

M-Tron™



User Manual - 11/01/2005

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Minimum System Requirements:

PC

96 MB of system memory; Pentium – II 300 MHz.
Win98 (98, NT4, ME, 2000, XP).
VST or RTAS instrument-compatible host program.
2.5Gb of internal hard disk space.

MAC

PowerMac 6040 200 MHz.
128 Mb of total system memory.
MacOS X.
VST, RTAS or AudioUnit instrument-compatible host program.
2.5Gb of internal hard disk space.

Contents:

1. M-Tron – a brief history	3
2. Sound Sources	4
3. Sound Production	5
4. Without Whom Dept.	5
5. Installing the M-Tron & Tape Banks	6
6. Registration	6
7. M-Tron Controls	7
8. MIDI Controller List	8
9. The Tape Banks	8

1 M-Tron – a brief history

The M-Tron is a virtual emulation of one of the most inspirational and unique instruments ever produced, the Mellotron®. This instrument was used on countless records in the heady days of the 1960's and 1970's from Yes' 'Heart Of The Sunrise' to Led Zeppelin's 'Stairway to Heaven' and The Moody Blues' 'Nights in White Satin'. The principal behind the instrument was that each key triggered a corresponding piece of audio tape which then played for a maximum of eight seconds before having to be released and rewound. This eight second limit has been retained on the M-Tron purely because a looped sound is not a true representation of the original instrument. Having to release the keys after eight seconds caused both the music to breathe and the musicians to adjust their playing technique - all of which added to the majesty of the instrument.

Further magic was supplied as each tape held recordings of real musicians playing real instruments including strings, flutes, voices, saxophones etc... There were even entire bands playing full ensembles and motifs. You could also purchase new tapes containing different sounds, and even have your own sounds recorded on to custom tapes. In theory, there was an infinite amount of sounds available and the Mellotron® was probably the first official sampler.

The dual manual Mark II was released in 1964 and, despite its home entertainment styling, was soon a compulsory instrument for the innovative bands of the era. One great example is The Beatles use of the evocative flute sound on 'Strawberry Fields'. It consisted of two 35-note keyboards from which rhythms and chords could be triggered via the left keyboard while lead sounds could be played using the right. We've included several of these rhythms and chords as M-Tron Tape Banks and these are mapped to the first 17 notes of our 35-note single keyboard. (Occasionally there are 16 or 18 notes)

Aesthetically, the M-Tron is based loosely on the successor to the Mark II, the M400. The M400 was released in 1970 and continued in production until 1977. This comprised a single 35-note keyboard (stretching from G to F) plus Volume, Tone and Pitch controls. It also came with three sounds and cost £795.00 in 1976. It enjoyed a relatively long and prosperous life and was used by almost every significant band during that period. Rick Wakeman is quoted as saying, "The sounds of the instrument were beautiful and unlike anything else available but the downside was that the instrument was hideously unreliable. On early models the more notes you attempted to play, the more strain it put on the motor which would then slow

down. On some Yes tracks I could start the song playing in Bb but towards the end I would be playing in F. It was so awful that I ceremoniously burned mine at the end of one tour. Of course, I've missed those sounds but I haven't missed its unreliability."

Indeed, the sounds available for the M400 still have a peerless quality and charm today, especially when compared with contemporary digital instruments. In the 70's, its sounds were used by everyone from Genesis to King Crimson and over twenty years later we still find these sounds in use by artists such as U2, Oasis, Putte, Neil Finn and many others in a bid to inject a timeless quality into their music.

The list of albums containing 'tron sounds over the last quarter of a century is immense and the instrument's character continues to resonate today thanks to the M-Tron's careful attention to detail, warmth, character and huge library.

2 Sound Sources

The M-Tron sounds come from a variety of different Mellotron® models and also include the following instruments.

Chamberlin

The Chamberlin was actually the US precursor to the UK manufactured Mellotron®. Harry Chamberlin, inspired by a tape based drum loop-playing instrument he'd invented in the early 1950's, came up with a keyboard instrument using the same principle and the Chamberlin was officially born. However, as radical as it was for the time, there were several engineering and reliability problems with subsequent models that caused the then salesman, Bill Fransen, to look elsewhere for solutions. Eventually a deal was struck with the Bradley brothers in the UK which would lead to the Mellotron® being conceived in the UK and the Chamberlin M series in the US.

Birotron

Conceived by Dave Biro with the help of keyboard wizard Rick Wakeman, the Birotron attempted to overcome the problems of the eight second note duration by implementing the use of eight-track cartridges instead of the various tape widths used in both Chamberlin's and Mellotron's. Whilst the concept was undoubtedly sound, the initial batch of Birotron's coincided with the dawning of the polysynth era and the whole Birotron operation failed. As a result of this quick demise, Birotron's are incredibly rare. In fact, it's rumored that between only thirteen and thirty-five were ever built.

Roland VP330 Plus

Yes we know this wasn't a classic tape-playing instrument, but the VP330 choir is regarded in many circles as a classic. Released in 1979 this Vocoder was more than a one trick pony due to the on-board string sounds and choir timbres. This instrument has found favour with bands, including Underworld, because of its unique sound and as such it is a worthy inclusion here.

3 Sound Production

As we mentioned before, the sounds come from a variety of sources and although in many cases these tapes required a degree of digital cleaning-up due to their age and storage conditions, we have deliberately left in many imperfections for fear of ironing out too much of the inherent character. Accordingly, you may find that in isolation the odd note may sound a bit wobbly and there may be clicks, hum and even the odd tape drop-out. This is entirely deliberate and when played within the context of a track, this is exactly what adds to the unique sound, vibe and character of the instrument.

One person who needs to be credited for his sterling sound preservation work is Klaus Hoffmann-Hoock, a supreme 'tron aficionado whose personal library amassed from his collection of Mellotron's is probably unsurpassed, as is his attention to detail in terms of preserving the faithful 'tron. For example, many of the early MkII's had no line output, so the only way to record these was via the on-board speaker and it was this technique that gave many of the classic 60's recordings that beautiful hollow mood and feel. This recording technique is evident on many of the M-Tron sounds.

For more information on the original instrument look at:

www.Mellotron.com

www.vemia.co.uk/Mellotron/

4 Without Whom Dept

Jason Field, Dave Spiers, Klaus Hoffmann-Hoock, all at Ohm Force, Angus Hewlett, Jim Wintermyre, Chris Macleod, Ian Legge & Putte

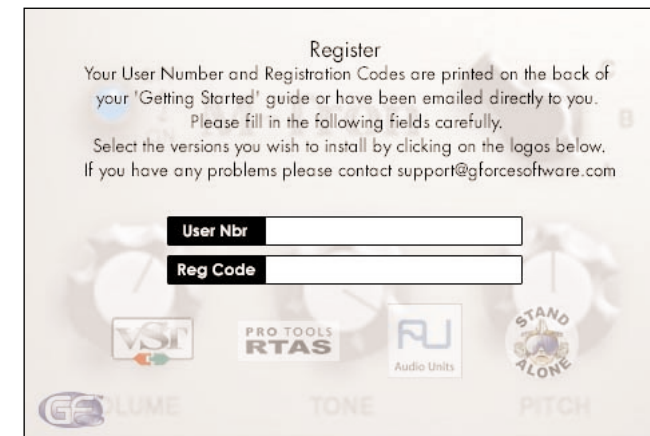
5 Installing the M-Tron & Tape Banks.

Because every note of each Mellotron® sound was sampled separately, the average size of an M-Tron Tape Bank is approximately 21Mb. There are over 100 Tape Banks featured in this collection resulting in close to 2.5Gb of data. The installation takes place via 4 CD's, each one containing a different selection of Tape Banks. We recommend that you install all of the Tape Banks and if necessary delete the ones surplus to your needs afterwards.

Included on the M-Tron Master CD are multiple versions of the M-Tron.

The M-Tron installer allows you to install any or all versions via a single installer; one for Mac and one for PC. Insert the M-Tron Master CD into your CD ROM drive and select the M-Tron installer applicable to your machine type, PC or Mac. Please follow the on-screen instructions carefully entering your unique User Number and Registration codes EXACTLY as you find them printed on the back of your "Getting Started" guide.

Finally, launch the plug-in host and load the M-Tron into an instrument channel.



Mac installer shown.

6 Registration

Please take the time to register your M-Tron on-line at: www.gforcesoftware.com
Registration is required to receive free technical support.

7 M-Tron Controls

Function Knob.

A. Once the M-Tron is open the control panel appears with the Function Knob set to position **A** and the panel lid closed. Playing the M-Tron from its own keyboard (or connected MIDI Keyboard) will play the default sound.

B. Moving the Function Knob to position **B** will open the panel lid and reveal the Attack and Release sliders. Moving the Attack slider to the right will progressively soften the front of the sound allowing it to fade in. Moving the Release slider to the right will lengthen the sound after a note-off.

C. Moving the Function Knob to the **C** position will open the Tape Bank selection window. Click on the Tape Bank name to open a drop down Tape Bank list. To select a Tape Bank simply highlight the required sound. There will be a slight delay while the Tape Bank is loaded into RAM.



Pitch Knob.

This allows you to change the pitch by + or - 15% from the centre position. Turning the Pitch Knob clockwise increases the pitch.



Tone Knob

The Tone Knob progressively filters out high frequencies. The knob defaults to an almost hard right position and moving it anti-clockwise will filter the high frequencies from the sound.



Volume Knob

The Volume Knob adjusts the output level of the M-Tron.



NB To Set any slider or Knob to its middle value simply move the mouse over the knob or slider, hold the ALT key (or Apple key) and click.

8 MIDI Controller List

The M-Tron's editing parameters can be controlled in real-time via MIDI with each parameter corresponding to the following controller numbers.

Parameter	MIDI CC
Volume	7
Tone	74
Pitch	95
Amp Envelope Attack	73
Amp Envelope Release	72
Pan	10
Reset All Controllers	121

9 The Tape Banks

15 Choir

A rare 15 male/female voice choir. An interesting alternative to the famous 8 choir.

Accordion Chords

A selection of accordion chords recorded from a Mk II. NB There are only 16 notes in this Tape Bank.

Accordion Bass + Violins & Brass

A microphoned recording featuring a carefully constructed Tape Bank faithfully recreating the Genesis Water Of The Skies string, brass and bass accordion pad (Accordion Bass Notes 1-12 Violins & Brass Notes 13-35)

ARP Country

Recorded from Tangerine Dream's collection of custom tapes.

ARP Fuzz

Again, taken from Tangerine Dream's custom tapes and featured on many of their recordings during the 1970's.

ARP Trombone

The final sound from Tangerine Dream's collection of custom tapes. A recording of the ARP Pro-Soloist.

Augmented 8 Choir

The rare and powerful double Genesis 8 Choir from 1980.

Bass Accordion

Wonderful deep bass accordion tones recorded directly from a Mk II Tron. NB This Tape Bank only has 17 notes.

Bassoon

One of the very rare and hardly used Mellotron® sounds. Very nice for early King Crimson-like songs.

Bassoon & Flute

This beautiful soft and moody sound perfectly fits to any kind of mediaeval song. Let the jesters enter!

Birotron Choir

Although the Birotron had overcome the 8 second limit for its sounds via the use of 8 track cartridges, we've retained this limit for use with the M-Tron.

Birotron Organ

A flaky but exceedingly rare Birotron organ recording.

Birotron Strings

Not the world's best quality strings but very rare nonetheless.

Birotron Woodwind

Again, an exceedingly rare recording of Birotron woodwind. You can just recognize it as such too.

Boys Choir

A fifteen voice boys choir originally recorded at St John's Wood Church in the UK.

Brass 1

A trumpet and sax combination.

Brass 2

Mixed Brass section comprising of trombone, sax and trumpets.

Brass B Revised

The 'tron's most famous brass in its ultimate extremely fat and powerful version.

Cello

This favourite of King Crimson was originally played by Reg Kirby, the cellist who performed on classic tracks such as 'Eleanor Rigby'. The first five notes are actually a Double Bass because Reg refused to retune his instrument to these notes during the recording of this Tape Bank.

Cello & Strings

A mixture of the above cello sound and a strings Tape Bank.

Chamberlin Harp 1

Fabulous harp rolls from a Chamberlin.

NB There are only 24 notes in this Tape Bank.

Chamberlin Harp 2

An assortment of superb harp glissandos that conjure up those immortal words..."Through the round window" NB There are only 25 notes in this Tape Bank

Chamberlin Voice

An ethereal solo female voice. NB There are only 30 Notes in this Tape Bank.

Choir 1

Male choir taken from an M400 belonging to a very famous band!

Choir 2

M400 female choir

Choir 3

M400 boys choir.

Choir Chords

Recorded at St Peter's Church, Caversham, these offer some interesting major and minor choir chords.

Church Organ & Choir

The mighty St. John's Wood pipe organ in combination with the 70's most famous female and male voices. Hallelujah!

Clarinet

Self-explanatory really.

Classical Choir

This unique solemn choir (six males/two females) sounds like the Russian State Choir.

Combined Brass

One of the Bradleys, early 1980's recordings, combining several brass versions to a mighty blend. Rare.

Double Bass

Although this was found on a Tape Bank, it's rumored that this was made-to-order and as such is very rare.

EFX 2

A variety of interesting, unusual and weird sound effects.

English Accordion

Recorded from a Mk II 'tron, this sound is pure nostalgia.

Flutes

Probably the most recognisable flute sound of all time. Originally made famous on 'Strawberry Fields' and 'Stairway To Heaven' and more recently used by Oasis.

French Horn

A mellow sort of 'mystic' brass sound that's very rare and much sought after by the 'Mellotronists'.

Genesis Split

Similar to the Accordion Bass + Brass and Violins 'Watcher of The Skies' bank but with organ and strings in the upper register.

Guitar

A unique steel string guitar recording.

Halfspeed Tron

Formerly only possible in the studio by layering different sounds and then tuning the tape recorder to half speed, this combination of eight fat string, brass and pipe organ is a monstrous addition to the M-Tron.

Hammond C3 Slow Leslie

Fed up with carrying your organ and the cabinet? Here comes the solution: a powerful crunchy C3 with a spinning Leslie. Finally being freed from the annoying bass pedal sounds the original version had (spread over the whole keyboard!), this fat tool is a real progrock monster that Arthur Brown's 'Kingdom Come' appreciated a lot.

M300 Solo Violins

This is a must-have sound. A good alternative string recording for the M300.

M300 Strings 1

This unusual combination taken from the rare M300 (only about 60 were ever made) belongs to the cream of string highlights.

M300 Strings 2

Barclay James Harvest's Moody trademark strings

M300 Violins

Like all M300 sounds, the layered violins of the violin section sound so clear and natural that it's sometimes difficult to tell if there were real string players or simply a 'tron.

Mandolins

A plucked mandolin sound recorded from a Mk II. Immediately reminiscent of the theme from 'The Godfather'.

Mixed Brass

Recorded from a MK II 'tron this combination of Trombone, Sax and Trumpet has a different blend to many other Mixed Brass Tape Banks we've heard.

Megatron

Imagine having ten of the 'tron,s most famous and powerful orchestral sounds in unison under your fingers! This must have been the idea Harry Chamberlin and the Bradleys had when they created the Mellotron®: a complete orchestra with violins, violas, cellos, flutes, brass, choirs and a church organ.

Megatron Organ

A hybrid organ sound created by layering a more recent recording of a church organ together with old 'tron tapes. Big and powerful.

Megatron Strings

A hybrid string section created by layering a more recent recording of tremolo strings with old 'tron string recordings.

Male Female Choir

A split male and female choir. (Male choir notes 1-17, Female choir notes 18-35)

Mixed Choir

Sometimes known as 8 Choir because it features four male and four female voices in unison.

MkII Flute

Do you still believe you already got the original 'Strawberry Fields' flute in your library? Try this one! Taken from a microphoned 1965 MkII you can clearly tell the difference. Pink Floyd's 'Julia Dream', from 1968 is another good source for this vintage marvel.

MkII Church Organ

We only know of King Crimson's 1970 'Lizard' album where this rarely heard organ was used. If you like the typical fast vibrato/Leslie organs of the first psychedelic era (do you remember The Electric Prunes, 'Mass in F-Minor?') then this will be your instrument.

MkII Guitar

A totally unusual 60's guitar with a special plucked electric bass on the lowest keys. Crazy.

MkII Piano

Sounds like the 'vicar's piano' but Pink Floyd liked it on their 1968 'It Would Be So Nice' single.

MkII Tenor Sax

Another microphoned recording, this time of a very rarely heard saxophone played in the style of its time.

MkII Trombone

Mike Pinder's sweet brass of the Moody Blues' 60's and 70's recordings. Also a microphoned recording.

MkII Violins

A microphoned recording from an original MkII. This famous 3 Violins sound offers the magical hollow strings sound of the mid 60's. Reminiscent of Traffic, John Lennon, Brian Auger, Rolling Stones, Manfred Mann etc...

MkII Organ No2

A beautiful sacral Hammond sound with a slow Leslie which in the wrong hands can sound like a UK seaside pier organ. Try to remember the Genesis 'Seven Stones' intro instead.

MkII Vintage Violins

Taken directly from Eberhard Schoener's MkII this is the best 'tron violins recording we know. Interestingly, all copies from the original master-tapes could be tailored with an equaliser to personal taste, so the differences were quite big.

MkII Violin Orchestra

These multi-layered violins offer a warm thick string sound you can only get from two MkII vintage 'trons played simultaneously. If you are looking for the full-on 1960's and 1970's progrock violins magic, don't search any further.

Moog Bass + Bells

A custom made tape for Frank Zappa's band. A real rarity.

(Moog Bass notes 1-18 Tubular Bells notes 19-35)

Muted Brass

Another microphoned recording for total authenticity. One of the Moody Blues' ingredients of their early orchestral sound.

Oboes

Oboes recorded directly from a Mk II 'tron

Orchestra

The ultimate symphonic 'tron powertool.

Orchestra & Moog

Fat orchestra with a big Moog bottom.

Pipe Organ

Undoubtedly used in Yes recordings at some time.

Rhythm 1

A selection of Samba rhythms and motifs recorded from a Mk II. NB There are only 16 notes in this Tape Bank. The first G is the end motif.

Rhythm 2

A selection of Viennese Waltz rhythms and motifs recorded from a Mk II. NB There are only 17 notes in this Tape Bank. The final B contains the end motif.

Rhythm 3

A selection of Slow Waltz rhythms and motifs recorded from a Mk II. NB There are only 17 notes in this Tape Bank. The C# above middle C contains the end motif.

Rhythm 4

A selection of Bossa Nova rhythms and motifs recorded from a Mk II. NB There are only 17 notes in this Tape Bank. The final B contains the end motif.

Rhythm 5

A selection of Slow Foxtrot rhythms and motifs recorded from a Mk II. NB There are only 17 notes in this Tape Bank. The first G# above contains the end motif.

Rhythm 6

A selection of Dixieland rhythms and motifs recorded from a Mk II. NB There are only 18 notes in this Tape Bank. The first F# above the initial G contains the end motif.

Rhythm 7

A selection of Foxtrot rhythms and motifs recorded from a Mk II. NB There are only 18 notes in this Tape Bank. The first Bb contains the end motif.

Roxy EFX

Various string motifs from Roxy Music. NB There are only 27 notes in this Tape Bank.

Sad Strings

Beautiful Mk II Cello & Violin Moving Chord motifs recorded directly from a MK II 'tron. One of our favourite 'tron sounds ever. NB There are only 17 notes in this Tape Bank.

Saxophone

Need we say more?

Second Flute

This is a real rarity of the early 80s. Intended to push the good old 'tron further in the battle against the forthcoming digital samplers, the second flute never quite made it to the 1963 (first) flute's full fame.

Solo Viola

One of the presumably 'lost master-tapes' recordings.

Sound FX 1

Originally compiled from the BBC's sound library for the MkII Sound FX version these effects became popular with studios, TV- and radio stations all over the globe for their radio plays and jingles.

Split Choir

Another St Peter's church choir recording containing a split male and female choir. (Male Choir 1-18 Female choir 19-35).

St Peters Choir Ah

Recorded in early 2003 at St Peter's Church, Caversham UK. A modern and unique M-Tron recording.

St Peters Choir Oo's

These modern recordings help drag the 'tron kicking and screaming into the 21st century. An interesting change to the usual 'tron choirs, and again, unique to the M-Tron.

Strings 1

Recorded from a Mk II 'tron and consisting of three Violins, Viola and Cello.

Strings 2

More of a Strings and Brass hybrid sound

Strings 3

Recorded from a Mk II 'tron although the aficionado's say this originally comes from an M300.

Strings & Choir

No surprises here in that this sound is a layered strings and choir sound recorded directly from an M400.

String Section

Two string sections completely out of time with each other.

Synth Brass

In the late 60's and early 70's when the first synthesizers became popular (but still unaffordable for the average man) the recorded sawtooth waves of a layered Moog revealed the Mellotron's polyphonic ability to cope with any challenge of the rising synth era.

Synth Trumpet

Reminiscent to the ARP Trombone this artificial trumpet with its oscillator slide and the early M400's inaccuracies is a unique relic of the times when all synths were called Moog or ARP.

Tripled 8 Choir

Imagine 24 male and female voices of the 70's most famous choir at your fingertips. Definitely one of our favourite ever 'tron sounds.

Trombones & Trumpets

Recorded from a Mk II 'tron.

Vibes

Recorded from a set of tapes that had clearly seen better days, we've been surprised at the number of people who love this vibe sound.

Viola & Cello

An ultra-rare combination of the presumably lost master-tape, Viola and a slightly different Cello recording.

Violins 1

The famous 3 Violins recorded from the line-out of a modified MkII. This is the bone-fide classic string sound featured on countless records since 1964. The Moody Blues' Mike Pinder used this sound in his Mk II Mellotron® for every Moody Blues album he recorded, processing it with EQ and an EMT plate reverb.

VP Choir

A mixed male and female tone taken from the VP330 Plus and much loved by early synth pioneers.

VP Ensemble

A mixed choir sound combined with the instantly recognizable sound of the Roland chorus.

VP Males

A male only tone, similar to the VP choir, again, much loved by early synth pioneers.

VP Rhythm 1

An interesting vocoder rhythm recorded at 120 BPM

VP Rhythm 2

Another interesting vocoder rhythm recorded at 120 BPM.

VP Swell

An evolving single note vocoded sound. Play chords for more fun.

Wine Glass

Fantastic! Not least because the age of these tapes has created some very wobbly wine glasses indeed. NB There are only 25 notes in this Tape Bank.

Woodwind

A typical Mellotron® woodwind sound.

Yes Strings

A full-bodied unicat especially recorded for Patrik Moraz' live shows with Yes. Never heard on any recordings.



M400 – known as 'Snowwhite'



M400 – Walnut



Klaus Schulz's Mk V,



Bill Wyman's Mk II



An M300 with speaker cabinet