Subject: Speaking of Firewire.. I need help Posted by brandon[2] on Tue, 13 Feb 2007 19:32:28 GMT View Forum Message <> Reply to Message

This is a multi-part message in MIME format.

-----=\_NextPart\_000\_0117\_01C74F73.67F76B90 Content-Type: text/plain; charset="iso-8859-1" Content-Transfer-Encoding: quoted-printable

Given the opportunity which signal chain would you prefer and why? =20 source-----mic pre/ analog to digi converter ------ADAT = lightpipe-----PCI sound card-----monitor outs from PCI = sound card

or

source-----mic pre/ analog to digi converter = ------Firewire------(i dont know where the signal = goes after this????)-----monitor outs from PCI sound card

Thanks,

```
Brandon
-----=_NextPart_000_0117_01C74F73.67F76B90
Content-Type: text/html;
charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
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```
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<META http-equiv=3DContent-Type content=3D"text/html; =
charset=3Diso-8859-1">
<META content=3D"MSHTML 6.00.2900.3020" name=3DGENERATOR>
<STYLE></STYLE>
</HEAD>
<BODY bgColor=3D#ffffff>
<DIV><FONT face=3DArial>Given the opportunity&nbsp;which signal chain =
would you=20
prefer and why?</FONT></DIV>
<DIV><FONT face=3DArial>&nbsp;</FONT></DIV>
<DIV><FONT face=3DArial>&nbsp;</FONT></DIV>
<DIV><FONT face=3DArial>&nbsp;</FONT></DIV>
```

-----PCI sound = card-----monitor=20 outs from PCI sound card</FONT></DIV> <DIV><FONT face=3DArial></FONT>&nbsp;</DIV> <DIV><FONT face=3DArial>or</FONT></DIV> <DIV><FONT face=3DArial></FONT>&nbsp;</DIV> <DIV><FONT face=3DArial></FONT>&nbsp;</DIV> <DIV><FONT face=3DArial>source-----mic pre/ analog to digi = converter=20 -----Firewire-----(i dont know where the signal = goes=20 after this????)-----monitor outs from PCI sound card</FONT></DIV> <DIV><FONT face=3DArial></FONT>&nbsp;</DIV> <DIV><FONT face=3DArial>&nbsp;</DIV> <DIV><BR>Thanks,</FONT></DIV> <DIV><FONT face=3DArial></FONT>&nbsp;</DIV> <DIV><FONT face=3DArial>Brandon</FONT></DIV></BODY></HTML>

-----=\_NextPart\_000\_0117\_01C74F73.67F76B90--

Subject: Re: Speaking of Firewire.. I need help Posted by EK Sound on Tue, 13 Feb 2007 19:44:39 GMT View Forum Message <> Reply to Message

Solution #1 will provide the lowest latency. You will also find that monitoring from a different interface than the one you are recording through will create some problems, if it works at all.

David.

Brandon wrote:

Subject: Re: Speaking of Firewire.. I need help Posted by Neil on Tue, 13 Feb 2007 20:48:44 GMT View Forum Message <> Reply to Message

David (or anyone) what's the latency per foot for Firewire cable... anyone know?

Neil

EK Sound <askme@nospam.com> wrote:

>Solution #1 will provide the lowest latency. You will also find that >monitoring from a different interface than the one you are recording >through will create some problems, if it works at all.

>

>David. > >Brandon wrote: >> Given the opportunity which signal chain would you prefer and why? >> >> source-----mic pre/ analog to digi converter -----ADAT >> lightpipe-----PCI sound card-----monitor outs from PCI >> sound card >> >> or >> >> >> source-----mic pre/ analog to digi converter >> ------Firewire-----(i dont know where the signal >> goes after this????)-----monitor outs from PCI sound card >> >> >> >> Thanks, >>

>> Brandon

Subject: Re: Speaking of Firewire.. I need help Posted by Tony Benson on Thu, 15 Feb 2007 18:02:35 GMT There would be no noticeable latency introduced by the Firewire cable. The electrical signal travels at close to the speed of light! Any audio latency would come from the processing before or after the Firewire. There may be a limit on reliable signal cable length, but that would have to do with the increasing cable capacitance.

Tony

```
"Neil" <OIUOIU@OIU.com> wrote in message news:45d2161c$1@linux...
>
> David (or anyone) what's the latency per foot for Firewire
> cable... anyone know?
>
> Neil
>
>
> EK Sound <askme@nospam.com> wrote:
>>Solution #1 will provide the lowest latency. You will also find that
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>
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>>>
>>>
>>>
>>> Thanks,
>>>
>>> Brandon
>
```

## Or, 1.0167033296343398952810963365041e-9 Seconds fer foot. ;-)

David.

Tony Benson wrote:

- > There would be no noticeable latency introduced by the Firewire cable. The
- > electrical signal travels at close to the speed of light! Any audio latency
- > would come from the processing before or after the Firewire. There may be a
- > limit on reliable signal cable length, but that would have to do with the
- > increasing cable capacitance.

>

> Tony

>

- >
- > "Neil" <OIUOIU@OIU.com> wrote in message news:45d2161c\$1@linux...

>

>>David (or anyone) what's the latency per foot for Firewire >>cable... anyone know?

>>cable... anyone kr

>>

>>Neil >>

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>>

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>>>David.

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>>>or

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>>>>

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>>>goes after this????)-----monitor outs from PCI sound card
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>>>
>>>
>>>
Thanks,
>>>>
Brandon
>>
>>>
```

Subject: Re: Speaking of Firewire.. I need help Posted by brandon[2] on Thu, 15 Feb 2007 18:26:06 GMT View Forum Message <> Reply to Message

Well now... What kind of problems can I expect If I am using an external firewire audio card for all my audio needs? Other than latency?

--

Thanks,

Brandon

"Mike Audet" <mike@mike....> wrote in message news:45d4a527\$1@linux...

>

> Yea, it's not the length of the firewire cable that introduces the

> latency,

> it's using firewire at all that adds it.

>

> It just wasn't designed for audio recording.

>

> All the best,

>

> Mike

>

>

> "Tony Benson" <tony@standinghampton.com> wrote:

>>There would be no noticeable latency introduced by the Firewire cable. The >

>>electrical signal travels at close to the speed of light! Any audio
>latency

>>would come from the processing before or after the Firewire. There may be > a >>limit on reliable signal cable length, but that would have to do with the > >>increasing cable capacitance. >> >>Tony >> >> >>"Neil" <OIUOIU@OIU.com> wrote in message news:45d2161c\$1@linux... >>> >>> David (or anyone) what's the latency per foot for Firewire >>> cable... anyone know? >>> >>> Neil >>> >>> >>> EK Sound <askme@nospam.com> wrote: >>>Solution #1 will provide the lowest latency. You will also find that >>>monitoring from a different interface than the one you are recording >>>>through will create some problems, if it works at all. >>>> >>>David. >>>> >>>>Brandon wrote: >>>>> Given the opportunity which signal chain would you prefer and why? >>>>> >>>> source------mic pre/ analog to digi converter ------ADAT >>> >>>>> lightpipe-----PCI sound card-----monitor outs from > PCI >>> >>>> sound card >>>>> >>>> or >>>>> >>>>> >>>> source-----mic pre/ analog to digi converter >>>> ------Firewire------(i dont know where the signal >>> >>>> goes after this????)-----monitor outs from PCI sound card >>>>> >>>>> >>>>> >>>> Thanks, >>>>> >>>> Brandon

>

>>> >> >> >>

Subject: Re: Speaking of Firewire.. I need help Posted by Mike Audet on Thu, 15 Feb 2007 19:23:35 GMT View Forum Message <> Reply to Message

Yea, it's not the length of the firewire cable that introduces the latency, it's using firewire at all that adds it.

It just wasn't designed for audio recording.

All the best,

Mike

"Tony Benson" <tony@standinghampton.com> wrote: >There would be no noticeable latency introduced by the Firewire cable. The

>electrical signal travels at close to the speed of light! Any audio latency

>would come from the processing before or after the Firewire. There may be a

>limit on reliable signal cable length, but that would have to do with the

>increasing cable capacitance. > >Tony > > >"Neil" <OIUOIU@OIU.com> wrote in message news:45d2161c\$1@linux... >> >> David (or anyone) what's the latency per foot for Firewire >> cable... anyone know? >> >> Neil >> >> >> EK Sound <askme@nospam.com> wrote: >>>Solution #1 will provide the lowest latency. You will also find that >>>monitoring from a different interface than the one you are recording >>>through will create some problems, if it works at all. >>> >>>David.

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>>>>
>>>>
>>>> Thanks,
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>>>> Brandon
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```

Subject: Re: Speaking of Firewire.. I need help Posted by Tony Benson on Thu, 15 Feb 2007 20:20:13 GMT View Forum Message <> Reply to Message

## Brandon,

All computer based recording systems will introduce some kind of latency. PCI based systems may have an edge on Firewire based systems, but far more latency is introduced during the AD/DA process, and during any heavy processing of the signal. FWIW, I use a MOTU 828MkII Firewire interface on a dual 2GHz Mac G5, and using the built-in Firewire interface, record all the time with the buffers set at 128 or 256. I regularly record 10 tracks simultaneously and at 128 I can't really detect any latency. Even at 256, I can barely detect the latency, and what is there is low enough it doesn't seem to affect my performance. I know there are some "golden ears" out there who will have problems with even this low level of latency. How low you can set the buffers is dependent a lot on your computers processor speed. As LaMont will testify, the Mac G5 is a slow, piece of crap computer, and yet I seem to get reasonable performance from mine. I would think any newer PC, with a good Firewire interface and a fast processor should be able to easily run at low buffer settings. If you're a Mac person, the new Intel boxes should be burners. My two cents.

Tony

"Brandon" <a@a.com> wrote in message news:45d4a615@linux...

> Well now...

- > What kind of problems can I expect If I am using an external firewire
- > audio card for
- > all my audio needs?
- > Other than latency?
- >
- >
- >
- > --

> Thanks,

>

> Brandon

>

> "Mike Audet" <mike@mike....> wrote in message news:45d4a527\$1@linux...

>>

>> Yea, it's not the length of the firewire cable that introduces the

>> latency,

>> it's using firewire at all that adds it.

>>

>> It just wasn't designed for audio recording.

>>

>> All the best,

>>

>> Mike

>>

>>

- >> "Tony Benson" <tony@standinghampton.com> wrote:
- >>>There would be no noticeable latency introduced by the Firewire cable.

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- >>>would come from the processing before or after the Firewire. There may be >> a
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- >>>increasing cable capacitance.
- >>>
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>>>>> Thanks,
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>>>>> Brandon
>>>>
>>>
>>>
>>
>
>
```

Subject: Re: Speaking of Firewire.. I need help Posted by brandon[2] on Thu, 15 Feb 2007 20:29:51 GMT View Forum Message <> Reply to Message

Well it look s like my built in firewire chipset is realtek. Motu recommends Texas instruments for least problems. So I will pick up a PCI expansion card for a firewire port that has a ti chipset.

So the lower the buffer the less latency you will have?

Thanks,

Brandon

"Tony Benson" <tony@standinghampton.com> wrote in message news:45d4c0d2@linux...

> Brandon,

>

> All computer based recording systems will introduce some kind of latency.

> PCI based systems may have an edge on Firewire based systems, but far more

> latency is introduced during the AD/DA process, and during any heavy

> processing of the signal. FWIW, I use a MOTU 828MkII Firewire interface

> on a dual 2GHz Mac G5, and using the built-in Firewire interface, record

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> fast processor should be able to easily run at low buffer settings. If

> you're a Mac person, the new Intel boxes should be burners. My two cents.

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> Tony

> >

> "Brandon" <a@a.com> wrote in message news:45d4a615@linux...

>> Well now...

>> What kind of problems can I expect If I am using an external firewire

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>> all my audio needs?

>> Other than latency?

>>

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>>
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>>>>> Brandon
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Subject: Re: Speaking of Firewire.. I need help Posted by Tony Benson on Thu, 15 Feb 2007 22:21:05 GMT View Forum Message <> Reply to Message

Yes, lower buffer equals lower latency, but higher processor load. Basically, it's best to record using the lowest buffer setting you can, without your computer choking. Then, when everything's recorded, set the buffer higher, and you'll have more processor overhead available for plug-ins, more playback tracks, VSTi's, etc. during mixing. The only thing the higher buffer does on playback is maybe add a few hundred milliseconds to the responsiveness of starting and stopping. So when you hit "play" you have to wait a whole 1/3 of a second before sound starts coming out. Not a big deal in the grand scheme of things.

Tony

"Brandon" <a@a.com> wrote in message news:45d4c30e\$1@linux...

> Well it look s like my built in firewire chipset is realtek.

> Motu recommends Texas instruments for least problems.

> So I will pick up a PCI expansion card for a firewire port that has a ti > chipset.

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```