

A MELLOTRON is a musical keyboard that plays back pre recorded sound on magnetic tape, the early version of a music sampler.

The MELLOTRON had its origins in a garage in California in the early fifties by Harry Chamberlin, who one day decided to record himself playing various melodies on his home organ. He had the idea of playing back these recorded melodies with a specific key that would allow virtually anyone to sit down and play an entire song from playing back pre-recorded tracks. After much trial and error, The CHAMBERLIN became a reality as a two bank side by side arrangement with 35 keys on each bank. Each keynote contained a roller and pressure pad that when struck would contact the tape to one of 70 playback heads. A capstan with a roller or drum the full width of the keyboard was chain driven by a motor. The left bank of keys contained a library of different rhythm and melodies while the right featured a range of solo and combined instruments. This meant that each instrument had to be recorded one note at a time and each note copied to a strip of tape. The first units were clunky and prone to tape jams and not a very uniform sound from note to note due to the inconsistency of the playback heads

By the early sixties Chamberlin was fabricating these units in his garage, but now had to get the word out to the masses and hired a salesman, Bill Fransen, to demonstrate the units. Bill had heard of an electronics manufacturer and supplier in England, Bradmatic, that manufactured a line of tape recorders and radios. So Fransen transports a Chamberlin to Bradmatic in England to see if they can resolve the flaws and Les Bradley agrees to provide heads that are consistent and is so motivated by the potential of such an instrument, decides to completely re-design the components from the ground up.

Fast forward to late 1962 and the British MELLOTRON, a name believed to be a combination of melody and electronics goes into production as the short lived MkI and followed by a MKII. Early recipients of these units were to name a few, Peter Sellers, Trident Studios, the Beatles, the Rolling Stones, Mike Pinder of the Moody Blues. It was now possible to play orchestral parts without having to rely on live musicians. However these units were heavy, around 350 lbs. and did not withstand the rigors of transporting. Each note took six strips of pre recorded tape separated by cue foil, and by pushing a button, the drum would speed up until it arrived at that selection. Each strip of tape or note lasted roughly 8 seconds or until the key was released and returned to its beginning point.

Sometime in 1973 the M400 was introduced weighing in at 135 lbs. with a much simplified transport system containing 35 notes and a removable tape frame consisting of three different sounds per tape. The 3/8" strips of tape were threaded in an M configuration with the tail end of each tape connected to a return spring. The 35 playback heads were mounted on a moveable block which allowed a mixing between tracks. Capstan speed was also variable. These were much more portable and reliable but still rather expensive at the time, around \$3500 dollars.

Surely by now you are asking why strips of tape instead of loops. Remember, by design, these were to replicate orchestral instruments. On a violin when the bow strikes the string you hear an audible attack, same with any wind instrument. Impossible to get an attack each time you strike a key with a loop. Most 400 models sounds came with flute, strings and either cello or 8 voice choir, but a vast

library of sounds could be ordered. Some of these were loaded with nothing but sound effects for live radio.

The next time when you hear the beginning of the Beatles Strawberry Fields or the beginning guitar part of Bungalo Bill, you are hearing magnetic tape being played back musically, thus the beginning of the music sampler in analog form.

As of this writing the MELLOTRON has regained popularity and can be ordered on either analog or digital versions.

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Mellotron M400 #703