

# Knowledge Base

## Comparison of MAYA44, MAYA44 XTe, Juli@ and Juli@ XTe

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As we have been asked frequently about the differences between our PCI and PCIe interfaces, this document contains a table with them showing the differences that helps you choose which is the best solution for you.

### PCI vs. PCIe

While Juli@ and MAYA44 are PCI interfaces, Juli@ XTe and MAYA44 XTe are PCIe interfaces. This is critical as some (usually older) computer systems only have PCI slots while some (usually newer) systems only have PCIe slots. Others have both. Because of that, you should check before you buy an interface, if you can use PCI or PCIe inside your computer.

### Functions vs. Audio Quality

MAYA44 and MAYA44 XTe have a huge number of functions, essentially they provide many and for some users even all the hardware I/O functions you need for a modern home studio. You can connect microphones to them, a guitar (MAYA44 XTe only) and also a headphone. Plus you have separate stereo line outputs which is great for DJ applications.

Different from that, Juli@ and Juli@ XTe only have 2 analog input and output channels at line level, however these can be used as balanced (with +4dBu studio level) I/O. Both Juli@ and Juli@ XTe have better audio quality AD and DA converters and more stable clock processing components for the digital I/O compared to MAYA44 and MAYA44 XTe.

This means that MAYA44 and MAYA44 XTe are perfect if you look for a powerful device with many functions. They are also perfect if you don't intend to use external microphone or headphone amplifiers and of course if you need 2 separate independent stereo line outputs.

Juli@ and Juli@ XTe provide reference audio quality for the analog I/O and perfect clock for the digital I/O. There are less features compared to MAYA44 and MAYA44 XTe but at a higher quality. This makes Juli@ and Juli@ XTe the perfect companion for outboard equipment such as a mixing desk, high quality preamps and channel strips.

### Comparison Table

	MAYA44	MAYA44 XTe	Juli@	Juli@ XTe
interface	PCI	PCIe	PCI	PCIe
max. recording samplerate & resolution	24-bit / 96kHz	24-bit / 96kHz	24-bit / 192kHz	24-bit / 192kHz
max. playback samplerate & resolution	24-bit / 192kHz	24-bit / 96kHz	24-bit / 192kHz	24-bit / 192kHz
total number of input channels	4	4	4	4
total number of output channels	4	4	4	4
number of analog input channels	4 unbalanced	4 unbalanced	2 balanced or unbalanced	2 balanced or unbalanced
number of analog output channels	4 unbalanced	4 unbalanced	2 balanced or unbalanced	2 balanced or unbalanced
analog input dynamic range	102dB(a)	102dB(a)	114dB(a)	114dB(a)
analog output dynamic range	108dB(a)	108dB(a)	112dB(a)	112dB(a)
microphone input with phantom power	yes	yes	no	no
Hi-Z instrument input	no	yes	no	no
headphone output	yes	yes	no	no
optical S/PDIF input	optional	yes	no	no
optical S/PDIF output	yes (max. 96 kHz)	yes	yes (max. 96 kHz)	yes (max. 96 kHz)
coaxial S/PDIF input	optional	no	yes	yes
coaxial S/PDIF output	yes	no	yes	yes
MIDI input	optional	no	yes	yes
MIDI output	optional	no	yes	yes
product description & picture	<a href="#">click here</a>	<a href="#">click here</a>	<a href="#">click here</a>	<a href="#">click here</a>

"optional" means that MAYA44 is extended with the MI/ODI/O extension board which is described in detail in this document .

"max. 96 kHz" is mentioned because of the specifications of the Toslink connection. We have received reports from a number of customers that it works fine for them with 192 kHz, however this totally depends on the quality of the used optical cable and most important on the quality of the Toslink receiver on the device you connect to our audio interface. More details here.