

KEYBOARD Reports

Mellotron Mark VI

TAPE - PLAYBACK KEYBOARD

What's a Chamberlin? See page 54.

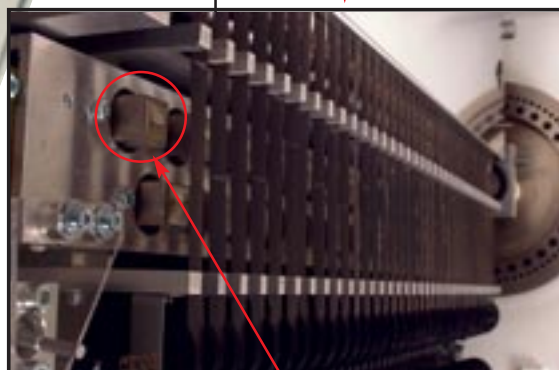
Exclusive!

Speed selector offers two user-adjustable speeds.

Lid is hinged at the back, facilitating quick tape-frame changes.



Even with the major upgrades, Mark VI tape frames can be used in vintage M400s (and vice-versa).



Tone control helps tailor high EQ to Mellotron and the more hi-fi Chamberlin libraries.

Silhouette is the same, but there's almost nothing that hasn't been changed, upgraded, or enhanced.

Heads are original never-used Mellotron parts.

by Ken Hughes

Since this is your April issue, you're naturally expecting some kind of joke content. Well, this ain't it. The Mellotron Mark VI is indeed a real product, and while it's functionally identical to its ancestor the M400, it couldn't in reality be a more different instrument; even the exterior dimensions have changed slightly from the vintage piece.

A quick back story is in order: According to Markus Resch of Mellotron Archives, vintage synth and keyboard conservator David Kean acquired the master tapes and tape-making equipment of the U.S.-based Mellotron company in 1990. He later acquired the masters from the British Mellotron operation as well, along with a cache of NOS ("New, Old Stock;" refers to parts made back in the day but never built into the final assembled product) original Tron

parts. Kean eventually acquired the worldwide Mellotron trademark as well. The original idea was to resume making tapes and parts available to the vintage Mellotron user base, a small but loyal band of enthusiasts who keep these charming tape players alive. At some point someone asked for a motor control board, and Resch got involved. Resch also built over a hundred upgraded M400 tape frames. From there, the project mushroomed into a completely new Tron — the Mark VI — which is now available. *Keyboard* brings you this exclusive review.

Tape-playback keyboard with replaceable tape sets.

Pros: It's the real thing. Dead reliable, unlike previous models. Vastly more playable than previous models.

Cons: Cost puts it out of reach for many.

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\$5,200

**One manual
not enough for you?
Check out page 56.**

Overview

For the uninitiated, the Mellotron's mystique comes from its status as a primordial sample-playback instrument. Arguably, its most famous appearance is on the Beatles' "Strawberry Fields Forever." If you were the keyboardist in a psychedelic or prog band in the '60s or '70s, a Mellotron likely crossed your path at some point. You're likely to see them onstage at prog festivals today, too. It was the only way for keyboardists to play "real" sounds until the advent of digital sampling in 1979 or so.

How does it work? Each key directly depresses a pinch roller and a pad against a master capstan and a length of analog three-track tape. The roller and capstan cause the tape to roll, the pad presses the tape against a playback head, and you hear the recorded sound of a flute, violin section, small choir, you name it. A mechanical slide mechanism moves the head block left and right to select which of the three available sounds is heard. There are a couple hundred different sounds available from Mellotron Archives and a new 'Tron can be factory-loaded with any three of your choice.

Improvements and Enhancements

The Mark VI incorporates countless electronic and mechanical improvements over the M400, starting with a sturdier yet lighter cabinet of Baltic birch plywood, the same stuff used to make Marshall speaker cabinets. M400 cabinets were made of fiberboard, a heavier yet weaker material. The keys are now sourced from the same plant that makes keys for Steinway; key warpage is no longer a concern. The black keys are real ebony, a luxurious touch. The lid hinges instead of coming all the way off, and the cabinet is a little taller so it's more comfortable to play while standing.

Inside, tape-path friction has been reduced dramatically, which means the new 'Tron is way easier to play; less force is required to keep the keys down and the tape engaged. Modulating the attack with key touch and pseudo-aftertouch tremolo effects are other old 'Tron techniques that are greatly eased by the new design. A stronger motor works in tandem with the reduced friction to keep chords from sounding flat relative to single notes. The motor is also now calibrated so that with the Pitch knob at zero, you actually get A=440 concert pitch. A heavier flywheel further aids pitch stability. The half-speed mode takes advantage of the calibration and drops the pitch exactly one octave (or any interval you like; speed is adjustable at both ends). There is a funny little pitch hiccup just before the target speed is reached, but it fits the vibe of the instrument and prevents all the quirky charm from being lost to new precision. The range of the pitch knob covers roughly a fifth north or south of concert pitch.

Head azimuth is now pre-adjusted and locked off, eliminating the need for the tedious periodical adjustments that once plagued road going 'Tron owners. Mellotron Archives has exploited and actually improved the usefulness of the "flaw" that allowed you to layer sounds. On vintage machines, you could sort of jam the sound selector between detents to play two adjacent tracks at once. On the Mark VI,

the tracks are uniformly spaced across the tape so this effect is even easier to achieve, and with better fidelity.

The new tube preamp is quiet and well isolated from buzz and interference, although I noticed that at high gain settings, a fair amount of hiss was present. Here again, this preserves the character of the original article. With the noise, though, comes fat tube saturation. On big chords, the sound grows some hair and gets a little rude. Outstanding. I'll put up with a little extra noise in exchange for that.

Sounds

Mellotron Archives sent us two tape frames to try out. One contained the "Strawberry Fields" flutes, violin trio, and solo cello. The other gave us the classic eight-voice mixed choir, solo trumpet, and bass clarinet.

The flutes are an iconic sound. What more can be said? They are the sound made familiar by the Fab Four. Except we get more than the eight seconds Sir George Martin had. The new design allows for a couple of extra seconds at the end. The funny end-of-tape pitch gargle unique to the vintage model has thankfully not been eliminated. It's another thing that gives the 'Tron its charm. I appreciated the new tone control, as it allowed me to dial back the highs for even more retrolicious sounds, as if the heads were in desperate need of cleaning or the tapes

Custom Finishes

The options for custom looks are limited pretty much only by your pocket-book and imagination. Noel Gallagher of Oasis had his Mark VI done in chocolate brown, and it looks delicious. The company's website showcases a sleek black Mark VI too. Sexiest of all, though, is this mahogany model. Dare ya to take *that* on the road. . . .



were worn. With the tone dimmed, though, a new clarity (and a bit of noise) came forth that was unlike any recorded Mellotron part I'd ever heard. Just goes to show that the original recordings were pretty dang good.

The strings really benefited from the tone control's range, since they were downright strident with the knob all the way up, but creamy and mellow at lower tone settings. They sound the way grainy black-and-white film images look.

The Chamberlin solo cello was new to me; if I've ever heard a recorded Chamberlin cello part I'm unaware of it. The recorded cellist apparently really dug in with the bow, as some of the low notes feature heavy string buzzing. Nice. A big, rosin-y tone was captured that day and makes a nice lead sound at original pitch. At low speed, it takes on a menacing character with a fair amount of subsonic energy.

The choir is a mixed bag. Get it? Mixed choir, mixed bag. . . . Never mind. Seriously, this is another of those iconic 'Tron tones and one that, honestly, I never actually liked except for creepy atonal cluster chords; *Exorcist* stuff. From one key to the next, the soprano is all over the map dynamically, and some of the altos and tenors are dodgy too. Then there are the notes where all of them are a little off-pitch, and it all adds up to one gloriously crummy choir that's *exactly* as you remember it (or would like to) from the original machine. If you must have this sound — again, it looms large in the 'Tron's legend — it's here in all its, uh, splendor. A little spring reverb or tape delay (to keep it vintage) diffuses it nicely, as does lowering the tone control.

Chamberlin?

The Chamberlin was the American precursor to the original Mellotron. It was much more complicated: Drum loops and fills were part of the package, as were a couple more octaves of keys. Despite major improvements, the Chamberlin fell victim to poor marketing, unreliability of the early machines, and underfunding. Harry Chamberlin's marketing man later took a couple of units to England, secured new financing, and the Mellotron was born. (Harry was eventually compensated.)

When they remastered all the Mellotron recordings in 1997, Mellotron Archives did the same with the Chamberlin tape library. This allows you to order tape frames pre-loaded with the sounds of your choice from either or both libraries.

Vital Stats

Sound generation	analog tape playback
Polyphony	full
Tape speeds	7.5 ips, 3.75 ips; user adjustable
Output	balanced 1/4"
Tube complement	2 x E88CC
Other connections	1/4" TRS volume pedal jack
S/N ratio	-60 dB
Dimensions/weight	34" H x 33" W x 22" D; 98 lbs.
Included accessories	flight case
Optional accessories	replacement tapes, \$250; empty tape frames, \$350

The solo trumpet is also from the Chamberlin library and is downright snappy. Due to the improved tape mechanism, it's possible to play much faster than on an old M400, so the trumpet becomes useful in more R&B-oriented parts; those dat-dats and bat-dows are within reach now. Falls and doits are easy to achieve with the pitch control. I had a blast — no pun intended — trying to cop Earth, Wind, and Fire horn parts. I could almost do the horn breakdown from Phil Collins' "Sussudio." Almost. The Mark VI wasn't quite fast enough for *that*. It will surprise no one that there's a lovely, warm analog sound to everything. It is analog tape, after all.

Learning to use the pitch knob like a bender takes a little practice but can be worth it. The speed switch also makes a nifty mock whammy bar. Go ahead. The new motor and control board can take the abuse.

In Use

I employed the Mark VI in the studio and onstage. In the studio there were no surprises; I got exactly what I wanted from the instrument, which was its signature sepia tone melancholy vibe. It called no undue attention to itself by freaking out or faltering in any way. The artist I'm producing indulged me a little experimentation, and due to the quick-change tape frames, I didn't have to call a break in order to swap out sound sets. Frankly, it took less time to load three fully polyphonic sounds into the analog tape-based Mark VI than it used to take to load a single sound on my first eight-voice digital sampler. So much for new technology trumping old. Four thumbscrews secure the key frame. Unscrew them and it lifts out. The lid of the tape spill box lifts off. Four more thumbscrews liberate the tape frame. That lifts out. Drop the new tape frame in, reverse the process, and you're done. It takes, maybe, a minute. Very nice.

The Mark VI's deadly serious flight case (included in the purchase price) was way too big to fit in my car (a Chrysler PT Cruiser) but a nude Mark VI would just fit. I loaded it out

under a tarp on a rainy afternoon, rolling it on the flight case's wheeled baseplate, and wrestled it solo without much difficulty into the car and strapped it down for the 30-mile drive to the gig. That thirty miles is a hilly, twisty, bumpy, stop-and-go freeway ride that gave the 'Tron a pretty good shakedown.

I should back up here. When we first rolled the machine into the *Keyboard* studio, we noticed that the sound selector's range was limited and it didn't give us access to all three sounds. A quick call to Resch in Sweden (unlimited tech support is also included in the purchase price) revealed two possible scenarios. It turned out that a part of the selector linkage known as the "polycarbonate head-block connecting plate" (Resch and I nicknamed it "the plastic thingy"), which is designed to be adjustable, had simply vibrated or been shocked out of whack during the trip across the Pond. Resch reckoned it "had to have been one *hell* of a shock." I imagine it did; the parts involved don't have much mass. A little gentle persuasion without tools sorted it out and we were in business. But the plate was cracked. This is the one and only weak point I found in the Mark VI. That plate should probably be made from a stronger material going forward. Had it *broken* in transit (Resch can share shipping horror stories that make it seem a wonder he's never had one break yet), we'd have had a useless Mellotron on our hands until the part could be replaced.

Back on the road to my gig, the Mark VI was getting another good vibration test. Loaded in and fired up at the venue, the previous adjustment had held tight and the 'Tron was ready to rock. I connected its output to a Danelectro Reel Echo, a simulated tape-delay stompbox. From there it went into a D.I. box and off to the board. The Reel Echo delay and the touch of reverb added at front-of-house gave the sound a nice space to sit in and softened some of the grainy edge inherent in the flute/strings/cello tape set I'd brought. An iMac running Reason sat on top of the Mark VI, and the setup garnered chuckles for its extremes of retro and current technology. I was compelled to play the Strawberry Fields

Mellotron Mark VI

intro ad nauseam as each musician arrived: "You gotta hear this! Play it again for him." Wide eyes or disbelieving laughter followed.

Our drummer doubles on Irish whistle, but rather than give him the melody of a ballad we were to play, the bandleader decided to have me try that part on the Mellotron. With the speed control on high, playing in the top octave, I got a breathy sound with a quavering vibrato that evoked the same feel as the whistle.

On another song, I tried a part I normally play on organ with the Mellotron strings instead. I had to adjust for the 10-second hold limit and find a place to retrigger the held note unobtrusively. Dealing with the limitations forces creative thinking; you can't just coast on this thing.

I had a great time playing it, the bandleader was really pleased with the new colors it gave him, and a couple of audience members came up afterward to see what the big white box was.

Conclusions

Mellotron Archives has achieved something pretty remarkable. They've preserved the essential character of the vintage Mellotron, the quirks and limitations that make it so unique

and charming, and removed nearly all the hassle of ownership. Even more remarkably — though it has to be said that five grand is a lot of bread — the new instrument is slightly *cheaper* in today's dollars than the original.

Now, who in their right mind would choose this over G-Media's M-Tron software instrument, or, for that matter the sample CDs available from Mellotron Archives? M-Tron has no moving parts, requires no disassembly to change "tapes," and weighs exactly what the host computer does. Sample CDs are even more flexible. The Mark VI is for the enthusiast, the fanatic. Those for whom only the real thing will do. Just as the experience of sitting in front of a real Hammond influences the way you play, just as sitting at a real Rhodes, Wurly, or Clavinet feels different from playing an imitation, the experience of playing this unlikely contraption has an unmistakable yet indescribable vibe-enhancing property. Working around its limitations, quirks, and — let's just face it — *defects* impacts your creativity in very cool and groovy ways.

If the thought of shelling out five large for the "privilege" of carting a big, expensive tape

Mark VII



For ultra-fanatic Mellotron devotees, Mellotron Archives has cooked up the dual-manual Mark VII and will make it available on a limited basis. Price? Just \$9,800.

player around seems just . . . so yesterday, the Mellotron Mark VI is clearly not for you. Grab a copy of M-Tron or some of the soundware Mellotron Archives offers and God bless you. But if you revel in the thought of following in the footsteps of Tony Banks, Mike Pinder, John Paul Jones, Sparklehorse, and of course the Beatles, there's no reason not to go for it. This is an entirely worthy instrument. ■

Ken Hughes performs, records, and produces in the San Francisco Bay Area.

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