pouch, neatly packaged in its own lockable, foam-padded aluminum flight case. Also included was a TMPS-6 remote power supply, an AC power cord,



Blüthner Digital Model One's control panel is primarily devoted to choosing timbral, reverb, and sustain impulse-response presets.