

MARK SAUL wired for a tune...

"You have to run with whatever is inspiring you, I think."

Mark Saul widens his horizons

OUT OF AUSTRALIA

AUSTRALIAN composer, piper and electronic musician Mark Saul has been playing a string of Scottish, English and Irish engagements this summer — his first real performing tour outside Australia — and is now considering moving to Scotland.

Playing with his band at *Celtic Connections* in Glasgow in January helped to open the door to a string of bookings, including the *Piping Live!* Glasgow International Piping Festival, and the demand shows every sign of continuing.

"There are a lot more opportunities for me in Scotland, and it's very expensive to get my band all the way over from Australia," he said. "Earlier this year, for example, we had a tempting offer from France. Had we been in Scotland, it would be a lot more feasible to say 'yes' to jobs like that.

"The band is booked for some gigs at the end of the year and, after that, I'm thinking I'll stay on in Scotland.

"In a lot of ways, I'm enjoying playing more traditional music as well as the contemporary stuff, and just being in Scotland may get me into the traditional scene a bit more. So I'm looking forward to meeting some more musicians in Scotland and, wherever that takes me and whatever happens, that will be my next album I think."

At the moment, his concern is giving his live concerts the far from traditional sound of his groundbreaking *Mixolydian* album



STRAPPED to the wrists, Mark Saul's version of an electronic chanter still uses bagpipe fingering for left and right hands, but also uses wrist movements and a breath sensor to modulate and add wider dimensions of expression to the sound... which can be that of a great Highland bagpipe — with a few extra notes — or of any of a range of other instruments, or sounds that Mark Saul has created for his "claw/thing" instrument.

(Greentrax CDTRAX267): the sound his audiences this summer are likely to have been expecting.

"But the things that I could do in the studio with a normal bagpipe are very difficult to reliably reproduce in an on-stage performance," he said. "I was having trouble with reeds and with doing what I'd done in the studio, like getting notes like F natural consistently, and so on... and I was going to start using Border pipes because they'd be the only thing that could really do what I was looking for — but I didn't record my album with Border pipes, and I wanted my concerts to sound like the album."

He had a trick up his sleeve... or, more precisely, strapped onto his wrists.

Some of his friends call it "the claw", he calls it "my instrument thing", and it bears some resemblance to an electronic chanter.

"Back in the early 1990s, I was writing and playing a lot of electronic music," he said. "Most of the instruments you write electronic music with are keyboard-based and, not being much of a keyboardist, I was continually frustrated by the whole business of interfacing with the computer and all the other electronic instruments via the keyboard. I really wanted to compose using an instrument that I could actually play well.

"I thought it'd be great if somehow I could plug my bagpipes into the process. That was the concept... but it took a long time to actually develop something that would do the job."

Finding the right person to engineer it was one of his first problems. "I started out with someone I knew but, among other difficulties, we had some bad luck," he said: "The place where we were developing it burned to the ground. We lost everything and had to start again.

"And then I found someone who by chance lived in Melbourne and is one of the world's

greatest at developing electronic musical instruments. There's a lot of work on the hardware side of things like this, including the electronics, but there's also the software side, and then there's the whole musical dimension. Not so many people who have the technology skills also know much about music."

The "claw/thing" works through contacts under each of the player's fingers. "It picks up what your fingers are doing and encodes that into a music language called MIDI," said Mark Saul. "The fingering is based on bagpipe fingering but it's an extended bagpipe fingering that is fully chromatic over three octaves, rather than semi-chromatic over one."

He split the chanter in half, between the two hands. "If you hold your left hand above your right hand, you're fingering it rather as you would a normal bagpipe.

"But, because it's split and strapped onto each wrist, you have the movements of each wrist to work with, and I'm using that to express the music as well," he said. "If you rotate your wrist as you're playing, which takes a bit of getting used to, it sends out data as well as the note data your fingers are sending out and gives expression to the sound you're playing: it could be

of whatever; you can get foot pedals which can make it constantly blow, like a normal bagpipe, or be set up to control the sound in some other way.

"Someone who is not a piper would find it as difficult to play as I found working on keyboards. You can change the fingering set-up, coding it to suit perhaps a flautist, a saxophone player, or whatever. But it's basically based on bagpipe fingering. And there are a couple of extra notes in there that most bagpipers don't play, to give the full chromatic range.

"It's very open in terms of what you can play, and you have a lot of options.

"It can have any sound you want. I've had a lot of fun jamming in rock bands and I'm playing bass on it, which is a whole new experience. It's a lot of fun playing saxophone on it because, with the breath sensor, you can set up quite realistic woodwind sounds, and there are sounds I've built up myself that aren't based on any real-world instrument, set up to respond expressively to the parameters that I send from the instrument, but they don't sound like anything you'd recognise.

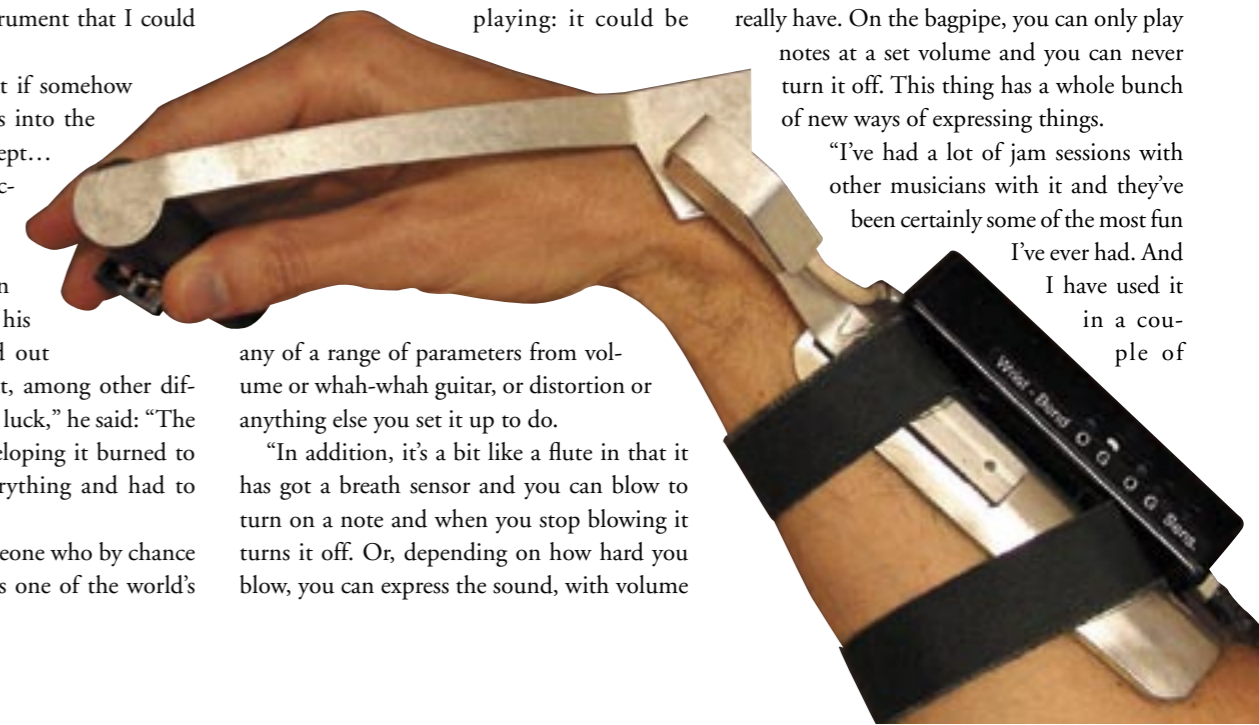
"It's pretty cool to have all these expressions which are something the acoustic bagpipes don't really have. On the bagpipe, you can only play notes at a set volume and you can never turn it off. This thing has a whole bunch of new ways of expressing things.

"I've had a lot of jam sessions with other musicians with it and they've been certainly some of the most fun

I've ever had. And I have used it in a couple of

any of a range of parameters from volume or wah-wah guitar, or distortion or anything else you set it up to do.

"In addition, it's a bit like a flute in that it has got a breath sensor and you can blow to turn on a note and when you stop blowing it turns it off. Or, depending on how hard you blow, you can express the sound, with volume



performances. I've got this instrument and I'm just starting to explore it and having fun with it. But I'm not sure where it's going to go."

So, having developed a "thing" that is really a new electronic instrument, it occurred to Mark Saul that he could adapt it to reproduce the sound of his own Highland pipes and solve his live performance problems.

"I've given it a different interface: instead of the two strap-on wrist parts, I've built it back into the one chanter section and I've plugged that into my pipes so it looks and sounds like a bagpipe.

"It's attached to a bag and drones like a normal chanter, and there's a cord coming from the back of the bag that goes off to the sampler.

"If you're onstage playing and it's all coming out the speakers, it all looks, sounds and behaves like a real bagpipe — but without any of the tuning, microphone, moisture, mixing and reed problems... it's a new experimental thing, something new, but something familiar enough for a piper to play. But it has such potential, and you won't master it in a day — there are a lot of directions in which you can take it."

And that is the instrument he has been using for his British performances this summer: electronic bagpipes. "It's a bit like what Hevia does — (the popular Asturian piper has developed and patented a 'multi-timbre electronic bagpipe') — although he's got samples of other bagpipes in his set — mine's just Highland pipes, and it's my Highland pipes that have been sampled," said Mark Saul.

This instrument does not have as wide an expressive range as the 'thing' with its two separate

strap-on pieces, but rather is purpose-built to play, sound and look like the Highland bagpipe, said Mark Saul, "it has given me the idea that maybe other people might want something like this as a practice instrument, so that's what I'm currently developing."

He has in mind a marketable electronic practice chanter that works with sound samples of the Highland bagpipe and has all of the intricacies and fingering of the Highland bagpipe, to reproduce the sound of a full set of pipes — features that the electronic chanters currently on the market do not really have.

"It certainly goes a long way further than the electronic chanters I've seen," he said. "It's an instrument based on the bagpipes, but which will have a lot more capabilities. My aim is that its output will be indistinguishable in sound from real bagpipes, with all its quirks and subtleties.

"That's what I want, I want people to have that experience when they practice: they put earphones on and they're brought into a world of playing their Highland pipes."

The instrument he is developing depends on very new technology, he said, and could not have been built even five years ago. "The processor has to be incredibly small to fit into the space you need it to be, it has to be incredibly powerful — and it's all due to developments with technology like digital cameras and videos, things that can work from batteries and have really powerful, seriously miniaturised little computer brains."

Mark Saul acknowledges that playing his electric bagpipes — despite its use of sound

sampling from actual instruments — will not, of course, be the same as the real thing. But neither is your ordinary practice chanter.

"When you're used to such a physically demanding and physically present instrument as the great Highland bagpipes — it's all over your body — it's quite a different experience. It's probably more akin to playing electric guitar or something, in that it doesn't make much noise until you plug it in and then the real fun starts.

"It is physically a lot different, and that's one reason why I still enjoy playing the actual bagpipes — the 'acoustic' bagpipes I call them now, and opposed to my electric bagpipes.

"But you can't worry too much about problems people might have with the image of the thing.

"People have images of the bagpipes that aren't helpful and you have no control over that sort of thing, it's for history to decide.

"The good thing about it is, I feel, I tried to design an instrument that wasn't aimed at any one particular style of music; it's quite capable of doing whatever you want it to do and that will help it in its longevity — that's assuming anyone else ever wants to play it and that I manage to build more of them.

"I think of it being equivalent to an electric guitar, which gets used in all sorts of ways.

"You have to run with whatever is inspiring you, I think." ●

(Short demonstration videos of Mark Saul's instrument are online at: <http://mark-saul.tv/InstrumentVideos.html>)



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