FM7
The Power Of Digital

Back to the future

The FM7 takes the legendary sound of FM synthesis to a new level. Not only does the FM7 read the complete sound library from the classic FM synths, but it goes far beyond emulation. It adds distortion and filter operators, extensive modulation capabilities, a comprehensive effects section, audio input and much more to the traditional FM architecture. The user interface of the FM7 makes it comfortable and easy to explore the fascinating new possibilities of FM – Native style.

Reproducing the FM classics

The lively and punchy FM sounds were a breakthrough in sound synthesis when they were first introduced in the early eighties. Nowadays, their special aesthetics are still highly appreciated by musicians and producers worldwide. FM sounds complement the sounds of analog and virtual analog synthesizers very well. The FM7 can read all programs from the original DX7, DX7-II, DX11, TX81Z, DX21, DX27, DX100, TX802 and reproduce the sounds of these machines exactly.

Extended sound processing and effects
The FM7 is more than an emulation. Enjoy the authenticity of the classic presets, and then transform them into something completely new. For example, each of the operators of the FM7 offers many waveforms besides sine. Additionally, a distortion operator with noise and an analog filter operator complement the waveform operators and increase the sonic range of the FM7, far beyond classic FM synthesis. Unlike the classic, FM routing can be set freely – you are not limited to preset algorithms.
The effect section of the FM7 offers high quality stereo chorus, flanging and delay effects.

Graphical editing
The advanced graphical editors of the FM7 offer intuitive access to FM synthesis. It's never been that easy to discover the enormous sound potential of frequency modulation.

Top Features	Interfaces
▸ Powerful FM synthesizer ▸ Extended sound architecture for new possibilities with FM synthesis ▸ Includes 512 excellent presets (FM7 Sounds Vol. 1 included) ▸ Reads and faithfully reproduces sound programs of the FM classics (DX7, DX7-II, DX11, TX81Z, DX21, DX27, DX100, DX200, TX802) ▸ Full matrix frequency modulation with 8 operators, no fixed algorithms ▸ 6 operators with many waveforms plus distortion and analog filter operator ▸ Sophisticated graphical editors with many convenient edit functions ▸ Flexible graphical envelopes with unlimited number of stages and looping ▸ Stereo effects section with chorus, flanger delay, can be used for external audio signals ▸ Runs either as stand-alone or as a plug-in on MacOS and Windows	Audio Units™, VST®, RTAS™(OS X), DXi™, Core Audio™, DirectSound™, ASIO® **System Requirements** OS 9.2/10.2.6, G3 500 MHz, 128 MB RAM Windows XP, Pentium III/ Athlon 500 MHz, 128 MB RAM **Support for Intel-based Macs not included but coming soon.** More info… **Recommended System** OS 10.2.6 +, G4 700 MHz, 256 MB RAM Windows XP, Pentium III/ Athlon 700 MHz, 256 MB RAM

FM7 IN DETAIL

The FM7 represents a new generation of FM synthesizers and another milestone in instruments for desktop and laptop studios.
While retaining compatibility to established DX-Series instruments, FM7 expands the sound repertoire and vastly improves ease of use.

Just Play

With hardware synthesizers you have to choose between either a keyboard version or a rack mount unit, but with FM7 you get both and also a full graphical editor, all available at the press of a button.

Library

A library of 256 top quality presets is included with FM7, putting a wide selection of standard and unique new sounds at your fingertips. With this library you can get straight to making music without having to program any sounds.

Easy edit

To make programming easier, FM7 has a page of dedicated analog-style controllers. Here one knob can change the sound in drastic but intuitive ways, for example by turning up the brightness, overall decay time, or effect depth.

SOUND PROGRAMMING

The creation of new sounds is simple with the clean FM7 interface. Just choose one of the different edit pages from the selector strip and start your journey into classic and modern FM synthesis.
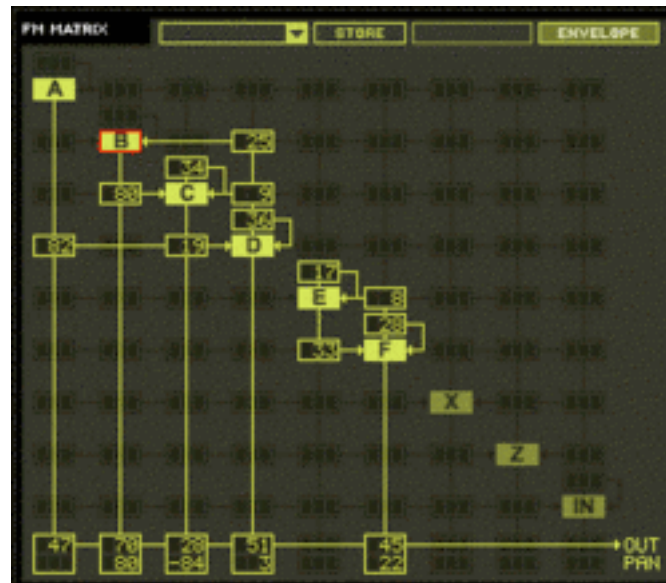

Operators

FM7 has 6 identical waveform operators labelled A to F which are the basis of FM synthesis. Each operator is sensitive to velocity for highly expressive control over the sound. The operators are controlled with 32-bit accuracy and their frequencies can be set with 6-digit precision.

Each of the operators A-F can have a different digital waveform. The instrument contains 32 different waveforms, including square and sawtooth, giving each operator a huge sonic potential even before it is frequency modulated by the others.

FM Matrix

In the FM Matrix, the signal flow between the operators (the "FM-algorithm") is displayed and edited. Each operator is represented by a box and the wires also show the connections. The output (what you hear) is the bottom line of the graphic. Each operator can have a different stereo position to give a lively, spacious sound.

Distortion: X Operator

The FM7 also offers two additional sound-design oriented operators that are totally unique: the X operator and the Z operator. The X operator allows you to insert distortion and noise into the algorithm, adding grunge to the sound. It can be used both as a noise source and to modify an input signal. The noise is mixed with the input signal, processed by a saturation stage, and multiplied with the envelope. This allows you to dirty up the sound and give it a real edge.

Filtering: Z Operator

With the Z operator FM synthesis finally has a great sounding, analog-style multimode filter section. Operator Z has two separate, 2-pole 12dB/oct multimode filters that can configured any way you like to fatten and warm up your FM sounds, or just add some more texture to cold, metallic FM favorites. The X and Z operators offer FM sound designers possibilities that were previously unimaginable, all within the FM algorithms themselves.

LFO

With the Z operator FM synthesis finally has a great sounding, analog-style multimode filter section. Operator Z has two separate, 2-pole 12dB/oct multimode filters that can configured any way you like to fatten and warm up your FM sounds, or just add some more texture to cold, metallic FM favorites. The X and Z operators offer FM sound designers possibilities that were previously unimaginable, all within the FM algorithms themselves.

Modulation
FM7 has a huge Modulation Matrix where the two LFOs and the peformance controllers can be routed to control all the operators and the pitch, for expressive playing. On the Operator Page you see the part of the Modulation Matrix that relates to this operator. The whole matrix is displayed on the Modulation Page (seen here).

Master

On the Master Page are the controls for unison mode, which plays more than one voice for each key pressed for an extra powerful sound.

You can also give the sound more character by adjusting the amount of analog and digital imperfections. Analog-style detuning gives a warmer sound, while digital noises make the sound gritty. By default, the sound is perfectly clean with 32-bit precision.

Effects

FM7 has a very flexible multi-effects processor on board which gives you chorus, ensemble, flanging, echo, multi-tap-delay, pseudo-reverb and other combinations of effects. The effects unit has four independent LFOs for a rich spacious sound.

FEATURES :

- FM synthesizer with extended sound architecture
- Reads and faithfully reproduces sound programs of the FM classics (DX7, DX7-II, DX11, TX81Z, DX21, DX27, DX100, DX200, TX802)
- Full matrix frequency modulation with 8 operators, no fixed algorithms
- 6 operators with many waveforms plus distortion and analog filter operator
- Sophisticated graphical editors with many convenient edit functions
- Flexible graphical envelopes with unlimited number of stages and looping
- Stereo effects section with chorus, flanger delay, can be used for external audio signals
- Runs either as stand-alone or as a plug-in on MacOS and Windows
- Optimized for Pentium III and G4 processors

Interfaces

MAC:
- VST® 2
- ASIO™
- New: Audio Units™
- New: Core Audio™
- New: RTAS™ (under Mac OS X)

WIN:
VST® 2.0
- ASIO™
- DXi
- MME
- DirectSound
- New: RTAS (Win XP)

System requirements

Mac OS 8.6 or higher, G4 400 MHz, 128 MB RAM

Windows 98/2000/ME/XP, Pentium III 450 MHz, 128 MB RAM, 16-bit sound card

http://www.nativeinstruments.de