Subject: AES article shows people can't hear the difference...
Posted by Bill L on Tue, 08 Apr 2008 13:27:21 GMT
View Forum Message <> Reply to Message

I read in the MIX Insider Audio feature that a recent study published by the AES shows people can't hear the difference between hi def (SACD or DVD-A) or cd quality (44.1x16) audio. The test group included men, women, audiophiles and audio professionals. They used a variety of high end equipment and a variety of program material including audiophile material from Chesky, Telarc, etc.

A precis of the study is available at
http://www.aes.org/e-lib/browse.cfm?elib=14195

Subject: Re: AES article shows people can't hear the difference...
Posted by TCB on Tue, 08 Apr 2008 15:14:33 GMT
View Forum Message <> Reply to Message

They probably forgot to burn the CDs at 2X speed using audiophile grade CD blanks, so their methodology blows.

I've been saying for a long time that 16 bit 44.1 done right sounds fantastic, but I'm deaf so don't worry about me.

TCB

Bill L <bill@billlorentzen.com> wrote:
>I read in the MIX Insider Audio feature that a recent study published by

>the AES shows people can't hear the difference between hi def (SACD or
>DVD-A) or cd quality (44.1x16) audio. The test group included men,
>women, audiophiles and audio professionals. They used a variety of high

>end equipment and a variety of program material including audiophile
>material from Chesky, Telarc, etc.
>
>A precis of the study is available at
>http://www.aes.org/e-lib/browse.cfm?elib=14195

Subject: Re: AES article shows people can't hear the difference...
Posted by Bill L on Tue, 08 Apr 2008 16:55:12 GMT
View Forum Message <> Reply to Message

Deaf? I can't hear you. "The Cymbals and the Damage Done"

TCB wrote:
> They probably forgot to burn the CDs at 2X speed using audiophile grade CD
> blanks, so their methodology blows.
>
> I've been saying for a long time that 16 bit 44.1 done right sounds fantastic,
> but I'm deaf so don't worry about me.
>
> TCB
>
> Bill L <bill@billlorentzen.com> wrote:
>> I read in the MIX Insider Audio feature that a recent study published by
>
>> the AES shows people can't hear the difference between hi def (SACD or
>> DVD-A) or cd quality (44.1x16) audio. The test group included men,
>> women, audiophiles and audio professionals. They used a variety of high
>
>> end equipment and a variety of program material including audiophile
>> material from Chesky, Telarc, etc.
>>
>> A precis of the study is available at
>> http://www.aes.org/e-lib/browse.cfm?elib=14195
>

Subject: Re: AES article shows people can't hear the difference...
Posted by dc[3] on Tue, 08 Apr 2008 17:16:40 GMT
View Forum Message <> Reply to Message

I did all my classical work at 44.1/16.

There are good reasons, starting with Nyquist himself, why higher
resolutions make very little difference.

DC

Bill L <bill@billlorentzen.com> wrote:
>I read in the MIX Insider Audio feature that a recent study published by

>the AES shows people can't hear the difference between hi def (SACD or
>DVD-A) or cd quality (44.1x16) audio. The test group included men,
>women, audiophiles and audio professionals. They used a variety of high

>end equipment and a variety of program material including audiophile
>material from Chesky, Telarc, etc.
>
>A precis of the study is available at
>http://www.aes.org/e-lib/browse.cfm?elib=14195

Subject: Re: AES article shows people can't hear the difference...
Posted by Chris Ludwig on Tue, 08 Apr 2008 19:24:17 GMT
View Forum Message <> Reply to Message

Hi Bill,
Can't wait to see the retarded opinions of these report on the Gear sluts forums.

Chris

Bill L wrote:
> I read in the MIX Insider Audio feature that a recent study published by
> the AES shows people can't hear the difference between hi def (SACD or
> DVD-A) or cd quality (44.1x16) audio. The test group included men,
> women, audiophiles and audio professionals. They used a variety of high
> end equipment and a variety of program material including audiophile
> material from Chesky, Telarc, etc.
>
> A precis of the study is available at
> http://www.aes.org/e-lib/browse.cfm?elib=14195

--
Chris Ludwig

ADK Pro Audio
(859) 635-5762
www.adkproaudio.com
chrisl@adkproaudio.com

Subject: Re: AES article shows people can't hear the difference...
Posted by Chris Ludwig on Tue, 08 Apr 2008 20:14:23 GMT
View Forum Message <> Reply to Message

heh

Neil wrote:
> I'm totally buying into the report... switching all my
> gear over to 22.5k/8-bit.
>
> Look for all my hi-rez stuff on the "For Sale" section soon.
>
> :)
>
>
> Chris Ludwig <chrisl@adkproaudio.com> wrote:
>> Hi Bill,

>> Can't wait to see the retarded opinions of these report on the Gear sluts
> forums.
>> Chris
>>
>>
>> Bill L wrote:
>>> I read in the MIX Insider Audio feature that a recent study published
> by
>>> the AES shows people can't hear the difference between hi def (SACD or
>
>>> DVD-A) or cd quality (44.1x16) audio. The test group included men,
>>> women, audiophiles and audio professionals. They used a variety of high
>
>>> end equipment and a variety of program material including audiophile
>>> material from Chesky, Telarc, etc.
>>>
>>> A precis of the study is available at
>>> http://www.aes.org/e-lib/browse.cfm?elib=14195
>> --
>> Chris Ludwig
>>
>> ADK Pro Audio
>> (859) 635-5762
>> www.adkproaudio.com
>> chrisl@adkproaudio.com
>

--
Chris Ludwig

ADK Pro Audio
(859) 635-5762
www.adkproaudio.com
chrisl@adkproaudio.com

Subject: Re: AES article shows people can't hear the difference...
Posted by Neil on Tue, 08 Apr 2008 20:22:44 GMT
View Forum Message <> Reply to Message

I'm totally buying into the report... switching all my
gear over to 22.5k/8-bit.

Look for all my hi-rez stuff on the "For Sale" section soon.

:)

Chris Ludwig <chrisl@adkproaudio.com> wrote:
>Hi Bill,
> Can't wait to see the retarded opinions of these report on the Gear sluts
forums.
>
>Chris
>
>
>Bill L wrote:
>> I read in the MIX Insider Audio feature that a recent study published
by
>> the AES shows people can't hear the difference between hi def (SACD or

>> DVD-A) or cd quality (44.1x16) audio. The test group included men,
>> women, audiophiles and audio professionals. They used a variety of high

>> end equipment and a variety of program material including audiophile
>> material from Chesky, Telarc, etc.
>>
>> A precis of the study is available at
>> http://www.aes.org/e-lib/browse.cfm?elib=14195
>
>--
>Chris Ludwig
>
>ADK Pro Audio
>(859) 635-5762
>www.adkproaudio.com
>chrisl@adkproaudio.com

Subject: Re: AES article shows people can't hear the difference...
Posted by Cujjo on Tue, 08 Apr 2008 20:27:33 GMT
View Forum Message <> Reply to Message

On my old monitors I thought 16/44.1 actually sounded better..On the dyns..I
can hear a difference..but really only A/B testing..Could be the plugs are
better at 24 too though.

Chris Ludwig <chrisl@adkproaudio.com> wrote:
>heh
>
>
>Neil wrote:
>> I'm totally buying into the report... switching all my
>> gear over to 22.5k/8-bit.
>>

>> Look for all my hi-rez stuff on the "For Sale" section soon.
>>
>> :)
>>
>>
>> Chris Ludwig <chrisl@adkproaudio.com> wrote:
>>> Hi Bill,
>>> Can't wait to see the retarded opinions of these report on the Gear
sluts
>> forums.
>>> Chris
>>>
>>>
>>> Bill L wrote:
>>>> I read in the MIX Insider Audio feature that a recent study published
>> by
>>>> the AES shows people can't hear the difference between hi def (SACD
or
>>
>>>> DVD-A) or cd quality (44.1x16) audio. The test group included men,
>>>> women, audiophiles and audio professionals. They used a variety of high
>>
>>>> end equipment and a variety of program material including audiophile

>>>> material from Chesky, Telarc, etc.
>>>>
>>>> A precis of the study is available at
>>>> http://www.aes.org/e-lib/browse.cfm?elib=14195
>>> --
>>> Chris Ludwig
>>>
>>> ADK Pro Audio
>>> (859) 635-5762
>>> www.adkproaudio.com
>>> chrisl@adkproaudio.com
>>
>
>--
>Chris Ludwig
>
>ADK Pro Audio
>(859) 635-5762
>www.adkproaudio.com
>chrisl@adkproaudio.com

Subject: Re: AES article shows people can't hear the difference...

Posted by Sarah on Tue, 08 Apr 2008 20:56:30 GMT
View Forum Message <> Reply to Message

This shouldn't come as any surprise considering most people can't tell the
difference between iPod and CD. Not to mention, doesn't everyone run their
digital mixes through some kind of tube thing to add distortio . . . er,
sorry . . . warmth? :)

S

"Bill L" <bill@billlorentzen.com> wrote in message news:47fb7576@linux...
>I read in the MIX Insider Audio feature that a recent study published by
>the AES shows people can't hear the difference between hi def (SACD or
>DVD-A) or cd quality (44.1x16) audio. The test group included men, women,
>audiophiles and audio professionals. They used a variety of high end
>equipment and a variety of program material including audiophile material
>from Chesky, Telarc, etc.
>
> A precis of the study is available at
> http://www.aes.org/e-lib/browse.cfm?elib=14195

Subject: Re: AES article shows people can't hear the difference...
Posted by Bill L on Tue, 08 Apr 2008 21:40:29 GMT
View Forum Message <> Reply to Message

The interesting thing is the pro audio guys guessed right only 52.7% of
the time. Oddly, women, 10% of those tested, with their better extended
hearing, got just 37.5% right.

All of the 60 people tested were either pros or audiophiles or college
students in a well regarded recording program and all had their hearing
tested before the program began. There were 554 individual tests using
various setups. The final score was 49.82% correct guesses - not even 50%!

Sarah wrote:
> This shouldn't come as any surprise considering most people can't tell the
> difference between iPod and CD. Not to mention, doesn't everyone run their
> digital mixes through some kind of tube thing to add distortio . . . er,
> sorry . . . warmth? :)
>
> S
>
>
> "Bill L" <bill@billlorentzen.com> wrote in message news:47fb7576@linux...
>> I read in the MIX Insider Audio feature that a recent study published by
>> the AES shows people can't hear the difference between hi def (SACD or

>> DVD-A) or cd quality (44.1x16) audio. The test group included men, women,
>> audiophiles and audio professionals. They used a variety of high end
>> equipment and a variety of program material including audiophile material
>>from Chesky, Telarc, etc.
>> A precis of the study is available at
>> http://www.aes.org/e-lib/browse.cfm?elib=14195
>
>

Subject: Re: AES article shows people can't hear the difference...
Posted by erlilo on Wed, 09 Apr 2008 05:43:37 GMT
View Forum Message <> Reply to Message

....and you think you can get it sold when all knows the truth?;-)...

"Neil" <OIUOIU@OIU.com> skrev i en meddelelse news:47fbd414$1@linux...
>
> I'm totally buying into the report... switching all my
> gear over to 22.5k/8-bit.
>
> Look for all my hi-rez stuff on the "For Sale" section soon.
>
> :)
>

Subject: Re: AES article shows people can't hear the difference...
Posted by dc[3] on Wed, 09 Apr 2008 06:00:10 GMT
View Forum Message <> Reply to Message

I skimmed over that article. I'll try to take a look closer in the morning, but it looks really well done and should be fairly conclusive.

If anything, their testing method biased things against finding no difference because their switcher has active electronics in the signal path for gain makeup. That alone can be audible. So I think the results are pretty significant when the percentage getting the right answer is below a coin toss probability.

DC

Bill L <bill@billlorentzen.com> wrote:
>The interesting thing is the pro audio guys guessed right only 52.7% of

>the time. Oddly, women, 10% of those tested, with their better extended

>hearing, got just 37.5% right.
>
>All of the 60 people tested were either pros or audiophiles or college
>students in a well regarded recording program and all had their hearing

>tested before the program began. There were 554 individual tests using
>various setups. The final score was 49.82% correct guesses - not even 50%!
>
>Sarah wrote:
>> This shouldn't come as any surprise considering most people can't tell
the
>> difference between iPod and CD. Not to mention, doesn't everyone run
their
>> digital mixes through some kind of tube thing to add distortio . . . er,

>> sorry . . . warmth? :)
>>
>> S
>>
>>
>> "Bill L" <bill@billlorentzen.com> wrote in message news:47fb7576@linux...
>>> I read in the MIX Insider Audio feature that a recent study published
by
>>> the AES shows people can't hear the difference between hi def (SACD or

>>> DVD-A) or cd quality (44.1x16) audio. The test group included men, women,

>>> audiophiles and audio professionals. They used a variety of high end

>>> equipment and a variety of program material including audiophile material

>>>from Chesky, Telarc, etc.
>>> A precis of the study is available at
>>> http://www.aes.org/e-lib/browse.cfm?elib=14195
>>
>>

Subject: Re: AES article shows people can't hear the difference...
Posted by neil[1] on Wed, 09 Apr 2008 08:15:03 GMT
View Forum Message <> Reply to Message

If the result is below a coin-toss, as described, then it
absolutely HAD to be biased against hi rez... even if said bias
was inadvertent. Otherwise what that would have to mean is that
audio pros actually have WORSE hearing discernment than the
average person - which is pretty unlikely, I think we can all
agree.

22.5k/8-bit FOREVER!!!! lol

Neil

"DC" <dc@spammersinhell.com> wrote:
>
>I skimmed over that article. I'll try to take a look closer in the morning,
>but it looks really well done and should be fairly conclusive.
>
>If anything, their testing method biased things against finding no
>difference because their switcher has active electronics in the signal
>path for gain makeup. That alone can be audible. So I think the
>results are pretty significant when the percentage getting the right
>answer is below a coin toss probability.
>
>DC
>
>Bill L <bill@billlorentzen.com> wrote:
>>The interesting thing is the pro audio guys guessed right only 52.7% of
>
>>the time. Oddly, women, 10% of those tested, with their better extended
>
>>hearing, got just 37.5% right.
>>
>>All of the 60 people tested were either pros or audiophiles or college

>>students in a well regarded recording program and all had their hearing
>
>>tested before the program began. There were 554 individual tests using

>>various setups. The final score was 49.82% correct guesses - not even 50%!
>>
>>Sarah wrote:
>>> This shouldn't come as any surprise considering most people can't tell
>the
>>> difference between iPod and CD. Not to mention, doesn't everyone run
>their
>>> digital mixes through some kind of tube thing to add distortio . . .
er,
>
>>> sorry . . . warmth? :)
>>>
>>> S
>>>
>>>

>>> "Bill L" <bill@billlorentzen.com> wrote in message news:47fb7576@linux...
>>>> I read in the MIX Insider Audio feature that a recent study published
>by
>>>> the AES shows people can't hear the difference between hi def (SACD
or
>
>>>> DVD-A) or cd quality (44.1x16) audio. The test group included men, women,
>
>>>> audiophiles and audio professionals. They used a variety of high end
>
>>>> equipment and a variety of program material including audiophile material
>
>>>>from Chesky, Telarc, etc.
>>>> A precis of the study is available at
>>>> http://www.aes.org/e-lib/browse.cfm?elib=14195
>>>
>>>
>

Subject: Re: AES article shows people can't hear the difference...
Posted by rick on Wed, 09 Apr 2008 08:50:46 GMT
View Forum Message <> Reply to Message

thank god i can still tell the difference between a naked chic and a
clothed one...the naked one is obviously in the wrong house.

On Tue, 08 Apr 2008 12:55:12 -0400, Bill L <bill@billlorentzen.com>
wrote:

>Deaf? I can't hear you. "The Cymbals and the Damage Done"
>
>TCB wrote:
>> They probably forgot to burn the CDs at 2X speed using audiophile grade CD
>> blanks, so their methodology blows.
>>
>> I've been saying for a long time that 16 bit 44.1 done right sounds fantastic,
>> but I'm deaf so don't worry about me.
>>
>> TCB
>>
>> Bill L <bill@billlorentzen.com> wrote:
>>> I read in the MIX Insider Audio feature that a recent study published by
>>
>>> the AES shows people can't hear the difference between hi def (SACD or
>>> DVD-A) or cd quality (44.1x16) audio. The test group included men,
>>> women, audiophiles and audio professionals. They used a variety of high
>>

>>> end equipment and a variety of program material including audiophile
>>> material from Chesky, Telarc, etc.
>>>
>>> A precis of the study is available at
>>> http://www.aes.org/e-lib/browse.cfm?elib=14195
>>

Subject: Re: AES article shows people can't hear the difference...
Posted by TCB on Wed, 09 Apr 2008 14:09:57 GMT
View Forum Message <> Reply to Message

According to Bill the guesses were 49.82% correct, which in statistical terms
is a coin flip unless you do at least 20,000 tests or so.

TCB

"Neil" <IOUOIU@OIU.com> wrote:
>
>If the result is below a coin-toss, as described, then it
>absolutely HAD to be biased against hi rez... even if said bias
>was inadvertent. Otherwise what that would have to mean is that
>audio pros actually have WORSE hearing discernment than the
>average person - which is pretty unlikely, I think we can all
>agree.
>
>22.5k/8-bit FOREVER!!!! lol
>
>
>Neil
>
>
>"DC" <dc@spammersinhell.com> wrote:
>>
>>I skimmed over that article. I'll try to take a look closer in the morning,
>>but it looks really well done and should be fairly conclusive.
>>
>>If anything, their testing method biased things against finding no
>>difference because their switcher has active electronics in the signal
>>path for gain makeup. That alone can be audible. So I think the
>>results are pretty significant when the percentage getting the right
>>answer is below a coin toss probability.
>>
>>DC
>>
>>Bill L <bill@billlorentzen.com> wrote:
>>>The interesting thing is the pro audio guys guessed right only 52.7% of
>>

>>>the time. Oddly, women, 10% of those tested, with their better extended
>>
>>>hearing, got just 37.5% right.
>>>
>>>All of the 60 people tested were either pros or audiophiles or college
>
>>>students in a well regarded recording program and all had their hearing
>>
>>>tested before the program began. There were 554 individual tests using
>
>>>various setups. The final score was 49.82% correct guesses - not even
50%!
>>>
>>>Sarah wrote:
>>>> This shouldn't come as any surprise considering most people can't tell
>>the
>>>> difference between iPod and CD. Not to mention, doesn't everyone run
>>their
>>>> digital mixes through some kind of tube thing to add distortio . . .
>er,
>>
>>>> sorry . . . warmth? :)
>>>>
>>>> S
>>>>
>>>>
>>>> "Bill L" <bill@billlorentzen.com> wrote in message news:47fb7576@linux...
>>>>> I read in the MIX Insider Audio feature that a recent study published
>>by
>>>>> the AES shows people can't hear the difference between hi def (SACD
>or
>>
>>>>> DVD-A) or cd quality (44.1x16) audio. The test group included men,
women,
>>
>>>>> audiophiles and audio professionals. They used a variety of high end
>>
>>>>> equipment and a variety of program material including audiophile material
>>
>>>>>from Chesky, Telarc, etc.
>>>>> A precis of the study is available at
>>>>> http://www.aes.org/e-lib/browse.cfm?elib=14195
>>>>
>>>>
>>
>

Subject: Re: AES article shows people can't hear the difference...
Posted by DC on Wed, 09 Apr 2008 20:52:41 GMT
View Forum Message <> Reply to Message

Since they ran the "bottleneck" or 16/44 signal through active electronics for makeup gain, if anything, the lower res one should be heard and identified, even granting it equal sound quality. The fact that it came to a coin toss equality is very significant here.

I am going to get up to date on my AES journals and will have the piece to quote from shortly.

DC

"Neil" <IOUOIU@OIU.com> wrote:
>
>If the result is below a coin-toss, as described, then it
>absolutely HAD to be biased against hi rez... even if said bias
>was inadvertent. Otherwise what that would have to mean is that
>audio pros actually have WORSE hearing discernment than the
>average person - which is pretty unlikely, I think we can all
>agree.
>
>22.5k/8-bit FOREVER!!!! lol
>
>
>Neil
>
>
>"DC" <dc@spammersinhell.com> wrote:
>>
>>I skimmed over that article. I'll try to take a look closer in the morning,
>>but it looks really well done and should be fairly conclusive.
>>
>>If anything, their testing method biased things against finding no
>>difference because their switcher has active electronics in the signal
>>path for gain makeup. That alone can be audible. So I think the
>>results are pretty significant when the percentage getting the right
>>answer is below a coin toss probability.
>>
>>DC
>>
>>Bill L <bill@billlorentzen.com> wrote:
>>>The interesting thing is the pro audio guys guessed right only 52.7% of
>>
>>>the time. Oddly, women, 10% of those tested, with their better extended
>>
>>>hearing, got just 37.5% right.

>>>
>>>All of the 60 people tested were either pros or audiophiles or college
>
>>>students in a well regarded recording program and all had their hearing
>>
>>>tested before the program began. There were 554 individual tests using
>
>>>various setups. The final score was 49.82% correct guesses - not even
50%!
>>>
>>>Sarah wrote:
>>>> This shouldn't come as any surprise considering most people can't tell
>>the
>>>> difference between iPod and CD. Not to mention, doesn't everyone run
>>their
>>>> digital mixes through some kind of tube thing to add distortio . . .
>er,
>>
>>>> sorry . . . warmth? :)
>>>>
>>>> S
>>>>
>>>>
>>>> "Bill L" <bill@billlorentzen.com> wrote in message news:47fb7576@linux...
>>>>> I read in the MIX Insider Audio feature that a recent study published
>>by
>>>>> the AES shows people can't hear the difference between hi def (SACD
>or
>>
>>>>> DVD-A) or cd quality (44.1x16) audio. The test group included men,
women,
>>
>>>>> audiophiles and audio professionals. They used a variety of high end
>>
>>>>> equipment and a variety of program material including audiophile material
>>
>>>>>from Chesky, Telarc, etc.
>>>>> A precis of the study is available at
>>>>> http://www.aes.org/e-lib/browse.cfm?elib=14195
>>>>
>>>>
>>
>

Subject: Re: AES article shows people can't hear the difference...
Posted by Kim on Thu, 10 Apr 2008 04:46:20 GMT

I think the coin toss stat, statistically, almost completely and absolutely confirms that there was no difference. As pointed out, the very small deviation from 50% to 49.82% is irrelevant given the sample size. If you tossed a coin 550 times you would usually see the same variation. To get precisely 50% is less likely than a small variation as seen.

If there was any benefit to either sound for any reason then it's highly unlikely you'd see a figure so close to 50%. Once again, the chances of them having added a piece of gear to just one signal chain which countered the advantages of higher resolutions with absolute statistical mathematical precision is far far less likely than the idea that people simply couldn't tell.

It seems quite plausible to me that the main reason that higher resolutions have been thought to sound better comes down to:

(*) You SHOULD mix at higher res than the master.

(*) Higher res (usually newer) converters are more likely to sound better than lower res ones.

(*) Newer higher res convertors are also more likely to be tested at and sound better at higher resolutions because that is what they assume most users will use.

These two factors in addition to psychological predisposition would come close to explaining the generally accepted belief that higher res sounds better, to my mind at least.

All I can say is that if there is any difference to humans, it seems to be amazingly small.

I would like to see similar tests including:

(*) Younger testers, perhaps early teens, young enough to hear better and old enough to communicate well.

(*) WAV vs MP3's / WMA / Ogg / etc. at different sample rates, and broken up into general public vs audio pros.

We all know that low res MP3's show a lot of artifacts, but I'd be very interested to know the point where the public and also audiophiles can discern a difference.

Very interesting stuff.

Cheers,
Kim.

"DC" <dc@spammersinhires.com> wrote:
>
>Since they ran the "bottleneck" or 16/44 signal through active
>electronics for makeup gain, if anything, the lower res one
>should be heard and identified, even granting it equal sound
>quality. The fact that it came to a coin toss equality is very
>significant here.
>
>I am going to get up to date on my AES journals and will have
>the piece to quote from shortly.
>
>DC
>
>"Neil" <IOUOIU@OIU.com> wrote:
>>
>>If the result is below a coin-toss, as described, then it
>>absolutely HAD to be biased against hi rez... even if said bias
>>was inadvertent. Otherwise what that would have to mean is that
>>audio pros actually have WORSE hearing discernment than the
>>average person - which is pretty unlikely, I think we can all
>>agree.
>>
>>22.5k/8-bit FOREVER!!!! lol
>>
>>
>>Neil
>>
>>
>>"DC" <dc@spammersinhell.com> wrote:
>>>
>>>I skimmed over that article. I'll try to take a look closer in the morning,
>>>but it looks really well done and should be fairly conclusive.
>>>
>>>If anything, their testing method biased things against finding no
>>>difference because their switcher has active electronics in the signal
>>>path for gain makeup. That alone can be audible. So I think the
>>>results are pretty significant when the percentage getting the right
>>>answer is below a coin toss probability.
>>>
>>>DC
>>>
>>>Bill L <bill@billlorentzen.com> wrote:
>>>>The interesting thing is the pro audio guys guessed right only 52.7%
of
>>>
>>>>the time. Oddly, women, 10% of those tested, with their better extended
>>>

>>>>hearing, got just 37.5% right.
>>>>
>>>>All of the 60 people tested were either pros or audiophiles or college
>>
>>>>students in a well regarded recording program and all had their hearing
>>>
>>>>tested before the program began. There were 554 individual tests using
>>
>>>>various setups. The final score was 49.82% correct guesses - not even
>50%!
>>>>
>>>>Sarah wrote:
>>>>> This shouldn't come as any surprise considering most people can't tell
>>>the
>>>>> difference between iPod and CD. Not to mention, doesn't everyone run
>>>their
>>>>> digital mixes through some kind of tube thing to add distortio . .

Subject: Re: AES article shows people can't hear the difference...
Posted by Bill L on Thu, 10 Apr 2008 12:06:34 GMT
View Forum Message <> Reply to Message

But, seriously, who cares what early teens think. They are among the
least discriminating listeners in the marketplace as to sound quality.
So it becomes fairly irrelevant.

Kim wrote:
> I think the coin toss stat, statistically, almost completely and absolutely
> confirms that there was no difference. As pointed out, the very small deviation
> from 50% to 49.82% is irrelevant given the sample size. If you tossed a coin
> 550 times you would usually see the same variation. To get precisely 50%
> is less likely than a small variation as seen.
>
> If there was any benefit to either sound for any reason then it's highly
> unlikely you'd see a figure so close to 50%. Once again, the chances of them
> having added a piece of gear to just one signal chain which countered the
> advantages of higher resolutions with absolute statistical mathematical
> precision is far far less likely than the idea that people simply couldn't
> tell.
>
> It seems quite plausible to me that the main reason that higher resolutions
> have been thought to sound better comes down to:
>
> (*) You SHOULD mix at higher res than the master.
>
> (*) Higher res (usually newer) converters are more likely to sound better
> than lower res ones.

>
> (*) Newer higher res convertors are also more likely to be tested at and
> sound better at higher resolutions because that is what they assume most
> users will use.
>
> These two factors in addition to psychological predisposition would come
> close to explaining the generally accepted belief that higher res sounds
> better, to my mind at least.
>
> All I can say is that if there is any difference to humans, it seems to be
> amazingly small.
>
> I would like to see similar tests including:
>
> (*) Younger testers, perhaps early teens, young enough to hear better and
> old enough to communicate well.
>
> (*) WAV vs MP3's / WMA / Ogg / etc. at different sample rates, and broken
> up into general public vs audio pros.
>
> We all know that low res MP3's show a lot of artifacts, but I'd be very interested
> to know the point where the public and also audiophiles can discern a difference.
>
> Very interesting stuff.
>
> Cheers,
> Kim.
>
> "DC" <dc@spammersinhires.com> wrote:
>> Since they ran the "bottleneck" or 16/44 signal through active
>> electronics for makeup gain, if anything, the lower res one
>> should be heard and identified, even granting it equal sound
>> quality. The fact that it came to a coin toss equality is very
>> significant here.
>>
>> I am going to get up to date on my AES journals and will have
>> the piece to quote from shortly.
>>
>> DC
>>
>> "Neil" <IOUOIU@OIU.com> wrote:
>>> If the result is below a coin-toss, as described, then it
>>> absolutely HAD to be biased against hi rez... even if said bias
>>> was inadvertent. Otherwise what that would have to mean is that
>>> audio pros actually have WORSE hearing discernment than the
>>> average person - which is pretty unlikely, I think we can all
>>> agree.
>>>

>>> 22.5k/8-bit FOREVER!!!! lol
>>>
>>>
>>> Neil
>>>
>>>
>>> "DC" <dc@spammersinhell.com> wrote:
>>>> I skimmed over that article. I'll try to take a look closer in the morning,
>>>> but it looks really well done and should be fairly conclusive.
>>>>
>>>> If anything, their testing method biased things against finding no
>>>> difference because their switcher has active electronics in the signal
>>>> path for gain makeup. That alone can be audible. So I think the
>>>> results are pretty significant when the percentage getting the right
>>>> answer is below a coin toss probability.
>>>>
>>>> DC
>>>>
>>>> Bill L <bill@billlorentzen.com> wrote:
>>>>> The interesting thing is the pro audio guys guessed right only 52.7%
> of
>>>>> the time. Oddly, women, 10% of those tested, with their better extended
>>>>> hearing, got just 37.5% right.
>>>>>
>>>>> All of the 60 people tested were either pros or audiophiles or college
>>>>> students in a well regarded recording program and all had their hearing
>>>>> tested before the program began. There were 554 individual tests using
>>>>> various setups. The final score was 49.82% correct guesses - not even
>> 50%!
>>>>> Sarah wrote:
>>>>>> This shouldn't come as any surprise considering most people can't tell
>>>> the
>>>>>> difference between iPod and CD. Not to mention, doesn't everyone run
>>>> their
>>>>>> digital mixes through some kind of tube thing to add distortio . .

Subject: Re: AES article shows people can't hear the difference...
Posted by dc[3] on Thu, 10 Apr 2008 23:05:45 GMT
View Forum Message <> Reply to Message

"Kim" <hiddensounds@hotmail.com> wrote:

>It seems quite plausible to me that the main reason that higher resolutions
>have been thought to sound better comes down to:
>
>(*) You SHOULD mix at higher res than the master.
>

>(*) Higher res (usually newer) converters are more likely to sound better
>than lower res ones.
>
>(*) Newer higher res convertors are also more likely to be tested at and
>sound better at higher resolutions because that is what they assume most
>users will use.
>
>These two factors in addition to psychological predisposition would come
>close to explaining the generally accepted belief that higher res sounds
>better, to my mind at least.
>
>All I can say is that if there is any difference to humans, it seems to
be
>amazingly small.

Here's a very pertinent quote from the article:

Though our tests failed to substantiate the claimed advantages
of high-resolution encoding for two-channel audio,
one trend became obvious very quickly and held up
throughout our testing: virtually all of the SACD and

to CD quality and blind-tested for audible differences, we
would have been tempted to ascribe this sonic superiority
to the recording processes used to make them.
Plausible reasons for the remarkable sound quality of
these recordings emerged in discussions with some of the
engineers currently working on such projects. This portion
of the business is a niche market in which the end users are
preselected, both for their aural acuity and for their willingness
to buy expensive equipment, set it up correctly,
and listen carefully in a low-noise environment.
Partly because these recordings have not captured a
large portion of the consumer market for music, engineers
and producers are being given the freedom to produce
recordings that sound as good as they can make them,
without having to compress or equalize the signal to suit
lesser systems and casual listening conditions. These recordings
seem to have been made with great care and
manifest affection, by engineers trying to please themselves
and their peers. They sound like it, label after label.
High-resolution audio discs do not have the overwhelming
majority of the program material crammed into the top 20
(or even 10) dB of the available dynamic range, as so
many CDs today do.

Our test results indicate that all of these recordings
could be released on conventional CDs with no audible
difference. They would not, however, find such a reliable
conduit to the homes of those with the systems and listening
habits to appreciate them. The secret, for two-channel
recordings at least, seems to lie not in the high-bit recording
---

Interesting huh?

DC

Subject: Re: AES article shows people can't hear the difference...
Posted by Kim on Fri, 11 Apr 2008 02:29:46 GMT
View Forum Message <> Reply to Message

hehe. Couldn't agree more, but it's more a curiosity thing than anything.

It's also because they are quite probably amongst the MOST likely to brag
about how good DVD-A sounds, hence it's handy to know whether they can actually
hear any difference just in case such an argument occurs, which I'm sure
it will at some point.

Cheers,
Kim.

Bill L <bill@billlorentzen.com> wrote:
>But, seriously, who cares what early teens think. They are among the
>least discriminating listeners in the marketplace as to sound quality.
>So it becomes fairly irrelevant.
>
>Kim wrote:
>> I think the coin toss stat, statistically, almost completely and absolutely
>> confirms that there was no difference. As pointed out, the very small
deviation
>> from 50% to 49.82% is irrelevant given the sample size. If you tossed
a coin
>> 550 times you would usually see the same variation. To get precisely 50%
>> is less likely than a small variation as seen.
>>
>> If there was any benefit to either sound for any reason then it's highly
>> unlikely you'd see a figure so close to 50%. Once again, the chances of
them
>> having added a piece of gear to just one signal chain which countered
the
>> advantages of higher resolutions with absolute statistical mathematical

>> precision is far far less likely than the idea that people simply couldn't
>> tell.
>>
>> It seems quite plausible to me that the main reason that higher resolutions
>> have been thought to sound better comes down to:
>>
>> (*) You SHOULD mix at higher res than the master.
>>
>> (*) Higher res (usually newer) converters are more likely to sound better
>> than lower res ones.
>>
>> (*) Newer higher res convertors are also more likely to be tested at and
>> sound better at higher resolutions because that is what they assume most
>> users will use.
>>
>> These two factors in addition to psychological predisposition would come
>> close to explaining the generally accepted belief that higher res sounds
>> better, to my mind at least.
>>
>> All I can say is that if there is any difference to humans, it seems to
be
>> amazingly small.
>>
>> I would like to see similar tests including:
>>
>> (*) Younger testers, perhaps early teens, young enough to hear better
and
>> old enough to communicate well.
>>
>> (*) WAV vs MP3's / WMA / Ogg / etc. at different sample rates, and broken
>> up into general public vs audio pros.
>>
>> We all know that low res MP3's show a lot of artifacts, but I'd be very
interested
>> to know the point where the public and also audiophiles can discern a
difference.
>>
>> Very interesting stuff.
>>
>> Cheers,
>> Kim.
>>
>> "DC" <dc@spammersinhires.com> wrote:
>>> Since they ran the "bottleneck" or 16/44 signal through active
>>> electronics for makeup gain, if anything, the lower res one
>>> should be heard and identified, even granting it equal sound
>>> quality. The fact that it came to a coin toss equality is very
>>> significant here.

>>>
>>> I am going to get up to date on my AES journals and will have
>>> the piece to quote from shortly.
>>>
>>> DC
>>>
>>> "Neil" <IOUOIU@OIU.com> wrote:
>>>> If the result is below a coin-toss, as described, then it
>>>> absolutely HAD to be biased against hi rez... even if said bias
>>>> was inadvertent. Otherwise what that would have to mean is that
>>>> audio pros actually have WORSE hearing discernment than the
>>>> average person - which is pretty unlikely, I think we can all
>>>> agree.
>>>>
>>>> 22.5k/8-bit FOREVER!!!! lol
>>>>
>>>>
>>>> Neil
>>>>
>>>>
>>>> "DC" <dc@spammersinhell.com> wrote:
>>>>> I skimmed over that article. I'll try to take a look closer in the
morning,
>>>>> but it looks really well done and should be fairly conclusive.
>>>>>
>>>>> If anything, their testing method biased things against finding no
>>>>> difference because their switcher has active electronics in the signal
>>>>> path for gain makeup. That alone can be audible. So I think the
>>>>> results are pretty significant when the percentage getting the right
>>>>> answer is below a coin toss probability.
>>>>>
>>>>> DC
>>>>>
>>>>> Bill L <bill@billlorentzen.com> wrote:
>>>>>> The interesting thing is the pro audio guys guessed right only 52.7%
>> of
>>>>>> the time. Oddly, women, 10% of those tested, with their better extended
>>>>>> hearing, got just 37.5% right.
>>>>>>
>>>>>> All of the 60 people tested were either pros or audiophiles or college
>>>>>> students in a well regarded recording program and all had their hearing
>>>>>> tested before the program began. There were 554 individual tests using
>>>>>> various setups. The final score was 49.82% correct guesses - not even
>>> 50%!
>>>>>> Sarah wrote:
>>>>>>> This shouldn't come as any surprise considering most people can't
tell
>>>>> the

>>>>>>> difference between iPod and CD. Not to mention, doesn't everyone
run
>>>>> their
>>>>>>> digital mixes through some kind of tube thing to add distortio .

Subject: Re: AES article shows people can't hear the difference...
Posted by Kim on Fri, 11 Apr 2008 02:43:43 GMT
View Forum Message <> Reply to Message

"DC" <dc@spammersinhell.com> wrote:
>Our test results indicate that all of these recordings
>could be released on conventional CDs with no audible
>difference. They would not, however, find such a reliable
>conduit to the homes of those with the systems and listening
>habits to appreciate them. The secret, for two-channel
>recordings at least, seems to lie not in the high-bit recording
>----------
>
>Interesting huh?
>
>DC

Very much so, especially considering they were using proper audiophile quality
recordings which presumably would be more likely show up any issues.

Very very interesting. Amazing that these tests weren't done years ago.

Cheers,
Kim.

Subject: Re: AES article shows people can't hear the difference...
Posted by Bill L on Fri, 11 Apr 2008 18:15:28 GMT
View Forum Message <> Reply to Message

I guess the question still unanswered is how important is recording
tracks at hi res, or is 96k+ also unnecessary?

Kim wrote:
> "DC" <dc@spammersinhell.com> wrote:
>> Our test results indicate that all of these recordings
>> could be released on conventional CDs with no audible
>> difference. They would not, however, find such a reliable
>> conduit to the homes of those with the systems and listening
>> habits to appreciate them. The secret, for two-channel
>> recordings at least, seems to lie not in the high-bit recording

>> ----------
>>
>> Interesting huh?
>>
>> DC
>
> Very much so, especially considering they were using proper audiophile quality
> recordings which presumably would be more likely show up any issues.
>
> Very very interesting. Amazing that these tests weren't done years ago.
>
> Cheers,
> Kim.

Subject: Re: AES article shows people can't hear the difference...
Posted by Kim on Sat, 12 Apr 2008 01:42:17 GMT
View Forum Message <> Reply to Message

Bill L <bill@billlorentzen.com> wrote:
>I guess the question still unanswered is how important is recording
>tracks at hi res, or is 96k+ also unnecessary?

Well EQ processing, even if under 20k, processes across the timeline, hence it may potentially be more accurate with more data. I don't know enough about the maths involved to be accurate in my guess though, so I couldn't say for sure either way. I certainly see potential there though for better results at the higher sample rate.

24bit and above was bordering on unnecessary in the first place for general purpose band recording. Even at 16 bits, if you sum the tracks at zero, you end up with another bit of resolution above the 16 every time you double the tracks. So 2 tracks = 17 bits. 4 Tracks needs 18 bits, and 8 tracks needs 19 bits to store the result unaltered without resolution loss. Of course if, say, your song starts with a solo acoustic guitar part, and you plan to apply gain (even through compression) then you'll start to get past the 16 bit resolution of the source track. Assuming your source track was recorded relatively hot though it's unlikely anybody listening in a normal environment will notice that you've dropped to 15 or 14 bit resolution for a short time, especially if you have a full resolution reverb applied.

But we'd need somebody with a good understanding of eq plugin operation to answer the high sample rate question. Potentially the answer might well be different for different eq designs.

Cheers,
Kim.

>
>Kim wrote:
>> "DC" <dc@spammersinhell.com> wrote:
>>> Our test results indicate that all of these recordings
>>> could be released on conventional CDs with no audible
>>> difference. They would not, however, find such a reliable
>>> conduit to the homes of those with the systems and listening
>>> habits to appreciate them. The secret, for two-channel
>>> recordings at least, seems to lie not in the high-bit recording
>>> ----------
>>>
>>> Interesting huh?
>>>
>>> DC
>>
>> Very much so, especially considering they were using proper audiophile
quality
>> recordings which presumably would be more likely show up any issues.
>>
>> Very very interesting. Amazing that these tests weren't done years ago.
>>
>> Cheers,
>> Kim.
