

## MPC2000XL-MCD Product Overview



#### **Product Description**

The Akai Professional MPC2000XL-MCD MIDI Production Center combines a 64-Track MIDI Sequencer and a 32-voice Stereo Digital Sampler, with 16 velocity and pressure sensitive rubber pads, providing rock solid sequencing and drum programming, combined with powerful sampling facilities, in one convenient and portable desktop unit

The MPC2000XL-MCD inherits many of the major features of the original MPC, such as the legendary "feel" and "groove", so that you can be sure that your beats and sequences just swing. It also features the original MPC60's intuitive transport and locate controls, the unique NOTE REPEAT function, plus new additions such as four bank keys to effectively provide 64 pads, multi-program playback, multi-track recording, simultaneous playback of a second sequence, Next Sequence key, Track Mute key, TimeStretch, Slice Sound, Resampling, plus folder file management. Add to these an improved friendly and intuitive user interface thanks to the graphic LCD, two MIDI ins and 32 MIDI channels via the two MIDI outputs, and options for multiple audio outputs, multieffects, SMPTE Time Code and even Flash Rom memory, and you have a dependable "switch on and work" solution to computer sequencer headaches.

The MPC2000XL-MCD comes with 2MB of onboard memory as standard, that can be expanded up to 32 MB of RAM using standard SIMMs. The Multi-Card drive (MPC2000XL-MCD) supports various types of removable flash memory, such as Compact Flash, Smart Media, Memory Stick, and Secure Digital. The MPC2000XL-MCD also includes a 50pin SCSI interface for connection to external SCSI drives such as CD-ROM drives, hard drives or ZIP drives.

#### **Positionina**

Whether you're producing drum 'n' bass, sequencing a rack-full of MIDI modules or performing live; whether you're programming intricate drum parts or triggering loops, you'll love the self-contained convenience and ease of use the MPC2000XL-MCD gives you and the MPC2000XL-MCD's friendly and intuitive user interface simplifies the expression of your creativity.

A compact and rugged dedicated hardware sequencer/sampler that is equally at home on stage as it is in the studio. No computer needed!

#### **Applications/Customers**

Hip-Hop and R&B artist or "producer", as well as DJ/Live Club performer

#### **Dimensions & Weight**

- H x W x D:
  4.17" x 15.945" x 8.985"
  (106mm x 405mm x 331mm)
- Weight: 12.125lbs (5.5kg)

This information is subject to change



### MPC2000XL-MCD Key Features

#### 1) Akai MPC design

- Established friendly and intuitive user interface of MPC series
- MPC's legendary 'feel' and 'groove': beats just swing!
- Pattern-based and linear 300,000 notes, 64-track sequencer with 32 MIDI channels
- 32-voice drum/phrase sampler with up to 32MB RAM
- Great-feeling, velocity and pressure sensitive pads for expressive programming
- 16 levels function: one sound on all pads with varied level or tuning per pad
- Note Variation slider for programming a wide variety of dynamic changes

#### 2) Connectivity

- Internal Multi-Card Flash drive supporting smart media, SD card, muti media card, memory stick, compact flash & micro drive.
- Up to 10 analog outputs, plus stereo digital I/O with the optional IB-M208P expansion board
- Flexible synchronization capabilities: MIDI clock, MTC, MMC
- SMPTE Time Code option to synchronize with tape machines (IC-M2TC)

#### 3) Compatibility

- Compatible with Akai, Roland and EMU CD-ROM libraries
- WAV file support

#### 4) Extensive sound control

- Extensive sample editing that includes cut and paste, timestretch, slice, resampling etc., with waveform display
- Dynamic resonant low-pass filters and envelope generator for each of the 32 voices
- Optional internal multi-FX processor



#### MPC2000XL-MCD

## **Specifications**

#### SOUND GENERATOR

- Data format: 16-bit linear WAV
- Sampling rate: 44.1 kHz
- Memory: 2MB standard, expandable to 32MB with 72pin SIMMs
- Preset sound memory: 8MB FlashRom option (FMX008M)
- Recording time: 21.9 sec. mono / 10.9 sec. stereo (2MB), around 6mn mono / 3mn stereo (32MB)
- Polyphony: 32-voice
- Filters: 1 dynamic resonant 12dB/octave low-pass filter per voice
- Number of active programs: 4 (with up to 64 pads per program)
- Maximum samples in memory: 256

#### **SEQUENCER**

- Capacity: 300,000 notes
- Resolution: 96ppq
- 99 Sequences
- 64 Tracks per sequence
- 32 MIDI output channels (16 channels x 2 output ports)
- Song mode: 20 songs, 250 steps per song
- Simultaneous playback of a second sequence
- MIDI Sync: Master/Slave, MIDI Clock, MMC, MTC (option)

#### DRUM PADS:

- 16 velocity and pressure sensitive pads
- 4 pad banks
- 16 Levels: Velocity, Tuning
- Automated Drum Mixer (Level and Pan)
- Note variation slider controls Level, Pitch, Filter Cutoff, Attack, Decay
- Track Mute and Next Sequence features for live performance

#### **GENERAL**

- Display: 248x60 dot graphic tilting LCD
- Multi-Card drive (MCD model only): Compact Flash, Memory Stick, Smart Media, Secure Digital
- Standard accessories: 1x CD-ROM sound library, Power cable

#### CONNECTIONS

- Record Input (L and R): ¼" jack x 2, balanced
- Digital Input: RCA x 1, SPDIF (option)
- Stereo Output (L and R): ¼" jack x 2, unbalanced
- Individual Outputs: ¼" jack x 8, unbalanced (option) IBM208P
- Headphone Output: ¼" stereo jack x 1
- Digital Output: RCA x 1, SPDIF (option)
- MIDI: 2 x MIDI In and 2 x MIDI Out
- SCSI: 50pin high density connector

#### OPTIONAL ACCESSORIES:

- IB-M208P: 8 individual output and digital I/O board, SPDIF
- EB16: Multi-effects processor board (4 simultaneous FX)
- FMX008M: 8MB Flash ROM board
- SMPTE: IC-M2TC

#### POWER

• 100-240V AC, 50/60Hz

Consumption: 23W



#### MPC2000XL-MCD FAOs

#### Q. What is the difference between patternbased sequencing and linear sequencing? A. The MPC2000XL-MCD can do both.

With linear sequencing, the whole song is one long sequence which can be recorded continuously in real-time, much like an audio recorder, or edited by copying/pasting bars (such as verse, chorus, etc). This is good when recording tracks while playing live over the whole song.

With pattern-based sequencing, a song is made of multiple short sequences (patterns) that can be rearranged very quickly in Song mode or even in real-time using the Next Sequence feature. However, unlike limited "groove-boxes" where patterns are only one or two bars, on the MPC2000XL-MCD, pattern/sequences can be of any length.

With the MPC2000XL-MCD, you can work on each pattern in a loop, switch patterns, and in Song mode, simply specify the order the pattern playback and number of repeats to create an arrangement. At any time, you can change the arrangement without tedious copying/pasting.

In addition, if you decide to modify a pattern (say, the chorus sequence) after having created the song arrangement, it will automatically be modified in all the instances of the same pattern (i.e. all the choruses in this example). With linear sequencing, you would have to copy/paste the edited bars again, as many times are there are instances. Of course, with the MPC2000XL-MCD, you can also create of a copy a pattern if you want to modify only one instance.

## Q. Can I edit the sounds of my MPC2000XL-MCD on a computer?

A. Yes. Samples are saved as standard WAV files and can be edited and processed in any sample editing software, such as the 'Audacity' freeware for Windows and Mac OS.

Programs can also be edited offline on a computer using 3<sup>rd</sup> party Program editor software such as 'MPC Editor' for Windows 95/98/NT/XP.

Sounds (programs/samples) and sequences can be transferred between the MPC2000XL-MCD and the computer either via Floppy disk, SCSI ZIP drive or via a Flash card (MCD model).

# Q. I have a sample of a bass sound assigned to one pad. How can I play it on all the pads at different pitch?

A. Easy. Simply press the '16 LEVELS' button, hit the pad that contains the bass sample and enable the 16-TUNING mode. Now, the bass sample can be played across all the pads with 16 chromatic tunings.

## Q. What is the benefit of having two sets of MIDI In / Out?

A. The two MIDI Inputs allow connecting a MIDI controller (keyboard, drum pads) to one input while the other input is used to receive MIDI Sync from another unit such as a digital recorder. Otherwise, you would need an outboard MIDI Merger. The two Midi Outputs allow the MPC2000XL-MCD to control 32 external MIDI Channels (16x2), in addition to the 24 internal Programs. This is very useful if you have more than one outboard multitimbral sound generator (for instance, your keyboard and a sound module).

## Q. What type of memory will work in my MPC2000XL-MCD?

A. You should use 72-pin Fast Page or EDO SIMMS with a speed rating of 70 ns (nanoseconds) or faster. They can be either parity or non-parity (if parity is present it will be ignored), and should have gold leads. The MPC2000XL-MCD supports 16 MB and 32 MB SIMMS. However we recommend using 2 x 16 MB SIMMS because the manufacturing specifications of 32 MB SIMMS have changed slightly since the introduction of the MPC2000XL-MCD and we have discovered that not all 32 MB SIMMS will work.

# Q. When I hook my MIDI keyboard to the MPC2000XL-MCD, why can't I hear the keyboard sounds when I listen to my headphones on the MPC2000XL-MCD?

A. MIDI connections do not transmit audio, so you won't hear the keyboard sounds from the MPC2000XL-MCD's headphone output. Only MIDI data (note on/off messages, etc.) are transmitted and recorded in the MPC. The audio from the keyboard will be output directly from the keyboard output. You will need a mixer to connect the outputs from the keyboard and MPC to, then you can listen to the headphone output on the mixer.



# MPC2000XL-MCD Comparisons

## What improvements were made from the MPC2000 to the MPC2000XL-MCD

- Both have the same I/Os, use same Effects board, 8-out expander and the sample engine between them is essentially the same.
- Many improvements on the Sequencer section and a few added features in the sample editing area:
- XL sequencer memory increased from 100,000 events to 300,000
- XL has 4 buttons for pad/bank selection vs the former 1
- XL can access 4 drum programs simultaneously, essentially making it 4 part multitimbral
- Number of samples stored doubled to 256 on the XL
- Folder support for storage on the XL
- XL dedicated Next Sequence button: can switch between sequences using the pads (just like the Track Mute function)
- XL has SUDDEN button added to immediately switch to next sequence
- XL has 2nd sequence function allows you to associate another sequence to play simultaneously with current one.
- XL can solo from Track Mute screen
- XL can change sequences with program changes
- XL has Device naming for each midi channel
- XL has Midi monitor screen
- XL has improved multiple-track recording by specifying which tracks to record and channels for soft-thru
- XL can Resample a sound with a different bit depth or sampling rate
- XL has Slice function. When samples are zoned (up to 16 zones per sample), you can automatically slice the zones and create new program (with pad assignments and with extra specified samples at end of each sample because of the sample decay).
- XL has Timestretch function with adjustable presets
- XL has automatic Chromatic assignment (16-Tuning mode). Essentially allows you to create a keygroup across the key/pads from one sample.
- XL has internal IDE port so you can replace the Multi Card Drive with a Zip drive.
- XL has a tilting screen.
- XL can now switch from REC/OVERDUB to PLAY and vice versa without having to stop the sequencer.

#### Differences between MPC2000 and MPC3000

- MPC3000 has 2 MIDI In and 4 MIDI out
- MPC2000 has 2 MIDI In and 2 MIDI out
- MPC3000 has built in SMPTE-pulse96-FSK24-1/4 click sync
- MPC2000 has SMPTE as an option
- MPC3000 has built in extra 8 outputs and digital in
- MPC2000 has 8 optional extra outputs and digital in/out
- MPC3000 has a text-based screen
- MPC2000 has more modern graphic waveform display/editing/menus
- MPC2000 has optional onboard effects, MPC3000 doesn't
- MPC3000 has an outboard effect send/return
- MPC2000 has Track Mute and Next Sequence features, MPC3000 doesn't