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# Mellotron MkVI

Rebirth Of The Cool

• **Keyboards**  
By Gordon Reid

**The Mellotron has had a chequered history, from '60s 'must-have' to '80s has-been, but it's survived bankruptcy and technological progress, and now it's back, in a brand-new, reworked form. We relate the story of this classic instrument, and see how the new version compares to the old.**



Mellotron MkVI.  
Photo: Richard Ecclestone

Once upon a time, sometime during the late '50s, a Californian window cleaner named Bill Fransen was intrigued by the sounds emanating from one of his customers' garages. Peering through a (newly cleaned?) window, he espied a remarkable contraption. Named after its inventor, Harry Chamberlin, the Chamberlin MusicMaster pioneered the use of pre-recorded tapes mounted inside a keyboard instrument in such a way that, whenever you pressed a key, the sound or musical instrument recorded on the tape emerged through the instrument's amplifier and speakers. Patented in 1949, the Chamberlin used a single strip of tape (called, perversely, an open loop) for each note and, while this precluded musicians from playing indefinitely sustained notes, a spring returned the tape to its start after each note was played, so the attacks of the recorded instruments were reproduced accurately each time you pressed a key.

Former uranium prospector Fransen knew an opportunity when he saw one, introduced himself, and ended up working as Chamberlin's salesman. Unfortunately, the Chamberlin proved to be very temperamental, not least because its electronics were badly supported, the tape guides could go awry, and because the instrument hummed very badly.

Now let's leap forward a couple of years to 1962, to an order placed by Fransen for 70 matched tape heads with a small company in Birmingham in the UK. This firm, named Bradmatic after its owners, the three brothers Bradley and their father, produced a range of products including tape recorders, amplifiers, and, of course, tape heads. Curious why anyone should require so many matched heads, the Bradleys met and eventually joined forces with Fransen, who, unbeknown to Chamberlin himself, had come to the UK to find the skills and finance to produce and sell the instruments. Fortunately, the Bradleys not only had the skills to build Chamberlins, but also to refine them. But, like Fransen, they didn't have the money, so they advertised for support. Bandleader and radio broadcaster Eric Robinson replied, and development of an improved instrument then began.



Bill Fransen with the first Mellotron off the production line, 1963.

## The Mellotron Mk1

The marriage of Fransen, Bradmatic, and Robinson was made in heaven: Fransen proved to be a talented recording engineer, and the Eric Robinson Organisation owned the highly regarded IBC Studios which were used to record the tapes that were eventually installed in the Bradleys' new keyboard.

Shortly thereafter, the Eric Robinson Organisation was renamed Mellotronics Ltd, and their first progeny — the Mellotron Mk1 — appeared in 1963. These Mellotrons (the name of which was apparently derived by Fransen from 'mellifluous electronics') closely resembled the Chamberlins, but offered many improvements over them, most significant of which were the transfer of all the tape guides and replay electronics to an internal aluminium chassis, and the replacement of bent-loop tape return springs with coil springs. But the Mk1 remained unreliable, and it was to be almost another year before the first truly playable Mellotron was to appear.



Bill Fransen and Norman Bradley in the early '60s.

## The Mk2

The Japanese could never have invented the Mk2 Mellotron, a 350lb dual-keyboard monster containing more than 70 3/8-inch tape players, a reverb unit, amplifiers and speakers. In modern terms, it was 70-note polyphonic, eight-part multitimbral, and held up to 54 voices in its tape RAM (Rotten Analogue Memory). With eight seconds of sample time per voice per note, this equated to 1260 sounds with over two hours of sample memory! Add to this the twin-channel output, rhythm, accompaniment and 'fill' capabilities, plus an integrated reverb unit, and the specification makes impressive reading even today.

A second version, the Mk2 FX Console, was designed for use as a sound effects machine in TV and film studios. With four separate tape head blocks and independent preamps helping to keep the noise down, the FX was also the first Mellotron to feature a quieter DC motor, transistorised electronics, and electromagnetic tape-track selection (earlier systems had been mechanical).

Strangely, Mellotronics saw its instrument as a type of organ, and aimed its advertisements at the old-time/modern/ Latin dance audiences of the era. Consequently, they supplied a number of Mellotrons to clubs and theatres, while others became the parlour novelties of glitterati such as Peter Sellers.

Nonetheless, the pop and rock community took the Mellotron to its heart, and it was this that ensured its success. By 1967, everyone was experimenting with the Mellotron. The Beatles used it for the flute intro to 'Strawberry Fields Forever' and couldn't get enough of it after that (the Spanish guitar riff that opens The White Album's 'The Continuing Story Of Bungalow Bill' wasn't played by George Harrison — it's straight from a Mellotron factory tape!). The Rolling Stones, Traffic and The Move were also Mellotron users. But perhaps the band that deserved the most credit in bringing the instrument to the world's attention was The Moody Blues. Their 1967 hit 'Nights In White Satin' was probably the first to bridge the gulf between 'beat' music and classical orchestration.

## The Model 300

Not content with the Mk2, the Bradleys decided to develop a smaller, lighter, higher-fidelity single-manual (52-key) Mellotron more suited to life on the road. They removed the speakers, adopted a new two-track quarter-inch tape format, and redesigned the motors and electronics. The result was the Model 300 which, thanks to its new solid-state circuitry, more stable DC motor and improved Hammond reverb, sounded far brighter than its predecessors. Sadly, the 300 had an Achilles heel. The new tape format used guides that, over a period of use, built up a static charge. Eventually the tapes would become charged, and they then wrapped themselves around the large drums that formed part of the voice-

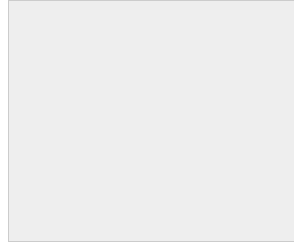


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selection mechanism.

Nevertheless, the 300s were important instruments — not because Mellotronics sold a huge number of them, but because the world was listening to them. New tapes had been recorded, and these were brighter and more dynamic than those in the Mk2. Bands such as Barclay James Harvest and Gentle Giant were influential exponents of the new Mellotron, and the Moody's Mike Pinder added a 300 to his collection of five Mk2s.

## The Model 400 & MkV

In 1970 the humungous Mk2s and Model 300s made way for a much more usable instrument — the Model 400. At about 120lbs this was less than half the weight of its predecessors, making the 400 (by the standards of the era) portable.

Despite a long-running battle between Mellotronics and the daft Musicians' Union, the list of players using the Mellotron soon became a Who's Who of music, and perhaps no other electronic keyboard instrument was used as widely and in so many different styles. Yet it is in the genre of progressive rock that the 400 became best known and most loved. The huge popularity of bands such as Genesis and Yes was due in no small part to the sounds of their Mellotrons.

In 1975 the Bradleys designed a new double-manual Mellotron, the MkV. Essentially two Model 400s in a single case, later MkVs incorporated a new, heavier flywheel, and — as a result of their increased pitch stability — these became among the most desirable of all Mellotrons.

But in 1976, the bubble burst. The advent of cheap string machines and primitive polyphonic synthesizers made it much simpler for keyboard players to obtain orchestral textures, and the birth of punk rock meant that they no longer needed to. Overnight, the Mellotron became a dinosaur. In 1977 the company's US distributor, Dallas Music, collapsed owing in the region of 80 thousand pounds, and Mellotronics found itself in severe financial trouble. Unable to meet its financial obligations, the company was liquidated, and its assets — including the master tapes and tape-slicing machines — were sold to a chap named Bill Eberline, the former sales manager for Dallas Music, and a shadowy partner.

### Imitating The Mellotron

If you can't find the considerable sum of money needed to purchase a MkVI or one of the refurbished machines supplied by Streetly Electronics, you may wish to imitate the Mellotron using a synth or sampler. Conventional wisdom suggests that this can't be done, but as is so often the case, conventional wisdom is not wise.

True, many synths contain genuine Mellotron samples and offer patches named 'Melly something', but very few of them sound anything like a Mellotron. The trick is to remain true to the limitations and idiosyncrasies of the original. You should use layers to emulate the initial 'pfft' of the key as the tape is taken up by the capstan, the body of the sound, and (on a badly adjusted Mellotron) the characteristic 'zzzzpppp' you may hear as the tape begins to rewind when you release a key. Oh yes, and be sure to limit the envelopes to just eight seconds. Also, the addition of 'Analogue Feel' can introduce a touch of pitch instability to the sound, imitating the slight speed instabilities of the original.

Understandably, most PCMs of Mellotron waveforms are too brief to provide sufficient movement and development within the sound — so the only convincing way to emulate a Mellotron is to sample a real instrument. Such samples have found their way into numerous libraries and feature in many artists' personal collections, but bear in mind that no two Mellotrons sound precisely the same. To get the best from your sampler, you should try to obtain access to an authentic Mellotron and record your own samples. If you do, the results can be superb and, in a mix, indistinguishable from the real thing.

### The Mellotron Family Tree

MODEL	YEARS MANUFACTURED	APPROX NUMBER MADE	NOTES
Mk1	1963-64	55	The first of the 3/8-inch three-track Mellotrons. Notable for the toughened Meccano (toy) chains that connected the motors and axles.
Mk2	1964-68	300	The Mk2 replaced the Mk1, and the early models were later recalled for conversion to the newer spec.
Mk2 FX Console	1965-70	60	With independent head-blocks and preamps, a quieter DC motor, and transistorised electronics, the FX was quieter than other Mk2s.
Model 300	1968-70	60	This was the first Mellotron that did not include a speaker in the cabinet. Unfortunately, its new quarter-inch two-track tape format proved to be unreliable.
Model 400SM & Novatron 400	1970-86	2000	Returning to the 3/8-inch format, the 400 was lighter and more robust than its predecessors. 100 were built under licence by EMI.
Model 400FX	1970-84	30	The 400FX was the equivalent of the Mk2 FX Console. Of the 30 built, 15 were sold to the South African Broadcasting Corporation.
MkV & Novatron MkV	1975-80	31	Two Model 400s in a single cabinet, the MkV featured additional tone controls and independent channel faders.
Novatron T550	1981-86	5	Internally the same as the Novatron and Model 400, the T550 was a Mellotron in a robust flightcase.
4-Track	1980?	4	Another quarter-inch machine, this was built by Streetly's US service agent. Only four prototypes exist.
Mellotron Studio Symphony	1985	1	Essentially a 24-voice, 16-bit sampler with a Synclavier-esque screen and keyboard. In all likelihood, only a single prototype was built.
MkVI	1999 -	35 (so far)	The first commercially produced Mellotron in 16 years; the MkVI offers a viable alternative to a refurbished Model 400 Mellotron.
JK-Mk6	2000	1	A bespoke dual-manual instrument built by Jerry Korb in Vermont, USA; he does not intend to start commercial production.

## The Novatron

Happily, Streetly Electronics — the former Bradmatic — survived but, while the Bradleys were able to continue manufacturing instruments, they couldn't call them Mellotrons because the receiver had sold the name along with the physical assets of Mellotronics Ltd. The Bradleys continued making Mellotrons, but without the rights to the name, they needed another. Thus was the Novatron born.

There were three Novatrons: the Model 400SM, the MkV, and the T550. Of these, only the T550 was a new product, the others being rebadged Mellotrons.

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Punk rock and its New Wave progeny lasted four years, but the Novatron outlived them. In fact, there was a resurgence of interest in progressive rock in the early '80s, with bands such as Pallas, Twelfth Night, IQ and Marillion championing the cause once again. Despite this, the advent of cheap, light and reliable samplers meant that, for most players, the Mellotron was again obsolete. In 1986, Streetly Electronics went into voluntary liquidation, and the Mellotron died.



The new Mellotron MkVI (left) next to the author's freshly refurbished 1981 Novatron.

## The Seeds Of The MkVI

Except that... it didn't. Interest in Mellotrons never waned, and enthusiasts kept them in the public consciousness for the next few years. In the USA, there was a period of flux as various companies and individuals experimented with concepts such as the Mellotron 4-Track and the digital Mellotron Studio Symphony. In 1991, a chap named David Kean purchased the rights to the Mellotron name and the tape-making equipment from the man who had bought the assets of the short-lived and by then defunct Mellotron Digital. Kean then established a new company that he called Mellotron Archives. Initially supplying tapes and spare parts, Kean and fellow enthusiast Markus Resch later provided servicing, and produced digitally remastered, and in some cases, 'cleaned up' sets of Mellotron and Chamberlin sounds. They also released a CD-ROM of sampled Mellotrons and Chamberlins (see box elsewhere in this article). Meanwhile, in the UK, John Bradley (son of the original designer, Les Bradley) and Martin Smith resurrected Streetly Electronics, providing another source of tapes and manuals, plus service, sales and support ranging from replacement parts through to totally refurbished instruments.

In 1993, Smith was the driving force behind a Mellotron 'tribute' CD, *The Rime Of The Ancient Sampler* (Voiceprint VPCD141, now deleted), which was the subject of an SOS feature that June. Soon after, interest in the instrument began to soar, and the '90s saw it used by newcomers such as Oasis, Blur, Radiohead and Saint Etienne, and the not-quite-as-new Elvis Costello, Michael Jackson, Lenny Kravitz and Paul Weller.

Demand for refurbished Mellotrons increased steadily, as did the prices charged for them. Smith and Bradley spent the decade scouring Europe, finding Mellotrons in all states of (dis-)repair, and returning them to England for complete overhauls. And, whereas in 1994 a rebuilt Mk2 might have cost you between £2000 and £3000, the cost is now closer to £8000 for an instrument in tip-top condition. This may seem at first sight to be a little steep, but when you consider the amount of time and work required to refurbish one of these monsters, it's not unreasonable.

Given this scenario, it was perhaps inevitable that somebody would look again at manufacturing Mellotrons. Two men to experiment were Justin Mayer, who in 1993 designed the J-Tron, and New England enthusiast Jerry Korb, the owner of my first Mellotron, a Mk1 with serial number #124. However, Korb never intended his dual-manual Mk6 to be a commercial proposition, and, by the time he demonstrated it to fellow enthusiasts at a Mellotron convention in Canada (yes, they really have them!) Kean and Resch had developed something far more significant. All of which brings us to...

## The Mellotron MkVI

The MkVI is, in essence a Mellotron 400 with a number of small but significant changes to the case, mechanics and electronics. Since I own a mint condition Model 400 (serial number 1809, built by John Bradley in 1981) that was recently serviced by Streetly Electronics, this review seemed the perfect opportunity to compare the two.

Unfortunately, reports of one of the early MkVIs were discouraging. The US-assembled unit initially allocated for review in *Sound On Sound* in 1999 (serial number #005), and later supplied to Noel Gallagher of Oasis, seemed to be beset by problems. By contrast, the instrument in front of me now (#029) was built entirely by Markus Resch and his collaborators in Sweden, and is destined for a customer in the USA. It appears that the emphasis has switched from Dave Kean (who still owns the rights to the name) to Resch.

Knowing all of this, it was with no little trepidation that I embarked upon the review. Time can play tricks on the best of us, and while I have owned three Mellotrons and played numerous more, it's been more than 20 years since I set eyes on a new, virgin Model 400. So it was with some relief that I first saw the large, beautifully built flightcase in which the MkVI was delivered. Indeed, Resch will not supply the instrument without the case, and with good reason. Would you want £4000 of delicate engineering shipped halfway across the world in a cardboard box? No, I thought not.

Manhandling the case up two flights of stairs proved to be more straightforward than expected, thanks to comfortable, well-positioned handles, the assistance of a young lady who is a lot stronger than she appears, and the surprising lightness of the instrument itself. Then came the moment of truth...

Wow!

Far from the less-than-perfect imitation I had feared, the MkVI exudes quality. From the superb white paint job that evokes the spirit of the Model 400, to the quality of the control hardware, I could see that Resch has put his heart as well as his money into the job. What's more, the MkVI is no mere approximation to the Model 400. With the exception of one extra control and a bit of chamfering to the edges of the body, it could easily be mistaken for an original Mellotron. Were I to be standing 10 metres away from it, I would be hard-pressed to tell the difference, apart from the fact that the MkVI is a couple of inches taller than a Model 400.

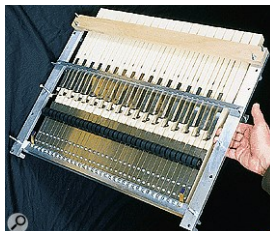
Switching it on, the MkVI comes quickly to life, and a lamp illuminates the Mellotron name on the control panel. Apart from the chunky On/Off switch, the controls themselves comprise the expected Volume, Tone and Pitch knobs, the A/B/C voice selector, and an intriguing Speed High/Low switch not found on the original Mellotron. As shipped from the Sweden, this switch halves the tape speed, reducing the pitch of the sounds by an octave and halving the bandwidth to produce a deeper and duller sound. What's more, you can adjust the speeds of both the High and Low settings independently. This allows you to work with a wider range of tunings, and — if you wish — set alternative intervals between the two speeds (see the box elsewhere in this article for more on this).

It was time to take a look inside. If you're not familiar with the innards of a Mellotron, I suggest a quick game of catch-up might be appropriate. I don't have room here to explain how a Mellotron works — this review is already more than generously sized — but if you take a look at the ['Further Reading'](#) box at the end of this article, you'll find an easily accessible resource that devotes considerable space to the subject, and explains some of the terms and mechanical parts I'll be using in the next few paragraphs.

Removing the lid, I was impressed by the quality of the track-selector mechanism and, in particular, the 'fast-action' wooden keyboard, which — if only because of its ebony 'black' keys — is superior to that of the earlier MkVIs assembled in the USA. The idea of speeding up the Mellotron's action was pioneered by one Pierre Veilleux, the former keyboard player in Canadian Genesis tribute band, The Musical



Flipping the lid of the MkVI open reveals the keyboard frame. The track-selector mechanism can be seen in the bottom left of the picture, located behind the front-panel controls on the unit.



The underside of the keyboard unit (held here with its rear edge nearest the camera). Note the bonded-rubber pinch rollers and the metal pad springs (the flanges across the centre of the unit).

Box. However, Markus Resch stresses that his mechanism is quite different from Veilleux's. Apparently, Resch spent much time experimenting with different key construction methods, using experienced Mellotron players as guinea pigs, and eventually settling for an arrangement in which the pressure-pad position is staggered for alternate keys. Original Mellotrons can be modified to offer this, but it was the first time I had seen a keyboard designed in this way at the point of manufacture.

One word of warning here... the pinch-roller and pressure-pad screws on this keyboard are more sensitive to small adjustments than are those of original Mellotrons. But since this MkVI was delivered perfectly adjusted, I never needed to touch these.

Delving deeper (by removing the keyboard) I was similarly impressed by the quality of the pinch rollers. These are vital to the smooth operation and playing of a Mellotron, and Resch's choice of bonded rubber rather than neoprene, and his use of high-precision bronze cores, suggest that he is more than an enthusiast: he is a perfectionist.

Next, I removed the tape frame. Doing so demonstrated another improvement over the earlier MkVIs; the wide bar through which the ends of the tapes are laced now sits comfortably on the top of the frame to make removal and replacement a painless affair. The instrument was supplied with a classic Mellotron tape frame comprising violins, cello and flute, and it proved to be nicely laced, with what were obviously new tapes. Bravo!

Finally, sticking my head inside in the now half-empty shell, I was much encouraged by the quality of the stainless steel capstan, the large flywheel, the other mechanical hardware and the extrusions thus revealed. There is no doubt that Resch has spent heavily to produce a machine of this quality.

At this point, I was ready to question one of Resch's major design decisions. At first glance, it appears that the MkVI's preamplifier lies in the base of the machine, sharing a case with the power supply. The preamp in original Mellotron 400s lay close to the head block, minimising the distance from heads to electronics, and therefore limiting the risk of unwanted noise creeping into the signal. However, closer inspection shows that on the MkVI there is a small preamp inside the head block itself, which raises the internal signal to line level. This arrangement means that, although the cable connecting the head block to the valve preamp is nearly three feet long, it should be less susceptible to noise problems, such as picking up the radio broadcasts of nearby taxi companies.

What lies in the base of the cabinet is a further output stage and it is this, as noted above, that shares its case with the power supply. I trust that Resch has sufficiently insulated one from the other, both in terms of mains electricity, and in terms of electromagnetic leakage.

To check whether this new layout worked as planned, I had a friend measure the signal-to-noise ratio of both my Model 400 and the MkVI. Surprisingly, he found the figures to be -57dB and -52dB respectively. This means that, for a given signal level, the new machine is somewhat noisier than my vintage one. What's more, the noise generated by my Model 400 was consistent, whereas — perhaps because it uses a valve output stage rather than solid-state electronics — that of the MkVI was continually fluctuating by a few dBs. Given that Mellotron Archives claims a signal-to-noise ratio approaching -70dB, I found these results rather anomalous until Resch explained that the quoted figure was for the head block preamp itself, not the complete assembly with 35 tape heads connected to it. Resch has told me that he will amend the company's figures to clarify matters.

Before reassembling the machine as delivered, I tried inserting a vintage frame manufactured by Streetly Electronics. This was when I encountered my next setback, and it was twofold. Firstly, I discovered that the thumbscrew mounts are metric rather than Imperial. Given that the MkVI is manufactured in Sweden, that's not surprising. Secondly, I discovered that the MkVI's tape guides are a fraction of an inch too narrow for the tapes in my existing frames, making them susceptible to crinkling and/or jamming. Clearly, the MkVI is not compatible with all the Mellotron tapes in circulation, so be aware that you may not be able to use some existing tapes in the new machine.

The difference between metric and Imperial threads did not seem to be a problem when placing a vintage frame into the MkVI, but the same is not true when placing a MkVI frame into the Model 400. You cannot tighten the thumbscrews. In addition, the MkVI's frame is slightly longer than the 400's, so it hits a large retaining bolt in the base of the Mellotron. Resch tells me that I could have bent a small metal pin in the tape frame to circumvent this, but I would have been loath to do so, even though the displacement needed was only a few millimetres. On the positive side, the extra length allows the tapes to be a little longer, increasing the eight-second limit by a few percent, but it means that — in some cases — neither machine's tapes and/or frames may be 100 percent compatible with the other's.

Not wanting to risk either of the tapes/frames at this stage, I reinserted Resch's in the MkVI, reattached the keyboard, and discovered my third reservation. Original Mellotrons have small screws inserted vertically at the back of each key. These allow the user to adjust the mechanical (as opposed to musical) pitch of the key, which is vital to compensate for any warping that may occur as the decades pass. The MkVI lacks these. To be fair, Resch's keyboard (which is built by the company that provides keyboards to Steinway) proved to be first-class, and the adjusters would be redundant at the moment, but who knows whether they will be necessary when the MkVI is as old as my Model 400? The company claims that the keys are warp-proof. Time will tell.

## In Use

Having noted these reservations, I completed reassembly of the machine, and switched on...

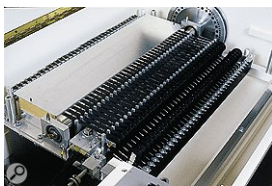
Selecting the three voices in turn, I immediately noticed that Resch has used original master tapes to create his new frames. For this, I applaud and thank him. The MkVI was bright, and 'cut' in exactly the way a Mellotron should.

To best compare the MkVI to my Model 400, I inserted a new set of Streetly tapes comprising the same violin/cello/flute voices into my Mellotron, and played the two instruments side-by-side. As a consequence of a little treble 'lift' in the valve preamplifier, the MkVI proved to be somewhat brighter than the 400 (this might explain the additional noise noted above). Anyway, I found it most acceptable. The violins were edgy, the cello rasped, and the flutes were pure 'Strawberry Fields Forever'. As far as the sounds are concerned, the MkVI is as good as the smaller Mellotrons get.

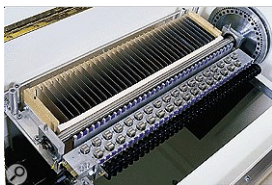
Of equal importance, I found that the MkVI was very stable, thanks in part to its heavier flywheel and to the new, high-torque motor that drives it. Furthermore, it suffered none of the 'drag' that makes some Mellotrons go flat if you play a fistful of notes and lean too heavily on them.

At this point, I decided to get daring. I removed both keyboards, swapped the frames, and reassembled. Then I prayed. Switching on both Mellotrons, I found — to my relief — that my frame played within the MkVI, although the tapes did not return as easily as they did in my Model 400.

Playing a few phrases, I now found that both Mellotrons sounded a little dull. The reason for this is that the tape and head alignments are slightly different on the two instruments. Discovering this solves one of the enduring mysteries surrounding Mellotron Archives' tapes, the sound of the MkVI, and vintage Mellotrons. To summarise, a handful of players



With the keyboard gone, the threaded tapes in the tape frame can be clearly seen. The tape frame itself is also easily removable so that tapes can be changed swiftly — more so than on older Mellotrons, in fact.



Taking out the tape frame reveals the stainless-steel capstan (running from the bottom left to the top right in this picture) more clearly, and allows a better view of the flywheel (top right) and head block (in front of the capstan, centre).

have claimed to find Mellotron Archives' tapes muffled and uninspiring, placing the blame on the digital remastering. Many people (myself included) believed that Kean and Resch had used a low-cost Sound Forge digital workstation to remove pitch inconsistencies and reduce the background hiss from the original recordings. However, when I quizzed Resch about this, he assured me that the retuning was minimal — a handful of notes — and that the noise reduction was applied only to a handful of Chamberlin sounds, not to the Mellotron tapes.

So why do some players believe that MkVIs sound dull, whereas others find that Kean's and Resch's tapes sound dull in their Model 400s? I believe that the answer is staring us in the face: the MkVI heads have one azimuth, and the instrument should be used with tapes that match; the Model 400's heads have a slightly different azimuth, so you should use this with tapes that match. Cross-match, and the sound suffers. Simple!

Studying the MkVI closely, I wondered whether I could overcome this by adjusting the azimuth individually for each head. On a Model 400, you do this by slackening the head-mounting screws and using a special head alignment tape to find the optimum position. Retightening the screws without nudging the heads can be tricky, but I understand that it's possible. In contrast, the MkVI has no azimuth adjusters. Apparently, you can effect minute changes by applying pressure to the heads, thus distorting the mounting pins by a fraction, but I was not prepared to do this.

Finally, I decided to quit Analysis Mode, reinsert my favourite frame ('Mk2 Violins'/Ian McDonald Flute'/Russian Choir') into my 400, and just play the two machines. Ooh... this is as gorgeous as keyboard playing gets. The MkVI is worthy of the Mellotron name, and that's the highest praise that I can lavish upon it.

In particular, I found the fast keyboard action a delight. Far from the spongy, resistive action that insists that you play block chords on most Mellotrons, this was capable of rapid solos and accompaniments. As already noted, my own machine was overhauled by Streetly Electronics immediately before this review, and was also a joy to play, being fast and responsive. But the MkVI was a tad better. Mind you, it would be interesting to compare the two when they are both 21 years old. I suspect that, once the MkVI has bedded in, the difference between it and my Model 400 will be of no significance whatsoever.

## The Low Speed Switch

Using the violin/cello/flute tapes installed in the MkVI, I wasn't too impressed with the low-speed option. But when I swapped these tapes for a second frame supplied by Resch, I discovered how interesting this could be. The classic Mellotron trumpet turned into a delicious trombone, and the piano became deep and grandiose. Clearly, your use of this (or not) will depend largely upon the tapes you install in the instrument.

## Conclusions

Today the Mellotron is enjoying a revival that would have been unthinkable at the start of the 1990s, and models that you could hardly give away 12 years ago are now fetching anything up to 10 thousand pounds. The reason for this is in part nostalgia, in part appreciation of a unique instrument, and in part a consequence of a unique sound that has never been bettered. Even the deficiencies of the Mellotron force players to develop musically interesting techniques to play it — in particular, the 'tarantula-creeping-up-the-keys' technique that overcomes the eight-second note length limitation. Then there's the interaction between the player and the instrument. Far from being a collection of soulless on/off switches, a well-adjusted Mellotron allows you to molly-coddle notes, coax them, or grind them out. Even different tapes demand different playing techniques, some using just the keyboard, others combining it with the swell pedal or other effects.

So, given that refurbished Mellotrons are now becoming as rare as eight-minute Minimoog solos in 13/8, it was perhaps inevitable that someone would eventually have the courage to start production again. That Markus Resch has done so with such obvious care, dedication and skill is a great relief to a Mellotron aficionado like myself.

In fact, I'm not just relieved... I'm delighted. The Mellotron was never rendered obsolete by modern polysynths and samplers, and it's just a shame that it has taken so long for it to be rediscovered. Eric Robinson died in the '70s, Frank Bradley died of a heart attack in 1979, Bill Franzen and Harry Chamberlin died in the '80s, but at least Les Bradley survived until 1997, which was long enough to see the start of the resurgence in the Mellotron's popularity. Their ghosts must be wearing broad grins as they haunt the great keyboard museum in the sky.

## Further Reading

For a full history and description of the Mellotron, with many pictures plus contributions from famous exponents such as Rick Wakeman and Mike Pinder of the Moody Blues, I recommend that you investigate *The Mellotron Book* by Frank Samagaio (ProMusic Press, distributed by Hal Leonard Corporation, ISBN 1931140146).

## Alternative Futures

Streetly Electronics, currently based in Birmingham, UK very close to the original Bradmatic factory, is also planning to restart production of Mellotrons. But rather than copy the basic Model 400, the plan is to develop a new version of the T550 flight-cased Novatron. Delivery is expected early in 2003.

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[www.vemia.co.uk/mellotron/](http://www.vemia.co.uk/mellotron/)

### Pros

- It's a real Mellotron.
- It sounds superb.
- It plays beautifully.
- The construction is first-class.
- It would grace an art collection, let alone a recording studio.

### Cons

- The MkVI tape guides are slightly too narrow (or some tapes are a fraction too wide) so it will not be compatible with all tapes.
- The tape azimuth is not the same for MkVIs and original Model 400s, which leads to compatibility issues between Mellotron Archives' products and those of Mellotronics/Streetly Electronics.
- There are no key pitch adjusters.
- The review MkVI was slightly noisier than my Model 400.

### Summary

The MkVI is a real Model 400 Mellotron, built to a very high standard by someone prepared to spend the time and money to do the job properly. Sure, it's not perfect (what is?), but if you don't lust after a MkVI, you should see a doctor immediately. You're not well.

### Information

US \$5200 (about £3400 at time of going to press). Price includes flightcase but excludes shipping.

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### Test Spec

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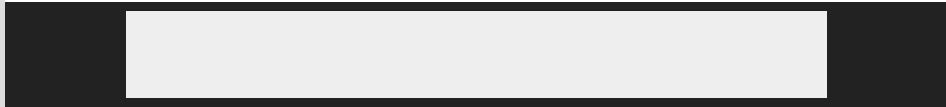
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