

Innovative External 5.1 Surround Audio Solution

User's Guide



AUDIOTRAK - Copyright © 2001 - 2006

Revision 3, December 2006

www.audiotrak.net

INDEX

1. Introduction	4
Hardware Features & Connectors	4
2. Installation	5
System Recommendation	5
Hardware Installation	5
Driver Installation	6
3. Settings and Usage	7
Windows Volume and Speaker settings	
QSound settings	9
ASIO compatible applications	
4. Specifications	
5. General Information	

1. Introduction

Thank you for choosing MAYA EX5 Crystal Edition, the USB Digital Audio Interface with 2 inputs and 6 outputs for your PC.

MAYA EX5 CE is a unique and powerful high fidelity audio interface with 5.1 surround sound capability for your notebook or desktop PC. This special Crystal Edition of MAYA EX5 is equipped with 6 output channels and 2 input channels along with digital S/PDIF in and outputs, microphone inputs and headphone output.

You can enjoy DVD movies on your notebook computer with 5.1 theatrical surround sound. Or you can listen to MP3s and other stereo music in a virtual surround sound environment with up to 5.1 channels of surround sound. MAYA EX5 CE is also a great companion for common DJ software applications.

Next to a special QSound surround engine that provides compatibility to EAX 1.0/2.0, A3D and DirectSound 3D, the hardware also allows the pass through of AC3, DTS and Dolby Digital data. There is even ASIO support available -provided by pro audio manufacturer ESI- that allows the usage of MAYA EX5 CE together with professional audio application.

The Crystal Edition of MAYA EX5 is the ideal portable audio solution for audiophiles, DVD enthusiasts, home musicians and DJs.

Hardware Features & Connectors

MAYA EX5 CE is connected to the computer with a fixed USB connection cable. In addition the product has these features:



On the left side of the unit, you can find the *Headphone & Optical Out* connector. You can use this connector to connect MAYA EX5 CE to devices with a digital S/PDIF input using a Toslink to Miniplug or Miniplug to Miniplug optical cable. Alternatively the same connector can be used as output for headphones featuring the built-in headphone amplifier.

The lower side features from right to left the *Digital I/O* to connect MAYA EX5 CE to digital devices using coaxial S/PDIF cables, the *Analog Out* section with its 6 output channels and the *Analog In* section with a *Line* input and *Mic* input (featuring the built-in microphone preamp). Make sure to connect your main analog speakers (amplified or via your HiFi system for example) to the *Front* output. Use the *Rear* and *Center/LFE* outputs for surround setups.

2. Installation

System Recommendation

MAYA EX5 CE is a very high quality multimedia digital audio interface with many different functions and not just a simple USB sound card. Even though MAYA EX5 CE does not depend very much on the available CPU in your system, it is important that the computer meets the minimum system requirements. A faster CPU, faster HDD and more memory is generally recommended.

Minimum System Requirements

- · Intel Pentium III 700 MHz CPU or equivalent AMD CPU on a desktop computer
- · Intel Pentium III 1GHz CPU or equivalent AMD CPU on a notebook computer
- · Windows 2000, XP operating system
- one available USB port (USB 1.1 and USB 2.0 are supported)
- · 128MB of RAM on a desktop computer
- · 256MB of RAM on a notebook computer
- · CD-ROM or DVD-ROM

Hardware Installation

MAYA EX5 CE is simply connected to an available USB port of your computer. A separate power supply is not required, as MAYA EX5 CE is a USB powered device. Simply install the hardware by plugging it into your computer (switched on).



USB port of a computer

You will see one of the LEDs turning on inside the MAYA EX5 CE case. After connecting the device to your computer, you should connect the MAYA EX5 CE's in- and outputs to your external devices such as headphones, speakers or mixers.

Driver Installation

After the connection of MAYA EX5 CE, the operating system automatically detects it as a new hardware device. Modern operating systems like Windows XP usually detect the hardware directly and are installing the correct USB audio drivers automatically.

You can use MAYA EX5 CE already now in typical consumer audio applications that do not need special multichannel driver support. The following section describes the installation of our special driver software that provides the special QSound features under Windows XP. The procedure is similar with other versions of Windows.

Software Installation under Windows XP

Launch *ex5qsound.exe* from the *AUDIOTRAK/MAYAEX5* folder of the included driver CD or from a download of a recent driver from our website. Then follow the instructions on screen.





Congratulations! You have now completed the installation successfully and the installation of MAYA EX5 CE has been completed now.

If you want to remove the software at a later time, you need to remove it via *Control Panel* > *Add/Remove Programs*.

3. Settings and Usage

MAYA EX5 CE is controlled via the various functions in the Windows control panel, the Windows Volume Control utility and via the special QSound control panel.

Please always refer to the manual of every audio software you use for detailed information on how to use MAYA EX5 CE with it.

Windows Volume and Speaker settings

Go to *Control Panel* > *Sounds and Audio Devices Properties* and check *Place volume icon in the taskbar* under *Volume* to conveniently access to the volume settings.

Sounds and	l Audio Dev	ices Prope	rties	?	
Volume	Sounds	Audio	Voice	Hardware	
Ø,	USB Audio				
- Device v		5		High	
	Mute	ume icon in ti	ne taskbar	nign	
			Adv	vanced	
Speaker	settings Use the speaker Speal	settings belo volume and ker Volume	w to change other settings	individual vanced)	
		ОК	Cancel	Apply	

Click Advanced... under Speaker settings and select the desired speaker configuration.

avancea	
Speakers	Performance Effects
O,	Select the speaker setup that is most like the setup you have on your computer.
	Speaker setup: Desktop stareo speakers

Unless you have a surround setup with more than two speakers, please select the default *Desktop* stereo speakers.

Apply all changes and close the Control Panel windows. Now you can always double click on the volume icon in the taskbar, to open the Windows mixer. The mixer will look like the following picture:

🕘 🛯 🕗 3:44 PM					
🛙 Speaker					- DX
Options Help					
Speaker	Wave	SW Synth	CD Player	Line	Microphone
Balance:	Balance:	Balance:	Balance:	Balance:	Balance:
Volume:	Volume:	Volume:	Volume:	Volume:	Volume:
Mute all	Mute	Mute	Mute	Mute	Mute
USB Audio					

Here you can change the playback volume of each specific signal source. To change the record settings and select a record source, go to *Options > Properties* and select *Recording*.

Properties ?	🗙 🚺 Wave In		
Mixer device: USB Audio	Options Help		
Adjust volume for	SPDIF	Line	Microphone
I Playback	Balance:	Balance:	Balance:
	Volume:	Volume:	Volume:
	J the		
Show the following volume controls:			
Speaker		i di i	: .
SW Synth	Select	Select	Select
CD Player			Advanced
V Microphone	USB Audio		
OK Cancel			

The record source (in the example above the *Microphone* input) is selected via the *Select* checkbox at the lower end of the channel. The record volume can be setup with the slider above that.

QSound settings

Click the QSound icon in the Windows system tray to open the QSound control panel.



The QSound control panel will appear:



The QSound control panel allows you to configure the various features of the QSound software. QSound is used to control and provide functionality like EAX or A3D compatibility in games or various virtual surround sound emulation features:

QSound Environmental Modeling (QEM^{TM}) is an acoustic environment simulation. Outputs are headphones, 2 to 5.1-channel speaker systems.

 $QSizzle^{TM}$ and $QRumble^{TM}$ are intended for dynamic spectral emphasis. This is especially valuable to improve the quality of compressed audio (MP3, internet broadcast, etc.).

Normalize is a feature that levels the output volume for you automatically.

The *3D Effect* column provides control over the QSound Multi Speaker System ($QMSS^{TM}$) settings, a technology that synthesizes multi-channel signals from mono and stereo content, and for $QXpander^{TM}$, providing mono-to-3D and stereo-to-3D stereo sound stage synthesis and enhancement.

The QSound *Equalizer* allows you to control the frequency response of your audio signals.

ASIO compatible applications

To use MAYA EX5 CE in ASIO compatible applications (like professional music recording or editing software), you need to install the ASIO driver first. To do this, you need to launch the *install_MAYAEX5.exe* installer from the installation CD (or from a recent download from our website).

After that, you can select *ASIO MAYA EX5* in all ASIO compatible applications. Please refer to the documentation of your audio software for more information on the usage of ASIO drivers.

4. Specifications

full speed USB audio interface (USB 1.1 compatible)
2 channel analog line inputs, 3.5mm jack, -10dBV unbalanced level
6 channel analog line outputs, 3.5mm jack, -10dBV unbalanced level
microphone preamplifier, +40dB fixed gain, 10K ohm
headphone output, 3.5 mm mini phone jack, 60mW max. output

- headset connector, 3.5 mm jack
- natively supported sample rate: 48kHz
- resolution: 16-bit
- digital I/O with coaxial input, coaxial output, mini optical output connector
 digital I/O format: 16-bit, 48kHz, S/PDIF (IEC-958)

- A/D converter: 91dB(a) dynamic range, frequency response: 20 Hz ~ 20 kHz, 18-bit resolution
 D/A converter: 88dB(a) dynamic range, frequency response: 20 Hz ~ 20 kHz, 18-bit resolution
 QSound driver engine supporting EAX1.0/2.0, A3D, Direct Sound 3D, QMSS, QExpander, QRumble,
- QSizzle, QNormalize, QEQ
- MME/WDM/ASIO compatible driver engine

5. General Information

Trademarks

ESI, AUDIOTRAK and MAYA, and MAYA EX5 CE are trademarks of Ego Systems Inc., Gyrocom C&C Co. Ltd., ESI Audiotechnik GmbH and RIDI multimedia GmbH. Windows is a trademark of Microsoft Corporation. Other product and brand names are trademarks or registered trademarks of their respective companies.

The FCC and CE Regulation Warning

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions : (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Caution : Any changes or modifications in construction of this device with are not expressly approved by the party responsible for compliance, could void the user's authority to operate equipment.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. If necessary, consult an experienced radio/television technician for additional suggestions.

Correspondence

For technical support inquiries, contact your nearest dealer, local distributor or AUDIOTRAK support online at <u>www.audiotrak.net</u>.

Disclaimer

All features and specifications subject to change without notice.

Parts of this manual are continually being updated. Please check our web site <u>www.audiotrak.net</u> occasionally for the most recent update information.