How to enable Gravis UltraSound in DOSBox for enhanced music experience in DOS programs and Games

Author : alex

Gravis UltraSound

Gravis UltraSound or **GUS** is a **sound card for the IBM PC compatible systems**.
It was lunched in 1992 and is notable for it's ability to use real-world sound recordings (wavetable) of a musical instruments rather than artificial computer-generated waveforms.
As one of my friends used to say back then: "it sounds like a CD".

To enable GUS in DOSBox all you need to do is:

1. Download the archive with the GUS files from https://alex.pc-freak.net/files/GUS/ULTRASND.zip. Extract the archive (there is already a directory in it so you don't have to create one) preferably where you keep your DOSBox stuff (like Games).

2. Find your DOSBox config file. Depending on the version or host OS, the dosbox conf file is located either inside the user profile folder or inside the same folder as dosbox.exe. In Windows 7 the config file

is located at

"**C:\Users\Fred\AppData\Local\VirtualStore\Program Files (x86)\dosbox.conf**"

where "**Fred**" is your username.

In **GNU/Linux** it's in "**/home/Fred/.dosbox/dosbox.conf**" where "**Fred**" is your username.

The name of the conf file may also have dosbox version (for example -

"**dosbox-0.74.conf**").

Open it with a text editor like notepad (Windows) or equvalent for GNU/Linux (**vi**, **Kate, gedit**...).
Locate "**[gus]**" section (without the quotes) and edit it so it looks like this:

```
[gus]
#     gus: Enable the Gravis Ultrasound emulation.
# gusrate: Sample rate of Ultrasound emulation.
#        Possible values: 44100, 48000, 32000, 22050, 16000, 11025, 8000, 49716.
# gusbase: The IO base address of the Gravis Ultrasound.
#        Possible values: 240, 220, 260, 280, 2a0, 2c0, 2e0, 300.
#  gusirq: The IRQ number of the Gravis Ultrasound.
#        Possible values: 5, 3, 7, 9, 10, 11, 12.
#  gusdma: The DMA channel of the Gravis Ultrasound.
#        Possible values: 3, 0, 1, 5, 6, 7.
# ultradir: Path to Ultrasound directory. In this directory
#        there should be a MIDI directory that contains
#        the patch files for GUS playback. Patch sets used
#        with Timidity should work fine.

  gus=true
gusrate=44100
gusbase=240
gusirq=5
gusdma=3
ultradir=C:\ULTRASND
```

Then save the dosbox conf file.

3. Start DOSBox and mount "ULTRASND" directory to "C:".

You can do that with

     mount c (directory to ULTRASND)

For example if you have extracted the archive in "**C:\Games**" it has created "**C:\Games\ULTRASND**" and the command you will have to write in DOSBox is

     mount c c:\Games

(example: if your game is in "C:\Games\Heroes2" and your GUS directory is "C:\Games\ULTRSND" (if you have extracted the archive "C:\Games\") then you "mount c c:\Games**"** and you are set)

or for GNU/Linux if you have extracted the archive in "**/home/Fred/Games**" it has created "**/home/Fred/Games/ULTRASND**" and the command you will have to write in DOSBox is

     mount c /home/Fred/Games (where "**Fred**" is your user name).

(example: if your game is in "/home/Fred/Games/Heroes2" and your GUS directory is "/home/Fred/Games/ULTRSND" (if you have extracted the archive" /home/Fred/Games/") in then you "mount c /home/Fred/Games**"** and you are set)

You can make this automatic so you don't have to write it everytime by adding this command in the end (bottom) part of your dosbox conf file and save it.

You're practically ready. All you need to do now is set Gravis UltraSound in your game or application setup (for example with the file "**setup.exe**") with **IO: 240**, **IRQ 5** and **DMA 3**. If you prefer you previous sound card you can do that by selecting it again from the setup without disabling GUS from the

dosbox conf file.

Happy listening!

Article written by [Alex](#)