

Midex with LTB Technology – superior timing and more than just an interface!

Today's complex operating systems make precise MIDI timing difficult. Operating systems and computer configuration can lead to small timing inaccuracies in MIDI event sends.

This can be up to 5 ms in extreme cases – small but audible. Depending on musical taste or the user's individual expectations, these inaccuracies can compromise the quality of songs. Additional delays caused by sound generators are also increasingly being seen as unacceptable among producers of today's dance music or any other musical styles where maximum 'tightness' is deemed particularly important.

In the age of virtual instruments, precision MIDI timing is essential because VST instruments operate with sample accurate timing. When they are used together with hardware sound modules, timing inaccuracies can become painfully apparent.

The solution is Steinberg's LTB technology, a new high-speed MIDI protocol which gets around an operating system's limitations in a simple yet elegant way. With LTB, every MIDI event is sent to the MIDI interface ahead of time, together with information describing the exact point of time when it is to be sent out from the interface. Here it is stored and released from every Midex port to the respective sound generator at precisely the right time. This guarantees a timing accuracy for single MIDI events of under a single millisecond - on every port. This is made possible by the microsequencer which is built into every Midex device.

This offers a timing accuracy which was previously only possible when working with old analog or hardware MIDI sequencers.

LTB is already incorporated into all Steinberg Midex series MIDI interfaces as well as Nuendo and the latest versions of Cubase VST.

All Midex products include drivers for all recent Windows and Mac OS operating systems.



Midex 8 – The professional 19" solution for larger MIDI systems

The new Midex 8 is the MIDI solution for all those who rely on external MIDI equipment. With its eight MIDI inputs and eight MIDI outputs, the Midex 8 is the convenient rack-mountable solution for all Steinberg VST-based studios which use many external MIDI sound generators.

The Midex 8 was developed to be able to operate without an additional power supply. It is powered directly by the computer's USB interface, using the included USB cable.

Each Midex 8 can access 128 MIDI channels independently of one another and can be run

together with other Midex 8 units simultaneously. The numbered MIDI port LEDs give you a clear overview over MIDI activity in your audio project. Midex 8's comprehensive range of functions is rounded off by a MIDI Thru function as well as an integrated cable tester.

Feature Highlights

- ▶ 8 separate MIDI outputs and 8 MIDI inputs – up to 128 different MIDI channels can be addressed per Midex 8
- ▶ Several Midex 8s can be combined to build larger MIDI systems
- ▶ Multi client capability – see below
- ▶ LTB protocol – Linear Time Base prevents audible timing lapses and guarantees accurate sending of MIDI events to within a single millisecond
- ▶ Midex 8 is automatically detected once it is connected to the computer
- ▶ Midex 8 can be connected to a computer which is already switched on thanks to USB
- ▶ Powered by USB – no external power supply needed (connection provided for external power unit – just in case!)
- ▶ Integrated MIDI cable test function
- ▶ Incorporated MIDI Thru function
- ▶ Driver CD and USB cable included
- ▶ Ready for the future! Free updates for the Midex 8 driver software continuously available on the web
- ▶ Easy access to extra MIDI input and output on the Midex 8's front side
- ▶ Numbered MIDI port LEDs for a clear overview of your music project
- ▶ Fits into every professional 19" rack – or can also be used simply as desktop unit
- ▶ Printed manual included in 6 languages

Feature Highlights

- ▶ 3 separate MIDI outputs and one MIDI input – up to 48 different MIDI channels can be addressed
- ▶ Several Midex 3s can be combined to build larger MIDI systems
- ▶ Multi client capability – works even when changing to a different MIDI program
- ▶ LTB protocol – Linear Time Base prevents audible timing lapses and guarantees accurate sending of MIDI events to within a single millisecond
- ▶ Midex 3 is automatically detected once it is connected to the computer
- ▶ Midex 3 can be connected to a computer which is already switched on
- ▶ Powered by USB – no external power supply needed
- ▶ Integrated MIDI cable test function
- ▶ Incorporated MIDI Thru function
- ▶ USB cable included
- ▶ Driver CD includes online manual in 6 languages
- ▶ Ready for the future! Free updates for the Midex 3 driver software continuously available on our homepage www.steinberg.net
- ▶ Numbered MIDI port LEDs for a clear overview of your music project
- ▶ Sturdy MacroLon housing

Midex 3 – The flexible solution for your MIDI equipment

Midex 3 is a newly-developed hardware MIDI solution for all those who place emphasis on absolutely accurate timing. With its one MIDI in and three MIDI outs, the Midex 3 is the ideal solution for mobile notebook studios and Steinberg VST-based studios who use external sound generators to supplement their range of virtual instruments.

The three outputs and one input allow up to 48 MIDI channels to be addressed. Midex 3 does not need an external power supply, as the interface's power is supplied by the USB bus. Numbered MIDI port

LEDs provide a clear overview over your MIDI set-up. Midex 3's comprehensive range of functions is rounded off by the relay-controlled MIDI Thru function as well as an integrated cable tester.



General Specifications

The following features make the Midex range stand out from the crowd:

Driver functionality – Multi client capability

The latest Cubase and Nuendo versions are already equipped with LTB. All Midex units also function perfectly with other standard programs in the traditional way. The latest drivers also offer multi client capability, allowing you to address single Midex inputs and outputs with different programs. This lets you combine stand alone applications such as Reaktor and Cubase with your MIDI hardware – even if one program uses LTB whilst the others do not.

PC	Mac	USB
The Midex series offers secure and reliable use with Windows 98 SE, Windows ME, Windows 2000 and Windows XP. Several Midex units can be combined to form larger systems, for example two Midex 3 interfaces for 2 MIDI inputs and 6 MIDI outputs or two Midex 8s for 16 inputs and 16 outputs. A special driver optimization gets around limitations in certain Windows versions which allowed only 10 MIDI ports to be used simultaneously.	The Midex range is also fully compatible with Macintosh computer. Nuendo and Cubase VST deliver the same astounding timing accuracy on the Mac, which is realizable in this form only with Steinberg's LTB technology. OMS serves as a communications interface which supports programs by other manufacturers. When used with Macintosh computers several Midex units can be combined to form larger MIDI systems.	It is only since the introduction of the markedly quicker USB interface with its higher transfer rate that has allowed us to introduce the highly developed USB protocol. During the development of the Midex range, only processors and USB components were used which are powerful enough to handle the complex sequencer tasks of the LTB protocol. This means that Midex units are not just MIDI interfaces based on aging concepts that have been fitted with an USB interface.