

SoundLab Nº.1

 **Yamaha DTXtreme**

by Norman Weinberg

Details, Details

Name: DTXpress Electronic Percussion System

Models: Six-piece DSXT11 (includes one 12" kick pad, one 12" snare pad, one 8", two 10", and one 12" tom pads, one 8" rubber hi-hat pad, two PAY80S cymbal pads, one PCY10 bell pad, one hi-hat controller, rack system, and brain)

Retail Price: \$4,600

Features: Real head pads, 16 inputs (8 stereo, 4 double mono), six individual outputs plus one stereo output, 64 voice polyphony, 1,757 drum and percussion voices, 128 general MIDI voices, 90 preset kits, 40 user kits, 162 preset songs, 32 user songs, SmartMedia storage card for voices, kits, and songs, ten dedicated volume sliders, two-track sequencer, groove check, pad songs, virtual snare drums

An Xtremely Cool Kit

Yamaha's DTX system is now in its fourth incarnation. The original DTX was soon followed by the DTX version 2.0, which added new software and a few additional functions to the brain. The next step was the DTXpress, which added some upgrades but was a scaled-down drum kit aimed at a market that wanted less complexity in their electronic kits. The DTXtreme, with new pads, a new frame, and a new brain is clearly a totally redesigned machine.

The Drums. The first thing you'll notice about the Xtreme kit is the RHP pad. RHP stands for Real Head Pad, and the shells, as well as the heads, are real. The natural-color shells are made of 7-ply birch and Philippine mahogany. All the pads are dual zone (one trigger for the playing surface and one trigger for the rim) and have a protective, removable rubber ring on the counterhoop that helps reduce stick noise when playing rimshots. Another rubber ring protects the bottom of the single-headed

ed shells. All drums have rubber insulation between the tension casings and the shell. The pads come in 8" (five lugs), 10" (six lugs), and 12" (also six lugs) diameters. All drums are 3" deep except the bass drum shell, which is 3.7".

Each drum is outfitted with a 1/4" stereo-out jack and two small dials that independently control the sensitivity and dynamic response of the head and the rim. As you turn the dials, you notice a large difference in the pad's response and playability. At the lowest setting, you really have to slug the drums to get them to speak. At the highest setting, they'll catch an extremely soft stroke. When used with the Xtreme brain's trigger controls, these dials offer enough flexibility to literally "dial in" your touch.

The drums normally ship with Remo coated Ambassador heads. If you've ever played on a Remo pad, you'll have an accurate idea of how these pads feel and sound. The tension rods affect only the feel and head response, not the trigger response or the trigger sensitivity, so you can tighten or loosen them to offer a faster or slower feel.



Special thanks to Robin Horn for his technical help with this review.

With the supplied heads, the drums make a pretty good racket. I think that the pads would be fine in a large venue where stage volume could mask the physical sound of the stick hitting the head. But the pads produce too much sound for use in a small hall, an apartment, or dormitory room. That being said, you can put any type of head on these pads, including the new "mesh" heads that are used on the Roland V-Drums. If you should decide to mount a set of mesh heads on the Xtreme, Yamaha has included a special foam pad with a waffle surface that replaces the pad underneath the normal head. I played the RHP pads with both the supplied heads and the mesh heads. Both types respond well, but mesh heads put out significantly less contact sound when the pad is struck.

I took one of the drums apart and can report that the instruments are built very well. Each pad has two large piezo pickups. One is securely affixed to a large metal plate under the drumhead. The other is attached to the shell to catch the vibrations from the strokes on the rim. The wiring is heavy duty, the solder joints are beefy, and the PC board looks sturdy. The floating metal plate is well insulated from the shell to help keep crosstalk to a minimum. (If you do experience crosstalk, you can make adjustments with the sensitivity dials.) If something went wrong, these pads would be easy to repair.

The bass drum pad is a huge advance over the older Yamaha bass drum towers! Since the beater ball strikes a real drumhead rather than a rubber block, the feel is much more natural. The pad includes a sensitivity adjustment dial like the other pads. The bass pad sits on an elevated brace, much like Yamaha's HipGig bass drum, which raises the pad enough to align the bass drum beater so it can hit in the center of the head. Double front and rear braces with highly adjustable retractable metal spurs give this 12" pad a sturdy feel. The 12" pad has plenty of room to accommodate a double pedal.

The hi-hat pedal is the HH80A and is more adjustable than the older HH60 pedal. A wing nut at the upper end of the tower controls how far down the pedal moves until it hits the bottom position and fires the closed hi-hat sound. A wheel adjustment directly over the pedal board

controls the spring tension of the pedal.

With all of these improvements to the pads, it's a little disappointing that the cymbal pads are the same PCY80S instruments from earlier DTX kits. These pie-wedge-shaped pads still offer a number of different tricks — different sounds on the pad or the edge, muting the cymbal sound by grabbing the edge, or getting an entirely new sound by playing the pad while the edge is being held. The hi-hat pad is also from earlier versions of the DTX line up. This small round rubber pad doesn't feel much like a hi-hat, but it works just fine. The PCY10 cymbal bell pad is also held over from previous kits. It's a mono pad, and actually does a great job of feeling like a cymbal's bell. Together, the cymbal pad and the bell pad provide a large number of sounds and tonal variations, but there's nothing new in the cymbal department.

The Rack. The new DTXtreme rack is much more solid than previous versions, and its gunmetal gray color looks cooler too. The solidarity is due to a number of factors: There is an additional vertical support (bringing the total to three) off the right side of the frame to offer additional stability to the floor toms. There are now two full-size horizontal braces on the front of the rack and an additional cross-brace on the left side of the rack. These improvements alone would be great, but there are a few other well-considered changes.

The two boom style cymbal stands mount directly into the vertical posts of the kit rather than mounting to one of the horizontal support bars. A separate arm dedicated to supporting the brain means that you'll be able to put the brain in a more accessible position. The pads are mounted to the rack with Yamaha's YESS mounting system. Being an electronic drum pad, this mounting system has nothing to do with the sustain of the tone, its purpose is to attach the pads to the rack with Yamaha's standard ball mounts (the same ones used with their acoustic kits).

The snare drum is no longer attached to the rack. Instead, the kit comes with a snare stand. If you plan to travel with the Xtreme, you'll appreciate the large number of supplied memory locks for the rack, the tom mounts, and the cymbal stands.

The Brain. The back panel of the DTXtreme sports 12 trigger inputs. The first eight jacks are designed for stereo

pads and will recognize strokes on a pad's surface and rim. The next four inputs are each designed to accept independent signals from two different mono pads connected with a Y-type cable. If you max out this brain, you'll have eight stereo pads and eight mono pads giving you a total of 24 different surfaces. The unit has a set of input attenuation switches that can be used to boost the trigger input signal if you should decide to use different types of triggering devices. Other inputs include a separate jack for the hi-hat controller and an additional footswitch that is programmable per kit. (This can be used for a number of different functions.) There is also a "to host" jack that provides a direct serial connection for MIDI, PC1, PC2, or Macintosh computers. With this connection, you can hook the Xtreme to your computer without a special MIDI interface.

New to the Xtreme's brain are six individual audio outputs, in addition to the stereo out. These can act as individual mono outputs, or can be grouped together to form three additional stereo pairs. The full complement of MIDI-In, Out, and Thru, as well as a control for the illumination of the LCD rounds out the back panel.

The front panel has also been totally redesigned. It's easy to operate and all the controls are laid out in a clean and clear manner. There is a large, 40 x 2 character back-lit LCD that displays programming information, and another LED that is dedicated to showing the current kit number or the metronome's tempo. Directly under the LCD are five dials that are used to input values of the parameter shown directly above them on the display. In fact, this unit doesn't even have a main data wheel, or cursor buttons. The entire interface is handled in a very elegant manner.

Programming. Here's how you program the DTXtreme: Select one of the eight modes (play, chain, song job, utility, trigger, voice, effect, or store), use the page up/down buttons to move to the page that you want to access, then twirl the dials to enter the value you desire. It's an elegant operating system that can easily be learned by novice and expert alike.

The middle section of the brain is primarily concerned with the sequencer functions. Dedicated buttons are available to mute the rhythm track, the bass track, or all the other tracks. There is a button

dedicated for accessing the click and the motion controls of song start, rewind, start/stop, forward, and record enable.

If you find yourself playing in different venues on a regular basis, you'll be glad to know that the bottom of the brain is taken up with ten sliders that are dedicated to controlling volume, or with the shift key held down, controlling the reverb send and return amounts on a global scale. These sliders affect the volume of the main outputs, the headphone, the click, the accompaniment (when playing along with songs), and individual volumes of snare, kick, toms, hi-hats, cymbals, and everything else.

To be honest, Yamaha gear, in general, has a reputation for complex operating systems. But, the DTXTreme couldn't be much easier to understand and navigate. The upper left portion of the LCD displays the mode and the page (such as "voice3" or "TrgFunc"), and each of the parameters is displayed directly over the dial that adjusts the value. Once you learn in what mode and page certain functions reside, programming is a snap.

It's only recently that manufacturers wised up to the fact that drum artists want the same power and control over their sounds as keyboard players. This kit comes with 90 preset factory drum kits, but if you want to create your own, it's a snap. In the area of voice control, the Xtreme's got just about everything you might need to satisfy your needs. The voice-editing mode contains ten pages of parameters. Most of the common editing values are conveniently located in the first few pages. For example, the MIDI note number, instrument type, the particular voice, volume, and tuning (over a four octave range in one cent increments) are located on the first page.

The second page of voice edit is reserved for some special snare drum parameters. If you've chosen a voice of the "XtrSnr" type, you can build a snare drum from scratch. There are a dozen different shell types, including maple, beech, aluminum, brass, steel and bamboo; tape or ring muffling; 14 different types of snares; strainer positions of off, loose, mid, and tight; and a balance between the sound of the shell and the sound of the snares.

The third page offers controls for pan



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position, balance between layers (for two-layer voices only), low-pass filter cutoff frequency, and Q factor. Page four gets you into the parameters to set the attack and decay rates.

The remaining pages get into more complex editing areas, such as the key mode (how the voice will sound when it is played repeatedly and/or simultaneously), reverb and chorus send levels, and output assignments. It's in this mode where you find the MIDI controls as well.

For those of you who like to create complex timbres or control external sound modules with your pads, the DTXTreme can work in several different performance modes. For example: In Stack mode, each pad can trigger one to six notes simultaneously. In Alternate mode, each pad can fire from one to nine notes played back in order — one note for each strike of the pad. In Hold mode, notes one through six will be played back simultaneously and when the pad is struck again, the notes are muted.

Drummers have been demanding more and more effects on their machines and again, the Xtreme comes through in spades. The machine has 12 different reverb and 14 different chorus effects that are global. In addition to reverb and chorus, there are two additional effect units (insertion effects 1 and 2) that can be applied to individual drums. With 44 different effects, you're sure to find a few that will get your creative juices flowing.

Depending on the effect chosen, the editing parameters can be quite extensive. A new effect called "Localizer" gives the player the feeling that the instruments are in a three-dimensional space through headphones. Not only are instruments positioned to the left and the right, but sounds can also be localized in terms of distance, speaker placement, and speaker angle (width). It's pretty cool!

Yamaha's interactive song features have always been a strong point of the DTX systems. Included in the DTXTreme are 31 full-length demo songs in a variety of musical styles, 67 practice songs (generally shorter than the demo songs), 66 "pad songs" that are designed to be played by hitting a pad, and 32 user songs. If you add a memory card, you can access 32 additional songs.

The Xtreme's sequencer is not as complete or flexible as a software or dedicated hardware sequencer, but it's not bad. With the basic two-track sequencer, you build tracks by bouncing the information that's on both tracks to a single track. One nice feature is that you can record in real time and determine the quantize level after the fact. If you prefer recording in step-time, the Xtreme can handle that too.

Sounds. Without a doubt, this baby comes with tons of sounds. To be exact, it comes with 1,757 drum and percussion voices (not necessarily 1,757 unique samples) and a full 128-voice set of gen-

eral MIDI voices. While Yamaha re-sampled all the drum and percussion sounds for fresh sounds in 16-bit clarity, the GM sound set seems pretty average. There are plenty of kick drums (112 acoustic and 60 electronic), snares (212 acoustic and 127 electronic), toms (237 acoustic and 87 electronic), and cymbals (91 cymbals and 79 hi-hats). Since the pads don't respond to brush playing, Yamaha has also included 28 different brush sounds as samples that can be fired when a pad is struck with a stick. In addition to drum set sounds, the Xtreme has a full pallet of percussion, special effect, loop, and human voice waveforms.

With more than 1,700 sounds, you're bound to find some that you think are great and others that you feel sound weak. While quality and usefulness are subjective, my opinion is that all of the sounds are very good. Attacks are sharp, decays are clean, and long sounds that have loops are very smooth. I was especially impressed with the sounds of the toms. They're killer.

With all of these sounds on board, there's still room for expansion. Yamaha has included a slot for a "smart card." Once formatted by the DTXtreme, these cards can be used to backup kit and song data and for the importation of sounds saved in AIFF format. In other words, you're able to download sounds off the Internet or create your own samples and use your computer to transfer the sounds to the smart card. Then when you insert the smart card into the Xtreme's brain, you'll be able to play these sounds. Of course, in order to do this, you'll need the proper hardware and software on your computer.

Cool Stuff. All in all, the DTX is very well thought out. There are several little niceties that were included to make your life easier. If you enter an editing mode when the feature called "JumpRecnt" is turned on, you'll instantly be taken to the last edit page you were working on. This can save your sanity if you're editing page nine of some mode. There are MIDI commands for Bank Select MSB and Bank Select LSB. If you're interested in marrying the DTXtreme with an external sound module that has many differ-

ent banks of sounds, you'll be glad that this command is available. Yamaha kept the "groove check" features that were available in previous kits. But this time, due to the larger LCD display, all the features are available on a single screen.

Using the shift key in conjunction with other keys makes some work easier. For example, in any of the programming modes, if you hold down the shift key and press page up, you'll automatically be taken to the first editing page. Shift and page down will jump you to the last editing page. Without the shift button, you'll tune by cents, with the shift button, you adjust the tuning by half steps. Once you get used to the various changes the shift button can call up, you'll appreciate its operation.

This instrument has taken the route of some other new machines on the market — two manuals. The first manual is the "Basic Section" and describes how to set up the kit, its basic operations, and how to access the main functions of the machine. The second manual, called "Reference Section," goes into all the details of each function. Not only do both manuals include a table of contents, but also the Reference book contains a thorough index. Gone are the confusing sentences and the silly typos. The DTXtreme manuals are Yamaha's best drum manuals so far.

Minor Gripes. The tap tempo feature is handy and a nice addition to the kit's features. It seemed to work just fine when dealing with meters of 2/4, 3/4, or 4/4. But I had trouble getting the unit to operate as expected when dealing in meters that have an eighth-note base. Yamaha claims that the snare drum is positionally sensitive and can detect and respond to strokes that are closer to the rim or closer to the center of the head. I found that this worked only marginally. The effect didn't sound or feel natural.

So... In the final analysis, this kit represents a quantum leap for Yamaha. The new pads feel great and respond very well. The drum sounds are fresh and absolutely killer. The songs are exciting and offer a lot of interactive value. If you're in the market for an electronic kit, you owe it to yourself to check out the DTXtreme. 