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Power Macintosh: Audio Dropout at Low Volumes (3/95)

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TOPIC -----

I've noticed that when playing classical CD's through my Power Macintosh that the sound drops out in the quieter sections of the music.

I have not previously encountered this on my other CDs (which are typically pop, jazz, folk, and rock). But I suspect that the dynamic range of classical CDs is just much wider than your typical popular music CD, resulting in the internal speaker not being able to playback very low volume sounds.

DISCUSSION -----

The audio amplification used by all three Power Macintosh computers is slightly lower than the amplification of previous computer models. This is due to changes in the chip used to amplify the audio signals.

I used a Power Macintosh to play a classical CD that contained very soft passages. I was able to very faintly hear the music coming from the internal speaker. I would not consider it to be listenable, but it was audible. I then listened to the same passage using the 14" AV display. The music was audible and at a slightly louder level than the internal speaker of the Power Macintosh.

I then used a set of AppleDesign Powered (ADP) Speakers connected to a Power Macintosh. Using the 1/8 inch mini jack input on the back of the ADP Speakers that has the Mac Icon next to it, the audio would cut in and out. This is caused by the noise gate circuitry that is connected to that input. The noise gate circuitry is meant to disable sound output if the incoming signal drops below a certain voltage. During the very soft passages the input to the speakers drops below that voltage.

With other computers, the workaround was to turn the volume all the way up in the Sound control panel and then use the volume control on the front of the speakers to control the volume. With the Power Macintosh computers, it has been found that during soft passages the output could still be below the threshold voltage of the noise gate, even with the volume in the Sound control panel

turned all the way up.

The work around for Power Macintosh computers is to use the CD input on the back of the ADP Speakers. The customer would need to use a cable that has a 1/8" (3.5mm) mini-plug to two RCA phono jacks. The CD input on the ADP Speakers doesn't utilize the noise gate circuitry.

This has been reported to the Power Macintosh engineering team. Hopefully they will make changes to the amplification system in future Power Macintosh models.

Article Change History:

17 Mar 1995 - Corrected wording of AppleDesign Speakers.

Support Information Services

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