

Star Quality

ROLAND JUPITER ANALOGUE POLYSYNTHS

Roland's Jupiter family yielded one or two shining examples of what an analogue polysynth should be. GORDON REID planet rocks...

Do you remember 1978? Flares were *in*, John Travolta was *in*, the Bee Gees were *in*, cheap Hammond impersonations, weedy string machines and ghastly electronic pianos were *in*, and Roland were *out*. Surprisingly, the world survived, but it was in this year that Roland started their metamorphosis from obscure manufacturer of unremarkable monosynths into the world leader they had become 10 years later.

THE JUPITER 4

Released in 1978 as part of Roland's 'Compuphonic' range, the Jupiter 4 (JP4) was one of a family of instruments, partnered by a programmable monosynth, the Promars, and a range of bleepy analogue drum machines such as the CR5000. It was born into a world dominated by the Yamaha CS80, the Sequential Circuits Prophet 5, and the Oberheim OBX. If Roland hoped that their new polysynth would compete against these, they were to be sorely disappointed. With but a single VCO per voice (compared to the Prophet's and Oberheim's pair) it was always

going to be the poor relation. And so it was. Most untreated JP4 patches are thin and uninspiring, and the JP4 was a bit of a loser in the keyboard department too: its four octaves compared poorly to the Americans' five. Furthermore, its 4-voice maximum polyphony was half the Yamaha's eight, and was utterly dwarfed by the 48 of the Korg PS3300! It also lacked the CS80's velocity and aftertouch sensitivity. As a final straw, the Jupiter 4 offered just eight memories which, even in 1978, was a meagre allotment. Whichever way you looked at it, this Roland was a bit of a lightweight.

On the other hand, the JP4's secondary facilities put its competitors to shame. It sported what was to become a Roland trademark — a superb chorus that thickened up the sound far more than Pulse Width Modulation or merely detuning the oscillators of the Prophet or Oberheim. It also featured three Unison options that made it a powerful monosynth. The *coup-de-grace* was an excellent arpeggiator, perhaps used most famously by Nick Rhodes of Duran Duran. But it wasn't only the electro-pop bands of the late '70s that adopted the Jupiter 4, and a list of its aficionados now reads like a *Who's Who?* of the era: Kitaro, Gary Numan, Tangerine Dream, Stevie Wonder, and Tomita all proclaimed their use of it.

The JP4 had one more trick up its sleeve: its price. At just £1800, it was much cheaper than its competitors, and appealed greatly to those for whom Prophets and OBXs would forever

remain unobtainable dream machines. In retrospect, though, the Jupiter 4's home-organ styling and sonic under-achievement guaranteed that it would never become a classic. That accolade was reserved for the synth that was to come...

THE JUPITER 8

Three years on, the world was still awash with American synths. Sequential Circuits had remained the market leader, with Oberheim running a close second. As for the Japanese... well, everybody 'knew' that they couldn't make real polyphonic synthesizers. The Korg PS series (which had eventually included three models, the PS3100, PS3200 and PS3300) were commercial flops, and the cheaper PolySix lacked the kudos to be taken seriously. It was into these hostile waters that Roland launched an 8-voice Jupiter, the JP8. Unfortunately, it made very little impact. A few bands adopted it, but only to supplement their American synths, not to replace them.

Yet right from the start there was something a bit special about the Jupiter 8. Prophets and Oberheims were always heavy-sounding, thick and imposing. In contrast, the Jupe seemed capable of much greater clarity and transparency. Unlike any other synth of its era, it didn't impose its own character upon a sound: if you wanted 'fat', you could have it; if you wanted ethereal, you could have that too. Indeed, the Jupiter 8 sounded as it looked — beautifully sleek and polished — in exactly the way that the American synths didn't. Why this should have been so is one of life's little mysteries. After all, later Prophets such as the Prophet 10 and Rev3 Prophet 5 used Curtis oscillator chips, as did the Roland. They all shared two VCOs per voice, a 24dB/octave low-pass filter, a pair of traditional ADSR envelope generators, and a wide range of modulation



options. But there it was: Prophets were fat, imposing, and dominated a mix, whereas the Jupiter 8 would happily complement other sounds without overpowering them.

Furthermore, the Jupiter 8 bristled with features its competitors lacked. It had a split keyboard and numerous keyboard assignments, so that you could, for example, play unison lead lines above left-hand pads, or electric pianos above grunting basslines. It offered oscillator sync, cross modulation, switchable 12dB/oct and 24dB/oct filtering, and polyphonic portamento. It saved and loaded voices reliably via its cassette interface, and it incorporated a superb arpeggiator that featured what is still my favourite Jupiter facility — ‘random’ mode. This added instant ‘sparkle’ to almost any track. Finally, there was a comprehensive complement of analogue interfaces that controlled the arpeggio speed, portamento, sustain, filter cutoff, and the VCA. Add the CV and Gate outputs (with the pitch CV derived from the highest note played), and the result was an impressive package of features.

Released in 1982, a full year before the appearance of MIDI, an upgraded Jupiter 8, the JP8A, offered a number of improvements, with greater tuning stability, and an updated LED screen. It was also the first synth to take a credible stab at talking to another instrument polyphonically. The interface that made this possible was called DCB, and it almost certainly was the most important factor in ensuring the synth’s success. The early 1980s were the heyday of electro-pop, and, long before the arrival of MIDI and the Atari ST, bands were writing songs based upon short programmed musical sequences. The machines they used for this were Roland’s MC4 and MC8 Microcomposers. DCB allowed the Jupiter to communicate with each of these, as well as with the Juno 60 and a range of ‘JSQ’ sequencers. Suddenly polyphonic sequencing was an affordable reality. The pop community was convinced: ‘Relax’, by Frankie Goes to Hollywood, was dominated by a Jupiter 8, Nick Rhodes relied heavily upon his 4s and 8s, and players such as Steve Luscombe (Blancmange), Vince Clarke (Erasure), John Foxx, and Martyn Ware (Heaven 17) were soon adopting the JP8. Roland even took care of owners of the original model by releasing a DCB add-on board, the OC8, that could be retrofitted to early Jupiter 8s. Indeed, another Roland box, the MD8, eventually made it possible for DCB to talk to MIDI, so the Jupiter 8 became one of the first big analogue synths with MIDI, years before retrofits became available for many of its contemporaries.

The Jupiter 8 and 8A had one other quality that made them more desirable than their competitors. Due to slack manufacturing and electrical tolerances, voices programmed on one example of a Prophet or Oberheim could



Jupiter 6.

sound quite different on another, ostensibly identical, one. Some players have called that defect ‘individuality’, but I don’t imagine they were very happy when they walked into a studio costing £100 per hour, loaded their patches into the studio synth, and found that all their string ensembles had become composite brass patches. This never happened on a Jupiter 8 or 8A (otherwise I wouldn’t have mentioned it).

THE JUPITER 6

The following year, 1983, Yamaha launched the DX7, and synthesis was never the same again. With its 16-note polyphony, MIDI, velocity and pressure sensitivity, and so-called ‘Equation Generators’, it made the big Rolands seem decidedly old hat. No doubt Roland asked their corporate selves what they could do to make the Jupiter 8 more desirable in the post-MIDI world. The answers — self-evident to those who played

it — would have been to increase the polyphony, add velocity and aftertouch sensitivity, work in more sync and modulation options, re-introduce chorus, and incorporate as sophisticated a MIDI implementation as 1983’s technology would permit. Perversely, though, Roland launched the Jupiter 6.

The JP6 retained the Curtis oscillators of its bigger brother, but with just 12 VCOs (offering a maximum of 6-note polyphony) rather than 16. It lacked velocity sensitivity, it lacked aftertouch sensitivity, it offered fewer programming options, it had no chorus section, and it featured only the most basic MIDI implementation. It was no match for the vastly more flexible and, at less than £1500, much more affordable DX7. The Jupiter 6 bombed.

Had the new Roland cost less than £1000 it might have become a well-received workhorse synth, finding an honourable niche

COMPARABLE POLYSYNTHS & CURRENT VALUES

Looking for a classic analogue polysynth? Besides the various models of Jupiter 8, you might like to consider the following alternatives:

MAKE & MODEL	S/H BARGAIN	S/H RIP-OFF	MAX VOICES	MIDI	VELOCITY SENSITIVITY	AFTERTOUCH SENSITIVITY
ROLAND						
JP8/8A	£450	£1000	8	No	No	No
MKS80	£650	£1200	8	Yes	Yes	Yes
SEQUENTIAL						
Prophet 5	£400	£1000	5	No	No	No
Prophet 10	£750	£2000	10	No	No	No
Prophet T8	£750	£2000	8	Yes	Yes	Yes
OBERHEIM						
OBX	£300	£550	8	No	No	No
OBXa	£400	£800	8	No	No	No
OB8	£500	£1000	8	Yes*	No	No
MOOG						
Memorymoog	£500	£1000	6	No	No	No
Memorymoog Plus	£500	£1000	6	Yes	No	No
YAMAHA						
CS80	£400	£750	8	No	Yes	Yes

* on all but the earliest versions

► somewhere between the Juno 60 and the Jupiter 8. It even offered a couple of tricks not found on its siblings, most useful of which were the high-pass and band-pass options found on the VCF. But, at £2250, the Jupiter 6 had limitations which far outweighed its benefits: it had no screen, its arpeggiator had lost the JP8's 'random' mode, patch volume was not programmable, it lacked a MIDI Thru, and it had but a single output. The final nail in its coffin (though this is a personal view) was that no matter how you programmed a JP6, it always sounded like... a JP6. That it now commands higher second-hand prices than the enormously superior Super JX10 is one of life's unfathomable mysteries.

THE MKS80 SUPER JUPITER

It was to be another year until Roland produced the synth that everybody had been waiting for. But when they did, it was not a keyboard. It was a 2U rackmount module developed to partner the MKB1000 and MKB300 master keyboards. A boring black oblong box in what was to become a glorious tradition of boring black oblong boxes, it was the MKS80 Super Jupiter.

The MKS80 delivered the entire Jupiter 8 wish-list and more, including a much larger memory and upgraded internal electronics. Now let's get one thing clear — despite a few commentators postulating otherwise, the MKS80 had nothing to do with the Jupiter 6. Although there were ultimately to be two versions of the instrument (one with the Jupiter 8's Curtis oscillators, the other with custom chips developed by Roland themselves) both retained the architecture of the Jupiter 8,

sounded identical to the Jupiter 8 and, apart from their many enhancements, were the rackmount module versions of the Jupiter 8.

Unfortunately the Jupiter module was the antithesis of the Jupiter keyboard in the style and ease-of-use departments so, unless you were happy to sit for hours struggling through a digital parameter-access programming system, you also needed the optional MPG80 programmer. Almost as large (and currently as expensive) as the MKS module itself, this offered yet another superb facility: it transmitted all your twiddles as SysEx. Thus the MKS/MPG combination became one of the first analogue synths (and still one of the few) that allowed you to sequence parameter changes within a patch. Hooked together, the MKS80 and MPG80 were exactly what the name 'Super Jupiter' suggested. They were the business.



Roland MKS80.

WHAT'S IN A NAME?

Despite the success of the D50 and subsequent synths, Roland have never really recaptured the magic of the Jupiter 8. Yamaha have taken their turn to dominate the keyboard world, and for the past decade Korg have proved unwilling to relinquish the crown they assumed when they launched the M1. Maybe it's because of this that every time Roland launch a new synth with the number '8' in its name, the rumours start... will this be the Juve's long-

awaited replacement? It happened with the JD800, and most recently with the JP8000. Indeed, Roland seem very keen to position the JP8000 as the digital Jupiter 8, but without actually naming it as such. It offers knobs and sliders in the grand tradition of the big analogue polys, and it's a good synthesizer, with plenty of vintage features and modern enhancements. Yet for all the computer power and programming skill that has undoubtedly gone

into making it the best imitation it can be, in my opinion it still hasn't completely captured the magic of the Jupiter 8 or, in particular, the MKS80. After 17 years and three technological revolutions, the original still stands supreme. Ultimately proving to be more flexible and far more reliable than its contemporaries, it has survived the test of time. It sounds great, it's a doddle to program and use, it's robust, it gives you no nasty surprises, and it was and still is the prettiest synth ever built. It's a funny old world, isn't it?

WHAT HAVE THE ROMANS EVER DONE FOR US?

The following is a complete list of Roland's 'Roman' synths and their modular derivatives. Prices depend, of course, upon condition, but beware the plague called 'fashion' that causes pound notes to disappear before your very eyes.

Model	Released	S/H bargain	S/H rip-off	Comments
Jupiter 4	1978	£100	£250	Roland's first true polysynth.
Promars	1979	£100	£200	In essence, a monophonic Jupiter 4.
Saturn 09	1980	£50	£100	A very basic organ. Best avoided.
Jupiter 8	1981	£450	£800	The classic 8-voice polysynth.
Juno 6	1982	£100	£175	Introduced DCOs, but retained analogue warmth.
Jupiter 8A	1982	£500	£1000	The updated JP8, with more stable tuning and DCB.
Juno 60	1983	£175	£350	Added 56 memories and DCB to the Juno 6.
Jupiter 6	1983	£300	£600	Roland's first MIDI synth, also used Curtis chips.
Juno 106	1984	£250	£400	The last Juno, with 128 memories and MIDI.
MKS80	1984	£650	£1200	Velocity- and aftertouch-sensitive Super Jupiter.
MKS80 w/MPG80	1984	£1,000	£2,000	The analogue dream machine.
MKS7 Super Quartet	1986	£100	£300	7 voices & drums. Preset Juno 106/TR707 in a box.

“The Jupiter 8 was and still is the prettiest synth ever built.”

THE TWILIGHT OF THE GODS

Roland discontinued the Jupiter 8 and Jupiter 6 in 1985, and their analogue era ended with the demise of the MKS80 in 1987. There were, of course, successors in the form of analogue/digital hybrids such as the JX8P, Alpha Juno 1 and Alpha Juno 2, but these could never replace the Jupiter 8. It was only the Super JX10 that managed, to some extent, to keep the spirit of the big 'analogue' synth alive.

The popularity of the JP8 itself (together with that of every other analogue synth) hit a low point in the late 1980s, but even in those analogue-unfriendly times, it still numbered users such as Mark Kelly (Marillion), Patrick Moraz (with the Moody Blues), Roland Orzabal (Tears for Fears), Peter Dinklage (Jethro Tull), John Beck (It Bites) and Steve Gray (Sky) among a long list of aficionados and endorsees. In stark contrast, the 1980s witnessed the deaths of Moog, ARP, Oberheim and Sequential Circuits — a situation that would have been inconceivable when Roland released the Jupiter 4. Much of the blame for this lies with the DX7 and its successors. But he who laughs last (and all that)... A big analogue polysynth such as a Prophet 5 or Jupiter 8 will now command a second-hand price four times that of the more common Yamaha. Even the Jupiter 4 is enjoying something of a revival (although this has more to do with its name than its sound, because the Juno 60 is, for most purposes, a far better polysynth). But that's fashion for you!

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