

## **Hz Tool v1.4**

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If you have questions then first read instructions and FAQ. If you still have problems, questions, or want to help me improve the program, mail to [hztool@akademikerna.com](mailto:hztool@akademikerna.com).

## **Installation**

Just unzip the archive to a folder of your choice, then run Hztool.exe. You can create a shortcut on your desktop by dragging Hztool.exe to the desktop with the left mouse button. Read the instructions and disclaimer before you use the program.

## **Introduction**

Hz Tool is a freeware tool for Windows 95/98 that lets you set the refreshrate for all resolutions, including the ones that Windows normally don't let you use. You can also change resolution and bit-depth.

It was programmed by me, Stefan Berglind, in 1998, because the drivers for my graphics card didn't allow me to easily set the refreshrates for games.

It works in all programs that uses Windows routines to change resolution, for example:

- \* Direct 3D games
- \* Open GL games, ie Quake3 and Unreal.
- \* Windows itself

Note that most games runs faster with a higher refreshrate if v-sync is enabled, which it is by default. It's also much more pleasant to your eyes looking at 120 Hz instead of 60 or 75 Hz.

With Hz Tool you can also edit the properties of your monitor, which allows you to get the most out of it in refreshrates and resolutions.

Note that all graphics cards and drivers do not allow you to change the refreshrate, or use unusual resolutions. The program gives you freedom to set whatever refreshrates and resolutions you want, but you have to make sure that both the graphics card and your monitor can handle it. Use precaution!

## **How to use**

### Quick start

Start Hz Tool; select the active graphics card in the "driver selection"-panel. Click on the resolutions you wish to use, and select their refreshrates. Select (in the "apply to bit-depths" panel) which bit-depths you wish to use the new refreshrates in. Press "save", and you're done!

You can now change resolution and the new refreshrate should be used.

### How to set the correct monitor

Select in "monitor options" the monitor type that you currently use. Find in your monitor's manual the maximum supported resolution, the supported horizontal frequencies (in KHz), and the supported vertical frequencies (in Hz). Type in these values in the corresponding boxes. You can leave the H/V sync setting blank, as the driver usually ignores it. Select if you have an Energy star compliant monitor. All settings will be saved when you press "Save". If you have set all values correctly, Windows will now not allow you to select an unsupported resolution or refreshrate.

### How to set refreshrates for different bit-depths

Select the active driver. Select which bit-depths you wish to change. Press "Restore". Set the refreshrates. Press "Save". Repeat this for the different bit-depths you wish to change. If you want to set the same refreshrate for all bit-depths, then just select them all before you press "Save".

### How to set non-standard refreshrates

Press "Add refreshrate". Type in the new refreshrate in the box that appears. The new refreshrate will show up LAST with a \* after it in the list-boxes. Use the new refreshrate and save settings.

## **Tested chipsets**

\* Nvidia Riva 128/TNT/TNT2.

Works with almost all resolutions on reference drivers.

\* 3DFX Banshee/Voodoo3

Works fine. Note: Voodoo1 and 2 does NOT work at all.

\* 3DLabs Permedia2.

Works from 640\*480 and up. Supports variable frequencies from 56-200 Hz (depending on RAMDAC) via custom refreshrates.

Most graphics cards (including S3, ATI, Matrox etc) work just fine too.

## **F.A.Q**

>Help! I changed some settings and now I can't get back the default settings, what to do?

You need to re-install the graphics-card drivers. In advanced display properties, Change adapter to standard VGA, and then re-install the correct drivers.

>I selected a too high refreshrate and switched to it. Now my monitor is black!

Press escape-key to revert to the previous resolution. If you have unchecked the "confirm change" box, you can try pressing CTRL-ALT-F9, which will try to switch to 640\*480 or 800\*600 (if you press twice).

>Nothing happens when I change frequency of the current resolution?

You must press "save", and press the "Set" button.

>The refreshrate does not change/are wrong after I press save and try to use it?

You have to select the active graphics driver in the driver selection panel.

Make sure your graphics card supports the selected refreshrates and resolutions.

Make sure you have selected the bitdepth you are currently using.

Perhaps your graphics card stores refreshrates in a different way that makes it impossible to change them with Hz Tool.

>Why do I have more than one driver listed in the driver-panel?

This is because you previously have installed others drivers. They are not used unless you use a multimonitor setup with several graphics-cards.

>How do I change bit-depth? It doesn't work!

It does work in Windows 98. In Windows 95 you'll have to use Quickres from Microsoft.

>Why does not all resolutions show up in the "change resolution" box?

The box show all currently supported resolutions. Resolutions that are disabled in the "resolutions" panel will not show up. Also, if you set your monitors max-resolution to for example 1024\*768, no resolutions above this will show up.

>What does the \* after the frequency mean?

That means that it is a custom frequency, not a standard one.

>What does the "85 Hz std" and "ini settings" buttons do?

These set the "standard" refreshrates to 85 Hz, and the settings specified in the Hztool.ini file, respectively. It's just a faster way than setting all resolutions manually.

>Will Hz Tool work under NT4 or Win2K?

No. Switching resolutions will work though. Try the excellent "Powerstrip" which you can find at [www.entechtaiwan.com](http://www.entechtaiwan.com). It works under NT.

>Custom refreshrates doesn't seem to work?

Many drivers don't support it. Try the excellent "Powerstrip" which you can find at [www.entechtaiwan.com](http://www.entechtaiwan.com).

>Does Hz Tool work under DOS / Can you support DOS in the next release?

No. It's 1999, don't use DOS. The sooner we forget it the better. ;-) )

Try "VBEHz" which you can find at [www.informatik.fh-muenchen.de/~ifw98223](http://www.informatik.fh-muenchen.de/~ifw98223).

Try "UniRefresh" which you can find at <http://home.student.utwente.nl/r.muller/unirefresh>.

Try "SDD" which you can find at [www.scitechsoft.com](http://www.scitechsoft.com).

## **Issues**

No checking that H/V frequencies or resolutions are valid on the selected monitor. Use precaution!

Changing the H/V sync polarity probably doesn't work on many chipsets.

Changing bit-depth will only work on Windows 98.

Only the first 10 drivers are listed in the driver selection.

#### **Thanks to**

The people at **DSP**: <http://sunsite.icm.edu.pl/delphi>

The maintainer of **UDDF**: <http://www.gnomehome.demon.nl/uddf>

The programmers of **UPX**: <http://wilsau.idv.uni-linz.ac.at/mfx/upx.html>

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