



## DOSBox – Quickstart Guide

Version 1.1e, 25/03/2007

- La Clinique des Jeux Vidéos -  
- Created for the Abandonware France Network -

### 1. Preface

First of all, many thanks for downloading this user guide. It isn't exhaustive, nor was it intended to be; rather it's meant to help people who have some knowledge of **DOS**<sup>®</sup> to get **DOSBox** up and running quickly. As a result the contents are intentionally brief and limited to the absolute necessities.

If you want more information, please feel free to take a look at one of the following guides:

- **Getting started with DOSBox,**
- **Advanced DOSBox.**

Note: newcomers may also want to refer to the guide titled **Discover DOSBox using D-Fend**.

**Pseudopode – La Clinique des Jeux Vidéos**

### 2. Introduction

**DOSBox** is a virtual machine application that makes it possible to fully emulate an older computer running the **DOS**<sup>®</sup> operating system.

Its purpose is to ensure compatibility for **DOS**<sup>®</sup> games on modern hardware and software, e.g. machines that run **Windows**<sup>®</sup> **XP** or aren't fitted with a Sound Blaster 16 sound card.

Important: Note that the level of compatibility varies from game to game, as does the speed at which any given **DOS**<sup>®</sup> game will run.

Visit the official **DOSBox** website to check the compatibility list for the most recent released version.

Note: **DOSBox** is not an application that is designed to make installing, configuring and using **DOS**<sup>®</sup> games any easier, it simply recreates the conditions that are necessary to carry out those steps.

**D-Fend** is a tool that is meant to make using **DOSBox** easier by providing a user-friendly graphic interface.

### 3. Installing DOSBox

Download the latest version of **DOSBox** from the official website, <http://dosbox.sourceforge.net>. To use **DOSBox under Windows**<sup>®</sup> click on the corresponding link.

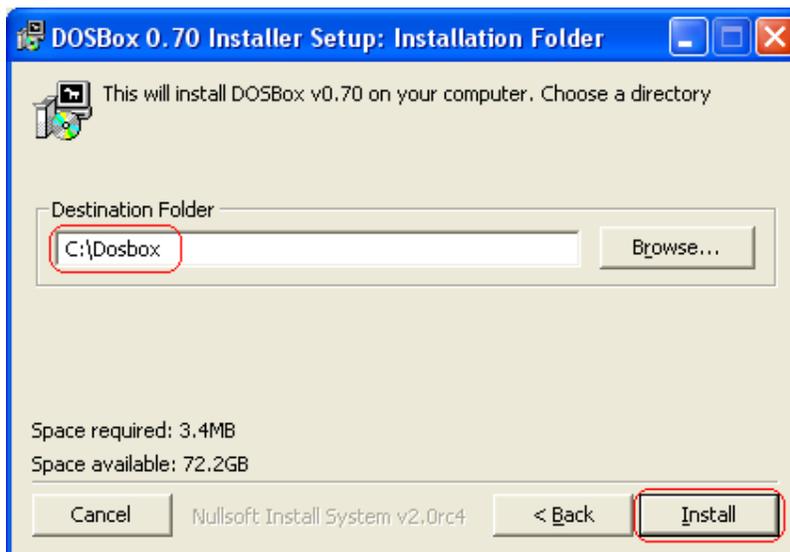
Once the download has finished, double-click on the program's icon to start installing.

DOSBox		
<u>Windows</u>	0.70	Win32 installer
<u>Gentoo Linux</u>	0.70	portage
<u>Source</u>	0.70	Source
<u>Mac OS X</u>	0.70	dmg (Universal)

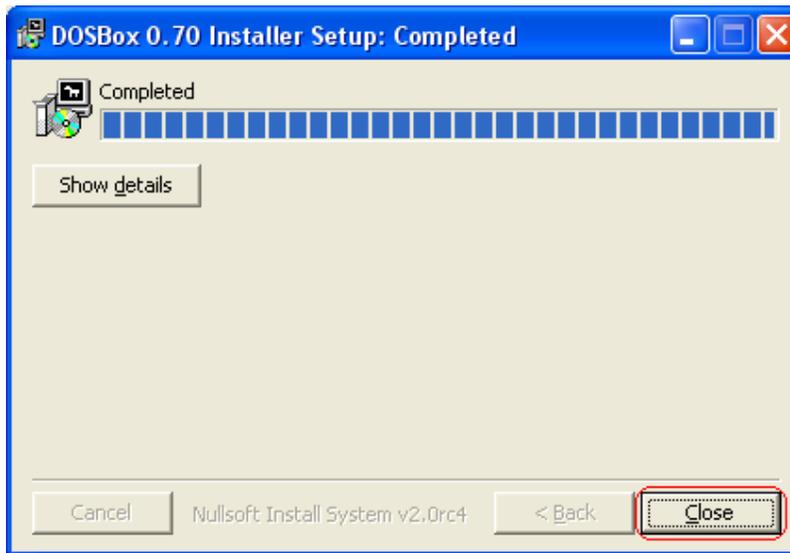
Once you have read the GNU licence and accepted the terms, click on the **I agree** button.



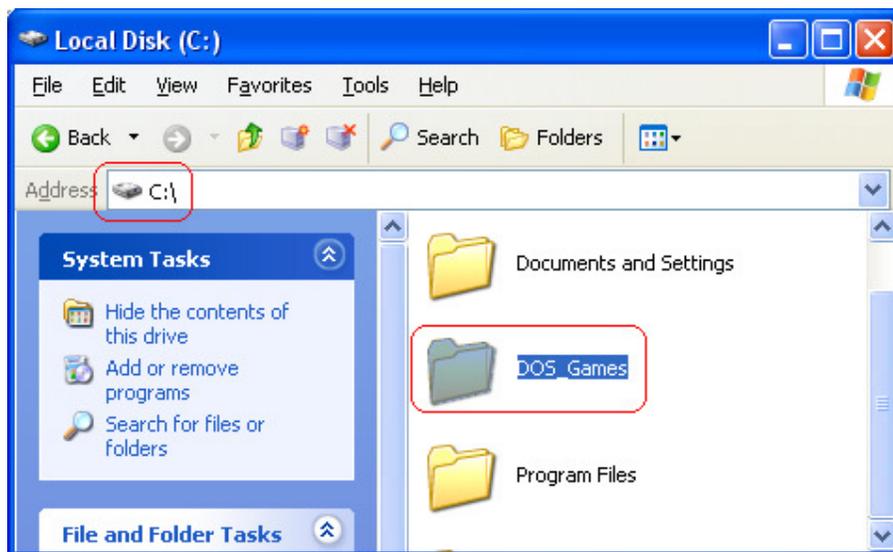
The field **Destination folder** lets you select which directory you want to install **DOSBox** in. Change the suggested default path to **C:\DOSBox**. Then click on the **Install** button.



Once the installation procedure has finished, click on the **Close** button.



All that is needed now is to create the directory where the **DOS**<sup>®</sup> games will be installed and run. You're your **C** drive in **My Computer** or in **Windows**<sup>®</sup> **Explorer** and create a new directory, then rename it to **DOS\_Games**.



#### 4. Mounting a virtual hard drives using a directory

**DOSBox** does not recognise your computer's hard drives by default, so it is necessary to mount one or more virtual hard drives.

Mounting a virtual hard drive is an absolute must for the majority of **DOS**<sup>®</sup> games, as they usually need to be installed on a hard drive before they can be configured and run,, or perhaps to be able to create save games. **DOSBox** lets you mount the directories on your own hard drives as virtual hard drives, after which **DOSBox** will see them as genuine hard drives.

#### **MOUNT C C:\DOS\_Games**

This mounts the **C:\DOS\_Games** directory in **Windows®** as the virtual hard drive **C** in **DOSBox**. **DOS®** games will therefore be installed, configured and run from virtual hard drive **C** in **DOSBox**, which in actuality is really the **C:\DOS\_Games** directory in **Windows®**.

Note: It is quite possible to mount the root directory of your real **C** drive as the virtual hard drive **C** in **DOSBox**, but it is strongly recommended not to do this so as to ensure that the files you use in **DOSBox** are kept separate from the ones you commonly use under **Windows®**.  
**DOS®** games do not generally require more than one virtual hard drive to be mounted at one time.

Important: The directories that you mount must be both read-accessible and write-accessible, so make sure that you do not mount directories on a CD-ROM or DVD-ROM.

To mount a virtual hard drive automatically whenever you run **DOSBox**, edit the **dosbox.conf** file located in the **DOSBox** directory and change the **[autoexec]** section as indicated below in bold:

**[autoexec]**

**# Lines in this section will be run at startup.**

**MOUNT C C:\DOS\_Games**

The **C:\DOS\_Games** directory will then be mounted automatically each time you launch **DOSBox**.

## 5. Enable the correct keyboard layout

First download the latest version of FreeDOS KEYB from the following web address:

<http://projects.freedos.net/keyb/>

Click on the link called **binary**. Then download a precompiled keyboard layout by clicking on the link called **here**.

### DOWNLOADS

The following downloads are available:

- **KEYB:** you can download [source](#) (21k) and [binary](#) (26k).
- **KC:** the KEY compiler, and you can download [source](#) (46k) and [binary](#) (58k).
- For precompiled keyboard layouts see [here](#).

Unzip the contents of the two archives into the directory of your choice. For now you will only need the files **KEYB.EXE** and **KEYBOARD.SYS**.

Open the **C:\DOS\_Games** from **Windows® Explorer** and create a subdirectory called **CMDS**. Put the **KEYB.EXE** and **KEYBOARD.SYS** files in that directory.

Edit the **dosbox.conf** file located in the **DOSBox** directory and change the **[autoexec]** section as indicated below in bold but replacing **UK** with the correct country code, e.g. **GR** for a German keyboard, or **SV** for a Swedish keyboard:

**[autoexec]**

**# Lines in this section will be run at startup.**

**MOUNT C C:\DOS\_Games**

**CD \CMDS**

**KEYB UK**

**CD \**

**CLS**

The specified keyboard layout will be activated automatically each time that you launch **DOSBox**.

## 6. Mount a virtual CD-ROM

**DOSBox** does not recognise CD-ROMs and DVD-ROMs in your machine's drives by default. To do this you need to mount virtual CD-ROMs or DVD-ROMs.

**DOSBox** lets you choose whether to mount:

- a directory on your machine,
- an image file in **ISO**, **CUE** or **BIN** format, or
- a real CD-ROM or DVD-ROM in one of your machine's drives. Emulated CD-ROMs and DVD-ROMs, e.g. using Daemon Tools or Alcohol, work in exactly the same way.

### 6.1. Using a real or emulated (Daemon Tools, Alcohol...) CD-ROM

#### **MOUNT D E:\ -t cdrom**

This mounts the real CD-ROM or DVD-ROM in your **E** drive as virtual CD-ROM drive **D** in **DOSBox**.

If the virtual CD-ROM is not recognised by the game in **DOSBox**, you can use the additional **-usecd** parameter.

Use the **MOUNT -CD** command and make a note of the value given for the real drive that you want to mount.

If the command returns the value 0 for drive **E** and 1 for drive **F**, the command needed would be:

#### **MOUNT D E:\ -t cdrom -usecd 0**

If this still does not work, you can try:

- the additional **-ioctl** parameter in **Windows® 2000/XP** :  
**MOUNT D E:\ -t cdrom -usecd 0 -ioctl**
- the **-aspi** parameter in **Windows® 95/98/Me** and systems using **ASPI** drivers:  
**MOUNT D E:\ -t cdrom -usecd 0 -aspi**

Note: If the game uses multiple CD-ROMs and asks you to change them, use the keyboard shortcut **Ctrl+F4** when you have swapped the discs. This will let **DOSBox** know that the disc has changed.

In some cases it is necessary to give the name of the CD-ROM as it appears in **My Computer** in **Windows®** by using the **-label** parameter.

If the name of the CD-ROM for **Day of the Tentacle** is **DOTT**, for example, you could use one of the following commands:

```
MOUNT D E:\ -t cdrom -label DOTT  
MOUNT D E:\ -t cdrom -usecd 0 -label DOTT  
MOUNT D E:\ -t cdrom -usecd 0 -ioctl -label DOTT  
MOUNT D E:\ -t cdrom -usecd 0 -aspi -label DOTT
```

Note: If the game uses multiple CD-ROMs and the names of those CDs are different, you will be unable to mount the other CD-ROMs during installation or when running the game. This method only applies to games that use a single CD-ROM or several that have the same name.

### 6.2. Using a directory containing the contents of a real CD-ROM

#### **MOUNT D C:\DOS\_Games\DOTT -t cdrom**

This mounts the **C:\DOS\_Games\DOTT** directory in **Windows®** as virtual CD-ROM **D** in **DOSBox**.

In some cases it is necessary to give the name of the CD-ROM as it appears in **My Computer** in **Windows®**.

If the name of the CD-ROM for **Day of the Tentacle** is **DOTT**, for example, you could use the following command:

#### **MOUNT D D C:\DOS\_Games\DOTT -t cdrom -label DOTT**

Important: Some games will not work using this method, in which case you will need to write the directory's contents to a real CD-ROM.

### 6.3. Using a CD-ROM image file in ISO/CUE/BIN format

#### **IMG MOUNT D C:\DOS\_Games\Hand\_of\_Fate.iso -t iso**

This mounts the [C:\DOS\\_Games\Hand\\_of\\_Fate.iso](#) image file as virtual CD-ROM drive **D** in **DOSBox**.

Important: Some games will not work using this method, in which case you will need to write a CD-ROM from the image file. This operation is generally referred to as “write an image” (make sure that you don’t write a CD-ROM that contains a copy of the image file). This obviously requires a CD burning program such as **Nero Burning ROM** or **Easy CD Creator**.

## 7. Mount a virtual floppy disc

**DOSBox** does not recognise floppy discs in your machine’s drives by default. To do this you need to mount virtual floppy discs.

**DOSBox** lets you choose whether to mount:

- a directory on your machine,
- an image file in **IMG** format, or
- a real floppy disc in one of your machine’s drives.

### 7.1. Using a directory containing the contents of a disc

#### **MOUNT A C:\DOS\_Games\KA\_Floppy -t floppy**

This mounts the [C:\DOS\\_Games\KA\\_Floppy](#) as virtual floppy disc **A** in **DOSBox**. **DOSBox** will then treat the directory as if it were a real floppy disc.

Note: If the game comprises several floppy discs, it will not be possible to mount the other discs during installation or when running the game. This method only works for games that use a single floppy disc.

### 7.2. Using a floppy disc image file in IMG format

#### **IMG MOUNT A C:\DOS\_Games\KA\_Flopp.img -t floppy**

This mounts the file [C:\DOS\\_Games\KA\\_Flopp.img](#) as virtual floppy disc **A** in **DOSBox**.

Note: If the game comprises several floppy discs, it will not be possible to mount the other discs during installation or when running the game. This method only works for games that use a single floppy disc.

### 7.3. Using a real floppy disc

#### **MOUNT A A:\ -t floppy**

This mounts the floppy disc in your **A** drive as virtual floppy disc **A** in **DOSBox**.

Note: If the game uses multiple CD-ROMs and asks you to change them, use the keyboard shortcut **Ctrl+F4** when you have swapped the discs. This will let **DOSBox** know that the disc has changed.

## 8. Switch from fullscreen mode to windowed mode

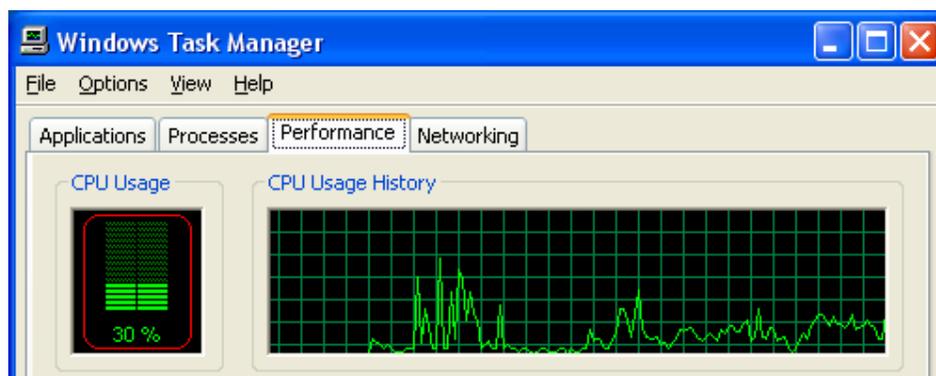
By default **DOSBox** starts in windowed mode, but you can switch to fullscreen mode by using the **Alt+Enter** keyboard shortcut. Use this shortcut again whenever you want to switch back to windowed mode.

## 9. Speed up or slow down the emulation

Use the keyboard shortcut **Ctrl+F11** to slow down the emulation and **Ctrl+F12** to speed it up.

Note: The load placed on your processor increases whenever you speed up the emulation. After a certain point this will have the opposite effect and could make your system unstable.

Use the **Task Manager (Windows® 2000/XP)** or **System Monitor (Windows® 95/98/Me)** to make sure that your CPU usage doesn't exceed 85% (this is only a suggested value, but we do recommend that you stick to it).



## 10. Control the mouse pointer in windowed mode

By default the mouse pointer remains active in **Windows®** but not within the **DOSBox** window. To make the mouse pointer work within **DOSBox**, simply click on the **DOSBox** window. To switch back to being active in **Windows®**, use the keyboard shortcut **Ctrl+F10**.

Note: The mouse pointer automatically becomes active in **Windows®** whenever you switch from fullscreen mode to windowed mode.

## 11. Some useful tips...

### 11.1. Installing and configuring a game

The file used to install a game is located on the game's floppy discs or CD-ROM. The name of the installer varies from game to game, the most common names being **INSTALL.EXE**, **DOSINST.EXE**... The configuration program is usually to be found in the game's directory once it has been installed. Again, the name may vary, but the most common names are **SETUP.EXE**, **INSTALL.EXE**, **SETSOUND.EXE**...

Note: In some cases a game's installation program is also used for configuration.

### 11.2. No sound in games

The usual causes for missing voices, sounds and music in a game are:

- the game has not been configured (or has been configured incorrectly) for the soundcards that are emulated by **DOSBox**,
- the CD-ROM or DVD-ROM on which the various sounds are stored is not mounted in **DOSBox**.

### 11.3. Selecting a soundcard when configuring a game

When configuring a game you will sometimes be asked to make various choices, particularly when it comes to choosing a selecting a sound card. Sound is handled by **DOSBox**, which emulates several different soundcards.



You can therefore choose from the following models:

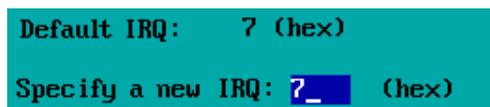
#### Voices and sounds

- **Sound Blaster 16, Sound Blaster Pro, Sound Blaster, Adlib** with the following virtual resources: address 220, IRQ 7, DMA 1 1, DMA 2 5,
- **Gravis UltraSound** with the following virtual resources: address 240, IRQ 1 5, IRQ 2 5, DMA 1 3, DMA 2 3.

#### Music

- **General MIDI, Roland Sound Canvas, Roland MT-32/LAPC-1** with the following virtual resources: address 330,
- **Sound Blaster 16, Sound Blaster Pro, Sound Blaster** with the following virtual resources: address 220, IRQ 7, DMA 1 1, DMA 2 5,
- **Gravis UltraSound** with the following virtual resources: address 240, IRQ 1 5, IRQ 2 5, DMA 1 3, DMA 2 3.

For some games you may be asked to specify the virtual resource values indicated, whereas others obtain this information automatically.



Important: If you are not able to get satisfactory sound in-game when using the **Sound Blaster 16**, choose the **Sound Blaster Pro** or **Sound Blaster** instead.

## 11. some handy links...

Official DOSBox website: <http://dosbox.sourceforge.net>

Official DOSBox forum: <http://vogons.zetafleet.com>

Official D-Fend website: <http://members.home.nl/mabus/dfend.htm>

ScummVM: <http://www.scummvm.org>

La Clinique des Jeux Vidéos : <http://clinique.jeuxvideos.free.fr>

ShinoD7: <http://www.shinod7.net>

Lost Treasures Fr: <http://www.abandonware-france.org>

Abandonware Forums: <http://www.abandonware-forums.org>

Free Oldies: <http://www.freeoldies.com>

Loriciels.org: <http://www.loriciels.org>

Alone In The Past ? : <http://www.aitpast.com>

Abandonware Paradise: <http://www.abandonware-paradise.net>

Oldware.net: <http://www.oldware.net>

Emu-France: <http://www.emu-france.com>

#### Fredo\_L's sites

- Lankhor.net: <http://www.lankhor.net>
- Définition de l'abandonware: <http://www.abandonware-definition.org>
- Abandonware Magazines: <http://www.abandonware-magazines.org>
- Abandonware Vidéos: <http://www.abandonware-videos.org>

### 13. Distributing and editing of this guide

Please contact me if you would like to host a copy of this guide on your site.  
You are not permitted to edit this guide.

**Pseudopode**  
**La Clinique des Jeux Vidéos - Abandonware France Network**