

# OBERHEIM

## DRUMMER AND STRUMMER MIDI PROCESSORS



An interactive drum sequencer and a keyboard to guitar chord convertor are the first new products to emerge from revitalised synth pioneers Oberheim Electronics. KENDALL WRIGHTSON gets on the case.

In the early 80s, the upwardly mobile keyboard player liked to be seen programming an Oberheim OBB analogue synthesizer. By the mid-80s, the zingy digital presets of the Yamaha DX7 were all the rage. Oberheim countered with the analogue-plus-a-bit-of-FM Xpander and Matrix 12, but failed to charm a world which had, in the meantime, become obsessed with sampling.

Perhaps in search of more lucrative products, and following the 1988 launch of the Matrix 1000 module, Oberheim headed down market, producing a pair of £229 MIDI processors — the Cyclone arpeggiator and the Systemizer MIDI organiser. However, neither product caught the public's imagination, and in '89 Oberheim were forced to close. However, the story doesn't end there, because earlier this year, guitar heroes Gibson plucked Oberheim from obscurity, re-launching the entire product range and promising brand new gear for the summer.

Later this year we can expect to see a modular, analogue synth called the OBMX, but the first products from the Mark II Oberheim are two new MIDI effect units: the Drummer and Strummer.

### PLASTIC

"I've seen sturdier novelties fall out of Christmas Crackers!" was our esteemed

editor's comment on the Cyclone and Systemizer casing in his March '89 review. Somewhere in North Hollywood, there must be a warehouse full of grey plastic boxes because, despite such criticisms, the electronics of the Drummer and Strummer are built into identical cases — a stick-on plastic legend being the only way to tell them apart.

It gets worse. The 12 ventilation holes on the top of the casing provide the perfect way to short out the internal electronics with spilt beverages or perhaps the odd 5p coin. The rear panel on/off switch sticks out a good 5mm and is therefore destined to snap off, or catch on something.

The user interface sets new standards in user un-friendliness too: it's the complete antithesis of a contemporary, compact design like the Boss DR550 drum machine with its large LCD and labelled rubber keys. In their place, the Drummer and Strummer offer a 2-digit LCD (which cannot, for example, even display a tempo above 100bpm adequately) and nine unmarked plastic buttons.

Where the DR550 is sturdy and attractive, the Drummer and Strummer are fragile and ugly, their portability spoiled by the lack of battery compartment or protective carry case. The four rear panel footswitch jacks are the only saving grace. I'm tempted to say that apart from that, I liked it, but we're still only half way into the story. There's also the software...

### THE DRUMMER

The Drummer contains no internal sounds, but offers 99 Preset drum patterns which are mapped to play any of 13 popular drum machine/expanders (including the Alesis SR16, Emu Proteus, and the Korg M1). There are also three user Kits, so that samplers or any drum machines that are not supported can be brought in on the act, but in all cases the maximum number of drums each Preset can address is 16 (15 if you assign one as a click source).

Each of the 99 Presets offers a basic kick/snare/hat/tom groove which can be modified using three different methods and stored as one of 99 Patterns. The first modifying function is Other Percussion, which introduces a random variation — on any one of the closed hi-hat, open hi-hat, ride, tambourine, or shaker — in keeping with the style of the Preset. Other Percussion can also provide snare fills every bar or every other bar.

A second modification works on time signature: you can set it, for any pattern, to 2/2, 3/4, 4/4, 6/8, 9/8, 12/8, or swing 4/4. Lastly, each Pattern has 100 variations, or 'feels', from which you can pick and choose. Amazingly, descriptions of the different feels are not provided (you gonna listen through each one?). The system applies volume envelopes to one or several of the drums, generating a pattern of accents. The exception is feel 99, which is totally random.

By plugging a MIDI keyboard into the Drummer's MIDI In, you can overdub additional drum parts into the first 13 Patterns (0 to 12). Editing is very basic; only quantise (16ths, 16ths shuffle, 16ths swing or off) and real-time erase are provided.

Up to 16 Songs can be constructed, and tempo is programmable for each Preset/Pattern (at 1bpm resolution) within a Song. Rather than jump abruptly from one tempo to another, the Drummer increases speed proportionally over the last bar of the preceding Pattern. No further control over this feature is provided. The remaining Song parameters are: number of repeats (1 to 99); and eight options of auto-fills, ranging from one every 32nd bar, to one during last bar of each Part (a Part = Preset/Pattern + repeats).

All the Drummer's user Kits, Patterns and Songs are stored in battery backed RAM, but for archival purposes, data can be dumped over MIDI to a sequencer or data recorder. Alternatively, individual Patterns can be recorded into a drum machine or sequencer, with the Drummer transmitting MIDI clock to keep sync.

### INTERACTIVITY

The Drummer's interactive capability is found under a button labelled Follow (Interact). Basically what the unit does is to listen to incoming MIDI data from your master keyboard, as you play your non-drum instruments, and modify its own patterns according to what you play — just like a drummer really. The MIDI input facility is augmented by four rear panel jacks which accept momentary footswitches. (Both normally-open and normally-closed types can be used since the Drummer checks which variety are plugged in on power up).

The Interact function has four parameters, and as each can be set to on or off, there are 16 possible modes of operation. When using the Follow feature, the drum machine/expander should be set to a different channel to your master keyboard's transmit channel, so that the keyboard performance does not trigger any drums.

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Parameter 1 is Auto Start, which starts the currently selected drum Preset or Pattern when the Drummer sees any MIDI Note at the MIDI In, or when footswitch 1 is pressed. If the Fill parameter is switched on, the Drummer automatically produces a drum fill whenever activity at MIDI In ceases. This is, for me, the Drummer's best feature, since it allows you to play a bass line (for example) and have drum fills appear exactly where you would expect them.

Parameter 3 is also quite useful, as it allows the volume of the Drummer's current Preset/Pattern to follow the velocity of the part you happen to be playing. It's a brilliantly simple way of programming overall dynamics, which makes you wonder why no one has thought of it before. However, a facility to limit the velocity range would have been handy.

The last interactive option is Bass, so called because any notes played below middle C are channelised and echoed to play the MIDI note assigned to the Bass (Kick) drum. The idea is that the bass and drums will then be locked tight. In practice, it means that the kick drum will almost certainly be too busy.

The remaining footswitches are: Break/Interrupt, which mutes the Drummer's MIDI output until the pedal is pressed again, whereupon the pattern continues on the nearest quarter beat; Random Percussion, which turns the parameter of the same name (described earlier) on and off; and Fill, which is

similar to the Alesis SR16 feature whereby a fill will play over part of a bar or the whole bar, depending on when the pedal is pressed.

## THE STRUMMER

The Strummer has three main facilities, all intended to turn 'simple' keyboard playing into realistic guitar technique simulations: keyboard to guitar chord conversion with simulated strumming; MIDI echo/arpeggiation; and riff triggering. The latter function allows you to record a series of looping riffs, and assign them to MIDI notes. The tempo can be determined externally by MIDI clocks, or set internally; a reference click is available at "footswitch" socket 1. The Strummer has enough memory for about 25 10-note riffs, though with pitch bend the total drops to around three or four.

## CHORD CONVERSION

The Strummer's major facility is the conversion of keyboard MIDI chords into guitar chords — you play a simple chord, and the Strummer turns it into something that a guitar player might have played had you asked them to play the same chord. This is done by adding to and/or transposing the MIDI notes, and the strumming effect is produced by adding a delay between each note. When using the Strummer with a single synth keyboard (no expander), turn local control off and connect the Strummer in a MIDI loop between the keyboard's Out and In ports. Unfortunately, some earlier keyboards don't support local on/off, the DX7 being a notable example.

10 parameters are provided to control the way the strumming works, and examples

of the most useful are found in the first 20 presets. Presets 21-40 and 41-64 are duplicates of 1 to 20 except that strumming is active only above (or below) a programmable split point.

Preset one, Folk Guitar, offers an example of open chord conversion. Any 3-note chord from a keyboard plays a 6-note guitar strum, using only notes that would be found within the first five frets on a conventionally-tuned guitar.

The overall strum rate (the delay between notes) can be changed by editing parameter 00. As with all parameters, this involves pressing the Edit Preset button, dialing up the intended parameter, and pressing enter. Values can then be edited with the arrow keys, but their effect cannot be heard until the Enter key is pressed. This takes you out of the parameter you were editing and back into parameter select mode, so you then have to press Enter again to listen to the effect of other values — Aarrghhh!

You can also control strum rate with keyboard velocity, via the function of parameter 01, Velocity Threshold. The effectiveness of velocity control is determined by this parameter's value, but as it also affects several other velocity controlled features, I sometimes found it difficult or impossible to produce the effect I was after.

Another important consideration when simulating a strumming effect is strum direction. Parameter 04 provides three options. With the first, chords below a (programmable) split point on the keyboard are strummed downwards (having already been transposed etc. as described above).

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