

ZYKLUS

MIDI Performance System



Photography Tim Goodlyer

Already tired of software tape-recorders? In need of something more adventurous? Zyklus' MIDI Performance System could be just what you're looking for. Review by Simon Trask.

WHILE TODAY'S GENERATION of MIDI sequencers provide tremendous organisational flexibility, typically they still adopt the tape-recorder model of parallel track-style operation. Zyklus' MIDI Performance System throws all that out of the proverbial window.

The MPS allows you to record sequences: 99 polyphonic single-channel sequences, to be exact. These can be organised into groups of 12 sequences which are known as Configurations, of which the MPS allows you to store 24 in its internal memory. Once you've recorded a few sequences and organised them into a Configuration, you can "play" them from a MIDI keyboard and from dedicated front-panel Control buttons. These actions can in turn be recorded into one of 12 Performances.

The important point to bear in mind is that the MPS's sequences are totally independent of one another. You can treat the MPS as a 12-track sequencer, but that's only one of countless options available to you, and it's really missing the point. If all you want is a multitrack sequencer you'd be better off investing in the "real thing" - and saving a considerable amount of money in the process.

Sequences

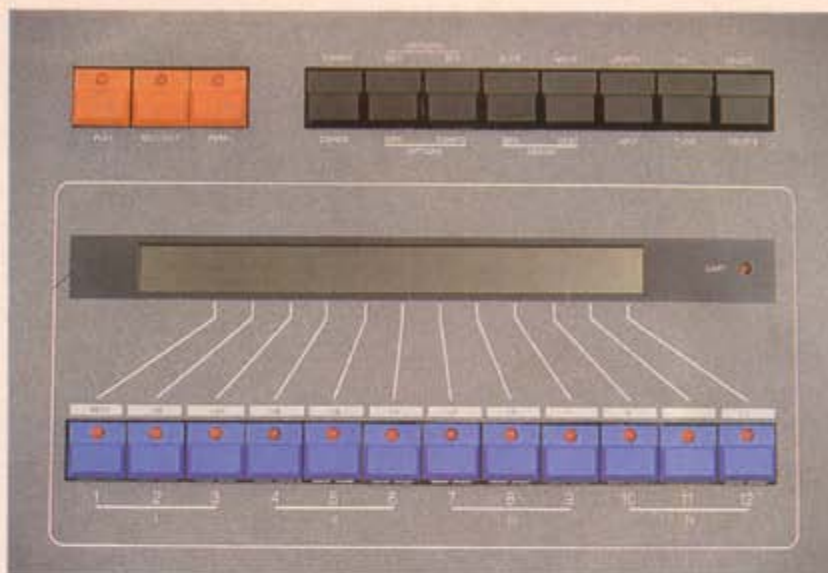
THE MPS'S FRONT panel divides into three sections. On the left side are the "master" controls such as the Run/

Stop button, the Configuration and Tempo buttons, and the alpha dial (used for editing). The large central section consists of the main display LCD (2x40-character backlit), dedicated Control buttons, Play/Rec-Edit/Performance select buttons and edit buttons, while the right section sports 12 Trigger Profile buttons.

The rear panel sports one MIDI In and four individually-addressable MIDI Outs (making a total of 64 MIDI output channels), sync input and output, trigger input, programmable gate output, metronome output and three footswitch inputs (Run/Stop, Enter and sequence Control). Additionally a cartridge port allows you to double the storage capacity of the MPS, with all data readable directly off cartridge. The MPS can transfer its data in either direction over MIDI (from/to the internal and cartridge memories), but rather unusually Zyklus have used the MIDI sample dump standard. MIDI File transfer is planned as soon as the format has been ironed out.

The MPS has a 9000-note internal memory capacity, but because of the way the unit is intended to be used, Zyklus estimate an effective capacity (based on a typical performance: sequence ratio) of more than 60,000 notes.

The MPS allows you to record in real and step time. Each sequence can be given its own time signature (1-32/2, 1-32/4 or 1-32/8) and keynote (the note which will retrigger the sequence at its original pitch). Sequence ▶



► specific quantising is applied during playback and is non-destructive (the MPS can record to a resolution of 96ppqn). The MPS allows you to monitor the other 11 sequences while recording in either real or step time. You can specify a range of MIDI input filter options: all channels (omni) or individual channels, together with on/off settings for note data, patch changes, poly aftertouch, pitch-bend and other data (controllers, mode messages and so on).

Punch in/out can either be manual (playing automatically starts punch-in) or automatic (using preset markers), and you get the option to recover pre-punch data. You can also delete any section of a sequence.

Less dramatic editing features include Delete, Slide, Move, Length and Value. Slide is used to add to or delete time from a sequence, while Move is used to adjust the position of individual notes or events, Length is used to adjust the length of individual events, and Value is used to view the value of individual events (such as velocity for notes).

Configurations

AS DESCRIBED EARLIER, each Configuration calls up 12 sequences onto the 12 Control buttons. Each sequence within a Configuration can be assigned a MIDI destination (one of channels A1-D16) and associated patch number, together with a second "effect" patch (again on one of channels A1-D16), a Repeat mode (Endless Loop, Single-shot or Hold-at-end - the latter holding the last note or chord in the sequence until it's turned off) and a velocity ratio (which gives you "live" control over the dynamics of the sequences you're triggering from the keyboard).

Start-up status defines how each sequence will behave when a new Configuration is selected: "on" will stop any previously-running sequence and start the new sequence, "off" will stop the previously-running sequence but not start the new one, while "blank" will allow the previously-running sequence to continue running. This last option is particularly useful, as it allows any combination of sequences to play through any number of Configuration changes. For instance, you could have a drum-and-bass backing loop while you switch to and fro between two Configurations for whatever you're putting on top.

The main display indicates both the current and the next Configuration, allowing you to use the alpha dial to select any of the other 23 Configurations in advance. Pressing the Enter button (or the equivalent footswitch) will step you to the next Configuration. By pressing the Tempo button instead of the Config button you can use the alpha dial to

select a new tempo; pressing Enter will call it up. Alternatively you can hold down the Tempo button and spin the alpha dial to introduce gradual tempo changes.

It's also possible to give each Configuration its own tempo (39-255bpm), while other Configuration features include pitch trigger on/off (which determines whether each sequence will be "immune" to pitch changes triggered from a MIDI keyboard), Trigger Profile on/off (which allows you to call up default Profile settings with each Configuration), and keyboard zone and octave (for use with the Profile Group option - see below).

But you don't have to assign a sequence to each of the 12 Control buttons. Selecting T (sequence zero, or Thru) allows incoming MIDI data to be sent straight out to the assigned MIDI destination. In fact you can select up to 12 T sequences, with each one sending out incoming MIDI data to its own destination - spontaneous MIDI layering, across all four output ports if required. Alternatively you can use the T sequence(s) to play slave MIDI instruments "live" over pre-recorded sequences.

All these features combine to make the MPS a sophisticated MIDI control station even without the sequence triggering options which are the unit's ultimate *raison d'être*.

Profiles

THE TRIGGER PROFILE section is the nerve centre of the MPS. It's here that all the really clever stuff goes on, with an array of buttons providing options for manipulating the sequences.

The first button to get to grips with is Ext Trig (EXTERNAL TRIGGER, if you prefer). With this switched out, the 12 current sequences can be controlled from their front-panel buttons. However, when you switch in Ext Trig all subsequently-selected sequences will be "pended" (the relevant sequence(s) blink at you) until a note is received from an external MIDI source. If that note is the sequence key-note, the sequence will play at its original pitch; if not, the sequence will be transposed by the relevant interval.

Playing a new note will cut short the sequence at its current pitch and start playing it at the new pitch. In this way you can play sequences rather than individual notes; in fact for most purposes it's best to set your master keyboard to local off, if possible, so that the keyboard notes won't become part of the performance.

By holding down several notes at once you can play back the current sequence(s) as a "chord", though with New Pitch Trigger selected, sequence(s) will be retriggered even if other notes are being held on the keyboard - perhaps useful if you don't want to risk playing a "chord" by mistake.

Switching in Build allows you to build up a maximum of eight versions of a single sequence (actually, of as many sequences as are pending) at different transpositions and different times.

Usefully, replaying a note cuts short the sequence(s) on that note - so you can play individual occurrences of the sequence(s) in rhythm against other occurrences of the sequence(s).

With Transposition switched in, all running sequences will be transposed in real-time when you play on the keyboard. This is a "monophonic" transposition, so if you play a chord the MPS will take the first-played note (apparently Zyklus are thinking of changing this to lowest-note priority). If you don't want certain sequences to be transposed at all (for instance, drum machine patterns), the best option is to set "pitch trigger off" for the relevant sequence(s) under Configuration Options (see above).

One of the most useful buttons rhythmically is Mom (Momentary). With this switched in, any newly-triggered



sequences will only play for as long as the notes on the keyboard (or the Control button(s) if Ext Trig is off) are held down. This is a marvellously spontaneous way of varying the length of a sequence.

Pressing Mom will cause all currently-running sequences to become "pitch-locked". If you then want to transpose any of these sequences, switch in the Override button, hold down a new note on the keyboard, and press the appropriate Control button(s).

Exclusive allows only one sequence to play at a time. With this switched in, triggering a new sequence will cause all currently-running sequences to come to an abrupt halt – a good way of returning to a simple texture after building up a dense one.

Cycle allows pending sequences to be triggered sequentially (and subsequently to be deactivated sequentially if Build is switched in), while with Step switched in the current sequence(s) will advance step-by-step – their rhythm being determined by the rhythm you play on the keyboard or Control key(s).

Group is a particularly useful option, as it allows other Trigger Profile features to be applied selectively. With Group switched in, the keyboard will be divided into four non-overlapping zones (these being defined as part of a Configuration). Notes played within each zone will only affect the corresponding group of sequences (4x3). So for instance, you can transpose sequences 10-12 while leaving the other sequences untouched, or use Exclusive to "chop" sequences 11 and 12 while leaving other active sequences running. You can adjust the pitch range of each zone +/- five octaves, so a note in the uppermost zone might trigger a transposition several octaves lower.

When Restart is switched in, all currently-running sequences will start from the beginning each time a sequence is triggered or retriggered; clearly when Restart is switched out, triggering or retriggering a sequence won't affect other sequences. Relative Quantisation can be used to "tighten up" a performance, as it will cause the entry of newly-triggered sequence(s) to be quantised relative to those sequences already running.

With Align switched in, the MCS becomes a standard 12-track sequencer – the 12 sequences all run in parallel. Switching sequences in/out from the dedicated Control buttons becomes standard track muting/demuting. Any number of sequences can be switched in/out at the same time (it all depends how many fingers you have spare). You can record these settings in Performance mode (see below), while sequences can also be muted/demuted whenever a Configuration is selected (by setting the start-up state of each sequence appropriately). And as mentioned earlier, each sequence will loop according to its own length.

Performances

WHEREAS A STANDARD multitrack sequencer's tracks are the finished product, the MPS's sequences are only the raw material. How you combine and manipulate them constitutes the real performance and the end result. Consequently, Zyklus have built in a second-level recording option: the Performance. Up to 12 of these can be stored in the MPS's internal memory (with another 12 on cartridge).

Performances are real-time recordings of Trigger Profile and Control button on/off settings, incoming MIDI notes and velocity, Configuration and tempo changes, and Control footswitch on/off settings. Tempo changes can be sudden or gradual. As a bonus, when you sit back and listen to a Performance you get the benefit of a light-show as the Trigger Profile and Control buttons switch in and out. Very satisfying.

Performances can be edited in real time (punch in/out) or step time. Zyklus have devised a range of easily-understandable symbols for step-time editing purposes; where relevant, pressing the Val edit button reveals the parameter value. As with sequence editing you can Insert, Delete, Alter, Slide and Move events.

Selecting a T sequence during Performance recording allows you to record a "proper" musical part (complete with non-note MIDI events such as patch changes) along with all the sequence triggering. You can layer this "live" playing by selecting more than one T sequence – so, for instance, with two such sequences selected the MPS will double the incoming data, sending it out on the relevant MIDI channels. Given this ability to "solo" over triggered sequences, it's a pity you can't overdub a solo onto a previously-recorded backing Performance.

MIDI Song Position Pointers and the usual MIDI sync commands are transmitted in all modes; you can also be selective about which Outs you want sync data to be transmitted from. MIDI sync data will be received at all times (providing MIDI sync is selected, of course), but Song Position Pointers are only received during Performance playback. A further option is Ext/Sync, which allows the MPS to be driven from its sync input socket on the rear panel (with a sync rate of 24, 48 or 96ppqn). Zyklus' unit can also send 24, 48 or 96ppqn sync data to an external non-MIDI instrument.

Finally, it's worth pointing out that Zyklus have designed the MPS to be roadworthy in the extreme. Not only does it come in a rugged casing, but the memory is double battery-backed, mains filter and PCB transient suppressors are built-in, and all inputs and outputs are diode-clamped against excess voltage.

Verdict

THERE'S NOTHING ELSE quite like Zyklus' MIDI Performance System. Only Dr T's KCS sequencer and Opcode's Sequencer 2.5 offer facilities remotely similar, but Zyklus' device really scores through being optimised for the task of manipulating musical information.

While the MPS can be (under)used quite effectively as a 12-track sequencer, it's no substitute for a full-blown multitrack. To be fair, Zyklus don't claim otherwise – but it's worth bearing in mind, nonetheless.

At just under £2000, Zyklus' device represents a hefty investment. I can see it selling to adventurous pro musicians, composers and producers; but whoever buys it should be prepared to invest time and effort in becoming fully conversant with it.

One thing is clear: the raw material which makes up each sequence can be whatever you want it to be, and for this reason I can see the MPS fitting into a variety of musical styles. In a sense the description "sequence" is misleading; the MPS provides a means of manipulating sound. A "sequence" could be a Tangerine Dream-style synth riff or a sampled James Brown beat, a 16-bar bassline or a sampled brass stab.

Not only will different raw material yield different results from the same manipulative process, but the same raw material will probably turn out very differently in the hands of different musicians. Now that is interesting.

For those musicians who are adventurous enough, the MIDI Performance System offers a wealth of new possibilities. Go for it. ■

Prices MPS: £1995 (including one RAM cartridge, four MIDI leads and a footswitch); RAM cartridge: £99.95; both prices include VAT.
More from Zyklus Ltd, 88 Golden Lane, London EC1Y 0UA. Tel: 01-675 1816

