Compatibility Issues With The US-428

The US-428's hardware and software drivers have been exhaustively tested with a large cross-section of PCs and Macs, and has proven to be an exceptionally stable device. This is in part due to the US-428's very robust driver software, which optimizes the USB protocol for audio, while keeping interruptions to the system at a minimum.

That said, there are a small minority of PC's which exhibit problems with the US-428 and other USB-based audio devices. By and large, compatibility is an issue which concerns the host computer's motherboard and chipset, and how that chipset handles USB protocol implementation. Due to the considerable demands placed on the USB bus by audio streaming, any less-than-optimal USB handling has the potential to disrupt the audio flow or, in extreme cases, even crash the computer.

Basically, there are two modes of USB protocol implementation:

1. **UHC**I, or Universal Host, is the standard implemented by Intel. As such, it can be found on virtually all PC's with genuine Intel processors. We have found no problems with any Intel chipset thus far.

2. **OHC**I, or Open Host, is the standard created by Microsoft and a consortium of other companies. The open host controller protocol can be found on most ViaTech chipsets (the chief supplier of AMD-based processors.)

Generally speaking, chipsets utilizing OHCI are more prone to compatibility issues, though this is not a hard and fast rule of thumb; many OHCI-based machines run fine with the US-428, and a very few UHCI-based ones do not.

How to determine what USB protocol your system uses:

- Right click on the My Computer icon
- Select Properties
- Click on the Device Manager tab
- Click on the plus sign ("+") next to Universal Serial Bus Controllers

You'll see two or more items listed. One will read something like:

"Intel 82371AB/EB PCI to USB Universal Host Controller" or
"VIA Tech 3038 PCI to USB Open Host Controller"

(In fact, there are numerous variations of chipset controllers, these are just two examples). Should you see VIA Tech listed or Open Host Controller, the possibility exists for compatibility issues.

Common symptoms of incompatibility occasionally include stuttering audio, but are primarily seen as crashes upon installation or, more commonly, upon selection of the US-428 in the application's audio menu.

We have found that, in many cases in which this incompatibility is discovered, the host computer can be fitted with a PCI-based USB adapter which employs an Opti-Chip controller. These are available through several local companies, including ADS Technologies (www.adstech.com) and Keyspan (www.keyspan.com). These cards cost roughly $30-40 and are available via mail or online ordering.

ADS also makes a PCMCIA version of this card for those using notebook computers. We've tested these with (non-USB equipped) G3's as well as PC laptops.