

EasyHDD is a software solution for MB02+ users who are seeking ways of connecting Compact Flash cards or hard drives to their ZX Spectrum system while avoiding difficult configuration. EasyHDD was primarily developed for usage with CF cards where offering autodetection and autoconfiguration of such media when looking up the first data sector. The major concept was to allow users to easily configure and share CF cards and exchange data while not sacrificing simplicity of operation. The system also provides easy means of creating and restoring a backup of entire contents of CF cards on your PC.

Hardware requirements:

- MB-02+
- MBHDD or MBHDD2
- Compact Flash or PATA hard drive

Main features:

- EasyHDD adds new "drive letters" to BS-DOS 308 system: 3 through 127 for Master device, 131 through 255 for Slave device.
- autodetects connected devices
- automatically configures connected devices
- automatic lookup of the first data sector
- easy media exchange without having to configure them repeatedly
- a device can be connected as both Master and Slave without changing a configuration
- easy means of creating and restoring a backup of entire device on your PC
- simple procedure allowing to transfer all data from one device to another on your PC
- uses LBA to access drives
- features simple GUI interface (in development)
- several startup modes (auto, manual, silent)



Setup:

1. we suggest to use CF card with capacity of 256 MB (maximum available is 250 MB)
2. format it on a PC with the following parameters:
 - system FAT16
 - cluster size 32 KB (suggested for the largest capacity)
3. copy here the *.MBH file so that it occupies entire capacity of the drive (see below)
4. connect your card to MB-02+
5. run EasyHDD
6. if you exchange a device (for example with a different CF card) all you have to do is run EasyHDD once again

Copying of the *.MBH file in step (3) above is not a requirement however doing so significantly simplifies backup/restore (and eventually sharing) procedures when handling entire drive images across multiple media. These files are part of the installation package:

- CLEAR.MBH for the first-time usage. This is a completely blank file (full of zeroes). Keep in mind that individual drives need to be formatted first.
- FORMATED.MBH already contains pre-formatted drives

Advanced configuration:

EasyHDD allows to configure certain parameters if required. It is executed from the address 32768. Offset at +3 allows to install the driver depending on Virtual Disk Table (VDT) bypassing the title GUI screen. General Settings for EasyHDD start at offset +6 and VDT follows at +13.

00 call GUI.gui
03 jp INSTALL

General settings

06 db 0 ;auto install (/wait for any key)
07 db 1 ;auto configure (auto search for the 1st sector & set HDD parameters to VDT)
08 db 1 ;show splash screen
09 db 1 ;play SFX
10 db 1 ;show GUI
11 db 1 ;install noverify patch
12 db 1 ;install dma patch

Virtual disk table

;master disk
db 32,16 ;Sectors/Heads
dw 980;Cylinders
db 0; Write protect
dw 128 ; first LBA sector of first file on disk
;slave disk
db 32,16 ;Sectors/Heads
dw 980;Cylinders
db 0; Write protect
dw 128 ; first LBA sector of first file on disk

Revision history:

version 1.04

- General setting added to VDT
- autoconfig now writes detected values into VDT
- calculation of the first data sector
- SFX added (thanks to Factor6)

version 1.03

- simple GUI added
- displays CHS and drive capacity
- graphic cleanup
- all logos transferred to SpriteEditor type #2

version 1.02

- source code cleanup
- bugfixes
- first working version
- added support for Write Protect and Master/Slave
- revision of DMA programming sequence, should be now Zilog Z80DMA (original) ready (not tested)

version 1.01

- all modes removed with the exception of LBA, supports only drives on Master, Write Protect disabled for now
- new VDT table

verze 1.00

- updated to compile with SjASM
- removed modification of port of IDE interface, ports are now hardcoded into the source so new compile is needed should a change be required

Greetings:

Factor6 - thanks for the EasyHDD logo and SFX

Dron - thanks for HDDpatch 1.62 - that's where it all begun

BLSoF8BC - thanks for translation and moral support