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Subject: Screen refresh rate?

Posted by [Viking](#) on Thu, 25 Jan 2007 20:58:04 GMT

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Ok in the task bar there is a Nvidia icon and when I right click it and go to "Screen Refresh Rate" it says I can choose 60Hertz 70Hertz 72Hertz or 75Hertz? It is on 60 but is there any advantages to put it on 75? Whats it do?

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Subject: Re: Screen refresh rate?

Posted by [Jonty](#) on Thu, 25 Jan 2007 21:10:45 GMT

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If you have an LCD monitor, chances are its optimum refresh rate is 60Hz, I know mine is.

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Subject: Re: Screen refresh rate?

Posted by [Viking](#) on Thu, 25 Jan 2007 21:13:52 GMT

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Ok than I got LCD.

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Subject: Re: Screen refresh rate?

Posted by [cheesesoda](#) on Thu, 25 Jan 2007 21:18:31 GMT

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Jonty wrote on Thu, 25 January 2007 16:10 If you have an LCD monitor, chances are its optimum refresh rate is 60Hz, I know mine is.

My LCD lags if my refresh rate is at 60MHz. I set mine to whatever is the highest it can go. It's either 75MHz or 70MHz.

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Subject: Re: Screen refresh rate?

Posted by [Jonty](#) on Thu, 25 Jan 2007 21:26:10 GMT

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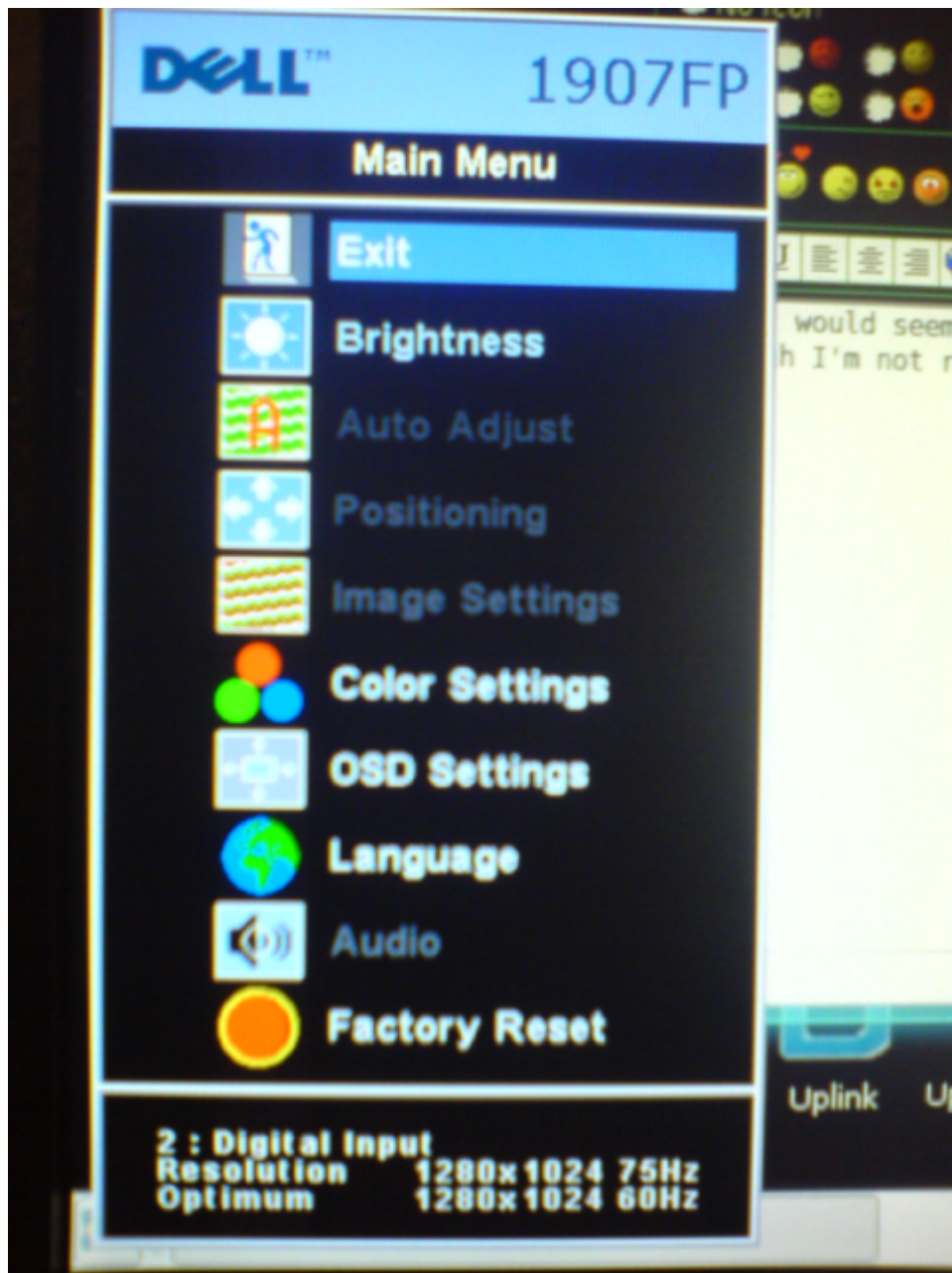
Yes, it would seem I currently have my refresh rate at 75Hz, although I'm not really sure why...

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## File Attachments

1) [screenrefresh.png](#), downloaded 652 times

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Subject: Re: Screen refresh rate?

Posted by [icedog90](#) on Thu, 25 Jan 2007 21:28:51 GMT

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If you have an LCD then don't even bother, leave it at the default. LCDs refresh a totally different way than CRTs and it's best to use the default rate it's normally at.

Now if you had a CRT, then you'd want the highest refresh rate your monitor can handle, unless the flickering of 60hz doesn't bother you. It bothers the hell out of me, so I put mine at 85hz.

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Subject: Re: Screen refresh rate?  
Posted by [cheesesoda](#) on Thu, 25 Jan 2007 21:45:02 GMT  
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icedog90 wrote on Thu, 25 January 2007 16:28If you have an LCD then don't even bother, leave it at the default. LCDs refresh a totally different way than CRTs and it's best to use the default rate it's normally at.

Now if you had a CRT, then you'd want the highest refresh rate your monitor can handle, unless the flickering of 60hz doesn't bother you. It bothers the hell out of me, so I put mine at 85hz. Yeah, but the odd thing about mine is that scrolling lags and so does the minimizing of windows. You see trails. That changes when I go from 60MHz to 70MHz.

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Subject: Re: Screen refresh rate?  
Posted by [JeepRubi](#) on Thu, 25 Jan 2007 22:00:59 GMT  
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I cant stand my monitor anywhere near 85hz, mine is set at 100

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Subject: Re: Screen refresh rate?  
Posted by [icedog90](#) on Thu, 25 Jan 2007 22:02:37 GMT  
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j\_ball430 wrote on Thu, 25 January 2007 13:45  
Yeah, but the odd thing about mine is that scrolling lags and so does the minimizing of windows. You see trails. That changes when I go from 60MHz to 70MHz.

That's probably because your monitor is supposed to be set at that. Sometimes the default for LCD monitors is not 60hz, but 70hz or higher.

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Subject: Re: Screen refresh rate?  
Posted by [Caveman](#) on Thu, 25 Jan 2007 22:04:36 GMT  
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Jeep Rubi wrote on Thu, 25 January 2007 15:00I cant stand my monitor anywhere near 85hz, mine is set at 100

And can you explain to us why you need to have it @ 100Hz and not 85. Your eyes cannot tell the difference between 85 and 100Hz.

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Subject: Re: Screen refresh rate?  
Posted by [Zion](#) on Thu, 25 Jan 2007 22:32:11 GMT

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I need to have mine at 60Hz (CRT) because any higher and i get interference from the LCT right next to it.

You guys do know that raising the refresh rate over it's factory defaults (or more than it's supposed to handle) can permanently damage your hardware?

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Subject: Re: Screen refresh rate?

Posted by [JeepRubi](#) on Thu, 25 Jan 2007 22:35:12 GMT

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Caveman wrote on Thu, 25 January 2007 22:04 Jeep Rubi wrote on Thu, 25 January 2007 15:00  
cant stand my monitor anywhere near 85hz, mine is set at 100

And can you explain to us why you need to have it @ 100Hz and not 85. Your eyes cannot tell the difference between 85 and 100Hz.

If im looking at something else in the room, and i see it in my peripheral vision and the screen is white, I see it flickering.

Would it being a 19" opposed to a 17" or a 15" make a difference?

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Subject: Re: Screen refresh rate?

Posted by [icedog90](#) on Thu, 25 Jan 2007 23:07:36 GMT

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Caveman wrote on Thu, 25 January 2007 14:04

And can you explain to us why you need to have it @ 100Hz and not 85. Your eyes cannot tell the difference between 85 and 100Hz.

Yes you can. I can actually see 85hz, but not enough to where it bothers me. I can only notice it at night and mostly if I look at it in my peripheral vision, like Jeep Rubi said.

Merovingian wrote on Thu, 25 January 2007 14:32 You guys do know that raising the refresh rate over it's factory defaults (or more than it's supposed to handle) can permanently damage your hardware?

There are no defaults for CRTs. Usually a store states the refresh rates it can handle, and as long as you install your video card drivers it shouldn't let you go higher than it can handle.

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Subject: Re: Screen refresh rate?

Posted by [Zion](#) on Thu, 25 Jan 2007 23:45:31 GMT

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Oh well, i have a "Default" settings in Ultramon so...

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Subject: Re: Screen refresh rate?

Posted by [Dave Anderson](#) on Thu, 25 Jan 2007 23:48:35 GMT

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That is just a setting that the manufacturer put their so you could revert back to the default settings the monitor was at when it was manufactured.

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Subject: Re: Screen refresh rate?

Posted by [Viking](#) on Fri, 26 Jan 2007 02:29:19 GMT

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The setting is on the computer not the monitor.

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Subject: Re: Screen refresh rate?

Posted by [Tunaman](#) on Fri, 26 Jan 2007 20:34:15 GMT

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Yes, you can change monitor settings through your computer...

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Subject: Re: Screen refresh rate?

Posted by [trooprm02](#) on Fri, 26 Jan 2007 21:31:32 GMT

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Questions:

- 1)how can I check my CRT's max refresh rate (trial and error only?)
  - 2)will I see an advantage in fps ingame if I increase refresh rate?
- 

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Subject: Re: Screen refresh rate?

Posted by [reborn](#) on Fri, 26 Jan 2007 21:42:29 GMT

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If you are running windows xp then go to your controll panel, then go to the display settings, click on the settings tab, click on the advanced button. click on the monitor tab. select the box so that it doesnt show modes that the monitor can't display. Then select the drop down box to see what you monitor can go up to.

Failing that, look at the back of you monitor, there will most likely be a silver sticker on it telling

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you the max refresh rate, or it might be branded into the plastic case on the back.

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Subject: Re: Screen refresh rate?

Posted by [trooprm02](#) on Fri, 26 Jan 2007 21:46:46 GMT

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Ok well I dont have XP on my CRT comp, but I got the max rate in the manual, so what about #2?

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Subject: Re: Screen refresh rate?

Posted by [reborn](#) on Fri, 26 Jan 2007 22:13:33 GMT

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No, your FPS will not increase from increasing your refresh rate.

Your increased refresh rate will increase the average amount of times each frame per second is illuminated, not the FPS itself.

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Subject: Re: Screen refresh rate?

Posted by [Dave Anderson](#) on Fri, 26 Jan 2007 22:27:37 GMT

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EDIT: //...

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Subject: Re: Screen refresh rate?

Posted by [trooprm02](#) on Sat, 27 Jan 2007 02:01:44 GMT

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How come then I remember Crimson posting some Nvidia tool design to increase the refresh rate on nvidia cards which I think she did say would increase fps

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Subject: Re: Screen refresh rate?

Posted by [reborn](#) on Sat, 27 Jan 2007 15:58:06 GMT

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Your FPS is limited to your refresh rate, so if you have a refresh rate of say 50hz then you will never experiance a FPS higher then 50, because the monitor wouldn't be able to display the frames that quickly.

The card will still be running a FPS higher then 50, but the monitor just wouldnt be able to keep up.

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If your nvidia card was capable of 60 FPS but your monitor was so shit it couldn't go above 50hz, then yes, you would notice an FPS increase by increasing the refresh rate. But technically you would of already be running at a higher FPS, just not able to view it.

But it doesn't actually increase the FPS, it stays the exact same, just the monitor then displays them properly.

It is unlikely that you have a card capable of a higher FPS then your monitors refresh rate.

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Subject: Re: Screen refresh rate?

Posted by [Zion](#) on Sat, 27 Jan 2007 20:06:01 GMT

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I got my 6200 to get to 100 FPS @ 60Hz (Fraps Frame Counter) in Ren once by turning off AA/AF.

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Subject: Re: Screen refresh rate?

Posted by [Dave Anderson](#) on Sat, 27 Jan 2007 22:51:59 GMT

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Quote:It is unlikely that you have a card capable of a higher FPS then your monitors refresh rate.

That is if you live under a rock. I play Renegade with 4xAA and 8xAF and get 120+ FPS.

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Subject: Re: Screen refresh rate?

Posted by [icedog90](#) on Sun, 28 Jan 2007 02:57:38 GMT

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I second that. I have a Geforce 6800 and many games run higher than my monitor's refresh rate. Vsync is what determines if your FPS is capped by your refresh rate. Most games have it off by default, but usually I like to have it on because tearing bugs the crap out of me.

The conclusion is that there is ABSOLUTELY no visible gain in performance when your FPS is capped at your refresh rate. It's practically impossible to notice the difference above 60 FPS, and the lowest anybody will have their CRT at is 60hz. The only reason you would want to see FPS higher than that is if you're recording benchmarks.

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Subject: Re: Screen refresh rate?

Posted by [trooprm02](#) on Sun, 28 Jan 2007 18:52:02 GMT

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I got a 64mb nvidia card and my fps caps at 60, so ill try increasing my refresh rate, see if it does



anything

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Subject: Re: Screen refresh rate?

Posted by [kopaka649](#) on Thu, 01 Feb 2007 03:43:44 GMT

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This is a bit of a bump, but usually you want as high a refresh rate as possible. Seeing a 60hz picture for too long gives me a headache now for some reason. Also 72hz is better than 75hz for watching movies, it's a multiple of 24fps.

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Subject: Re: Screen refresh rate?

Posted by [icedog90](#) on Thu, 01 Feb 2007 03:46:16 GMT

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I don't use 60hz, I use 85hz. I can still see flickering even with 85hz, but not enough to where it bothers me.

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Subject: Re: Screen refresh rate?

Posted by [reborn](#) on Thu, 01 Feb 2007 07:55:08 GMT

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Dave Anderson wrote on Sat, 27 January 2007 17:51Quote:It is unlikely that you have a card capable of a higher FPS then your monitors refresh rate.

That is if you live under a rock. I play Renegade with 4xAA and 8xAF and get 120+ FPS.

You miss understand what I meant.

It is unlikely that he has a card capable of a higher FPS then his refresh rate because the max FPS you can actually get in renegade is 60 (despite seeing in windowed mode FPS rates as high as 600). So it is unlikely that his monitor operates at a refresh rate lower then 60hz.

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Subject: Re: Screen refresh rate?

Posted by [icedog90](#) on Thu, 01 Feb 2007 23:56:15 GMT

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I think he understood it fine. You did a bad job expressing what you actually meant.

Whatever you're saying about Renegade having a "max tolerance" for FPS is completely bogus. The only time a game caps the FPS is if it's trying to keep it under the monitor's refresh rate, or vertical sync is on. I play in FULLSCREEN MODE and my FPS is usually well above 100.

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Subject: Re: Screen refresh rate?  
Posted by [jnz](#) on Fri, 02 Feb 2007 00:03:26 GMT  
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doesn't the card reguce it to whatever your monitor is set at?

so ren is playing at 100fps  
your monitor is set to 60Hz  
the card changes 100Fps into 30 (since its always half, because it does 2 passes?)

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Subject: Re: Screen refresh rate?  
Posted by [icedog90](#) on Fri, 02 Feb 2007 00:06:11 GMT  
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ugh... okay, you guys know nothing, I'm sorry.

Your FPS will only be capped IF you have vertical sync (VSYNC) turned on in the game. Vsync CAPS your FPS at your monitor's refresh rate, NOT 60. Your FPS won't be split in half, that is total nonsense.

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Subject: Re: Screen refresh rate?  
Posted by [Dave Anderson](#) on Fri, 02 Feb 2007 00:17:07 GMT  
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To reinforce Icedog's point and my point:

Wiki ExplanationWhen vertical sync is enabled, video cards only output a maximum frame rate equal to the refresh rate of the monitor. All extra frames are dropped. When vertical sync is disabled, the video card is free to render frames as fast as it can, but the display of those rendered frames is still limited to the refresh rate of the monitor. For example, a card may render a game at 100 FPS on a monitor running 75Hz refresh, but no more than 75 FPS can actually be displayed on screen.

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Subject: Re: Screen refresh rate?  
Posted by [icedog90](#) on Fri, 02 Feb 2007 00:18:25 GMT  
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I hope you all will understand now.

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Subject: Re: Screen refresh rate?  
Posted by [Zion](#) on Fri, 02 Feb 2007 01:20:25 GMT

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Makes perfect sence to me.

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