Subject: Placing Microphone Over A Musical Instrument
Posted by Lancelot on Wed, 02 Feb 2011 07:32:40 GMT
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Why is it that the sound coming from the musical instrument has a different quality when a microphone is place near it? In our Christmas party last December, a friend played the violin and it sounds better without the microphone placed beside it.

Subject: Re: Placing Microphone Over A Musical Instrument
Posted by Adveser on Wed, 02 Feb 2011 08:19:17 GMT
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It depends on the microphone. If it can get you a flat, 20-40Khz response, I don't know what the problem is, but usually a mic compresses the audio due to it's bandwidth limitations.

Likely they had no idea which microphone to buy and got something that was not flattering to the sound.

Subject: Re: Placing Microphone Over A Musical Instrument
Posted by Lancelot on Fri, 04 Feb 2011 05:53:27 GMT
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I forgot to mention about the speaker they used for that event. It was a very old one already. I'm not sure whether it is the microphone, the speaker, or even the amplifier that they used that made the sound terrible.

Subject: Re: Placing Microphone Over A Musical Instrument
Posted by Adveser on Fri, 04 Feb 2011 18:53:00 GMT
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I think the problem with capturing any audio event is getting 10-20Khz recorded accurately, but just as important is 20-40Khz, we can not hear those by themselves, but when they are created as a function of a single "sound" they become critical.

Naturally, most mics start rolling off above 3.5Khz, especially vocal mics. This is exactly why 10K dollar condenser mics exist. They will make it sound real.

Subject: Re: Placing Microphone Over A Musical Instrument
Posted by audioaudio90 on Sat, 05 Feb 2011 01:41:48 GMT
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Microphone choice is one of the first important decisions to make when recording, as well as

placement.

Of course, bad amps and speakers would definitely effect the sound quality too.

Subject: Re: Placing Microphone Over A Musical Instrument
Posted by Lancelot on Sun, 13 Feb 2011 12:27:44 GMT
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Adveser wrote on Fri, 04 February 2011 12:53Naturally, most mics start rolling off above 3.5Khz, especially vocal mics. This is exactly why 10K dollar condenser mics exist. They will make it sound real.

You mean $10,000 for just a mic? I might create my own recording studio if ever we will use that kind of mic. Can the amp correct the regular mic that we have? I might have to do this on the next event that we will use this audio setup.

Subject: Re: Placing Microphone Over A Musical Instrument
Posted by Adveser on Mon, 14 Feb 2011 02:45:59 GMT
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There are a lot of condenser mics, a $10K one is an extreme example.

They make great stuff for 500-1000 bucks in condenser mics.

There is really nothing you can do to a dynamic mic to make it respond like a condenser mic.

Dynamic mics are for percussion and live sound really. They do well with guitars and bass because of those instruments' narrow bandwidth, so that's not out of the question.

Subject: Re: Placing Microphone Over A Musical Instrument
Posted by Bill Wassilak on Fri, 18 Feb 2011 18:35:28 GMT
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I agree with Adveser somewhat, but you said the majic words right here:

"I forgot to mention about the speaker they used for that event. It was a very old one already."

Depending on how old the speaker system is, some of the 'old school' midrange drivers started rolling off 6.5khz. It wouldn't matter what kind of high dollar(full freq. range mic)you used, like Adverser said. The speaker system would not be able to reproduce it no matter what mic placement. That's why the violin probably sounds like crap when they mic it.