

The Ultimate Bootable USB Flash Drive— Advanced Features



A guide for adding advanced functionality to the Ultimate Bootable USB Flash Drive.

Overview

Corsair has provided a utility that helps users create the [Ultimate Bootable USB Flash Drive](#). One outstanding feature of this tool is that it is very simple for end users to add advanced functionality to the tool once the basic installation is complete.

A drive like the Flash Survivor GTR, pictured below, can become a wonderful tool in a few easy steps. An ISO image is an image of an optical disk and this tool has the ability to boot from a bootable ISO image thus eliminating the need to burn a CD or DVD. Following the directions in this guide, the user simply downloads the desired ISO file, extracts it to the USB drive, edits three lines of text, and the tool is ready to use.



There are many options that a user can add to the basic version of this tool. Most Linux distributions can be downloaded as ISO files. With this tool, users can boot to Linux from their drive which amounts to a pocket sized portable operating system.

Also, many tools and utilities such as [Parted Magic](#) from our example here, can be found in ISO form. This means no more burning CDs or DVDs using ISO images if you don't want to. And, those ISO based tools and utilities can be more conveniently used, stored, updated, manipulated, and transported using a USB flash drive. Multiple ISOs can be added to the drive and the capacity is limited only by the drive size.

If you can find the program, application, or utility you wish to use in a bootable ISO form, you can add it to your USB flash drive using this tool. The process is simple and takes only a few minutes.

1

Download and Extract the Needed Files

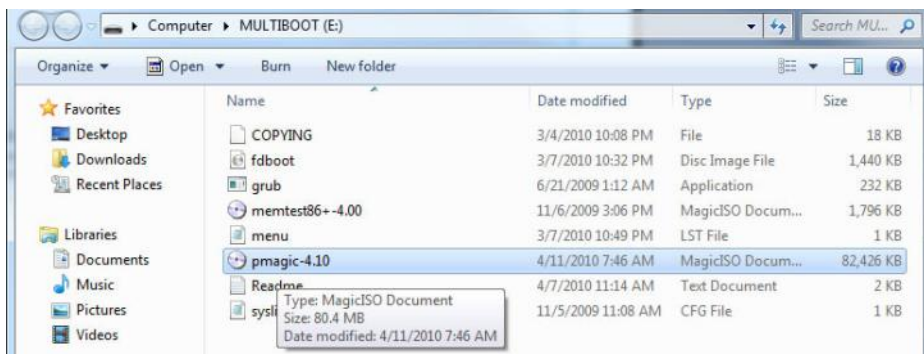
Download the Ultimate Bootable USB Flash Drive Tool and the How To Guide for it here: <http://forum.corsair.com/forums/showthread.php?t=85815>

Download the Parted Magic ISO file here:
<http://partedmagic.com/download.html>

In addition to the 2 files above, you will need a text editor. Notepad, included with Windows, is sufficient. Notepad ++ is another excellent option and can be found here: <http://notepad-plus.sourceforge.net/uk/site.htm>

Our example uses [Parted Magic](#), a very helpful formatting tool. This tool is frequently recommended by Corsair Technical Support and is especially useful for SSD owners.

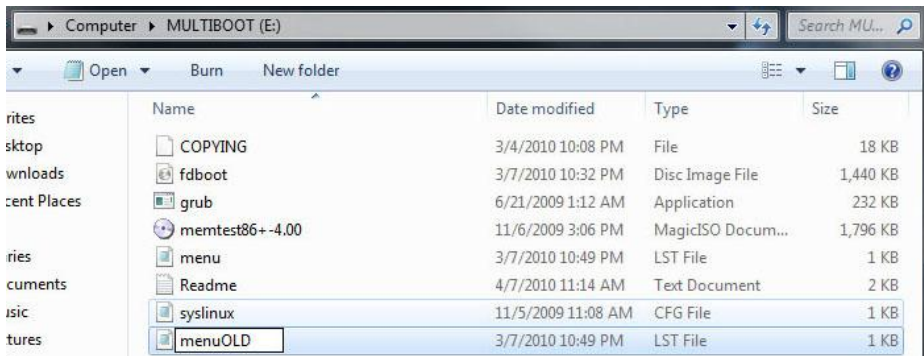
After you have completed the basic creation of the Ultimate USB Flash Drive, you'll need extract [Parted Magic](#) and save it to your flash drive.



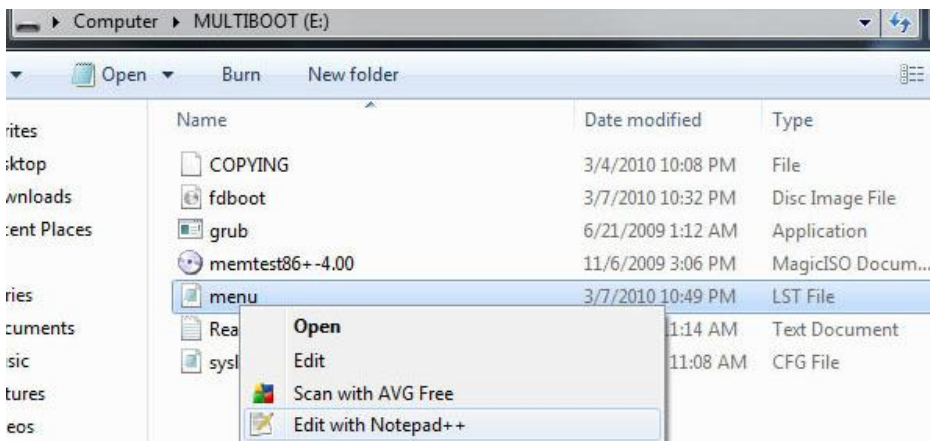
2

Copying and Editing to Add the ISO to the Boot Menu

The tool uses a file named menu.lst to list the boot options for the boot loader. With a simple edit of this file, you add the ability to boot an ISO image. Copy your menu.lst file and rename the copy menuOLD. This will ensure that you have an unedited copy of the file on hand if you need to restore the original file.



In this portion, you will need a text editor such as Notepad or Notepad ++. Open the menu.lst file with your text editor.



3

Edit the Text in the menu.lst File

The last segment of text in the .lst file is a sample file provided to make modifying the tool easier. First, remove the # signs from lines 24-29. Then, on line 24, change the title to the name of your ISO. In this example we named it [Parted Magic](#). On lines 25 and 26, change testname.iso to the name of your [Parted Magic](#) ISO file. Remember to keep the syntax spacing the same in each line that you edit. Save your edits to the menu.lst file on your flash drive. See below for examples of the file before and after.

BEFORE

```
21
22 # Uncomment the following section to use the Test ISO menu item (just remove the #'s)
23
24 # title Test ISO
25 # find --set-root /testname.iso
26 # map /testname.iso (hd32)
27 # map --hook
28 # root (hd32)
29 # chainloader (hd32)
```

AFTER

```
22 # Uncomment the following section to use the Test ISO menu item (just remove the #'s)
23
24 title Parted Magic
25 find --set-root /pmagic-4.10.iso
26 map /pmagic-4.10.iso (hd32)
27 map --hook
28 root (hd32)
29 chainloader (hd32)
```

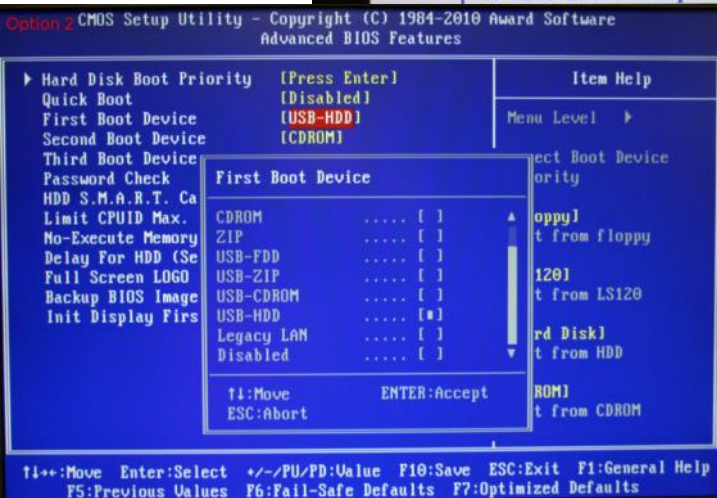
You have now modified your drive to use [Parted Magic](#) in addition to the basic functions of Memtest86+ and FreeDOS.

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Boot to Your USB Flash Drive

To use the utilities on your drive, you will need to boot your system to this drive as opposed to booting to your system drive. There are 2 ways to do this. Option 1 below shows how you would manually select the boot menu and select the drive to which you want to boot. Refer to your manual as the key for this varies across different motherboards. You may also set the USB flash drive as the first item in your boot order as shown in Option 2. Either method works equally well.

OPTION 1

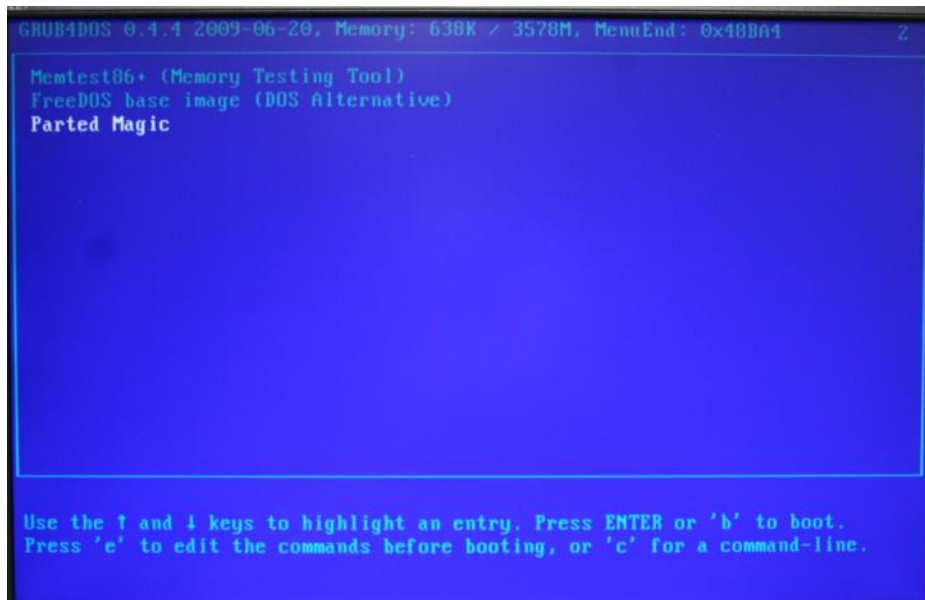


Option 2

5

Select the Utility you Wish to Use

Once you boot to your USB flash drive, you will see the boot menu as shown below which will now include [Parted Magic](#). Select the utility you wish to use and it will be loaded.



```
GRUB4DOS 0.4.4 2009-06-20, Memory: 638K / 3578M, MenuEnd: 0x10001  z
Memtest86+ (Memory Testing Tool)
FreeDOS base image (DOS Alternative)
Parted Magic

Use the ↑ and ↓ keys to highlight an entry. Press ENTER or 'b' to boot.
Press 'e' to edit the commands before booting, or 'c' for a command-line.
```

There are literally endless possibilities for using this tool and adding advanced functionality. Essentially, any program that will fit onto the drive and that can also be run from an ISO image can be utilized in this manner. This includes many utilities like [Parted Magic](#) and Linux distributions. Many open source programs, such as the [FreeNAS](#) server program for example, are distributed in ISO form and can be added and used. The advanced functionality truly makes this the ultimate bootable USB flash drive.

Resources

The Ultimate Bootable USB Drive Tool:

<http://forum.corsair.com/v3/showthread.php?t=85815>

Corsair USB Flash Drive Product Page:

<http://www.corsair.com/products/flash.aspx>

Pendrivelinux.com:

<http://www.pendrivelinux.com/>

Download Parted Magic here:

<http://partedmagic.com/download.html>

