



Mobile Disk

User's Guide

Please refer to our website at www.mobile-disk.com for the latest updates on Mobile Disk.

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1. Features

Mobile Disk is a portable device for saving data using a technology known as flash memory. Mobile Disk's small size and large capacity make it convenient for a variety of individuals, including corporate road-warriors who deal with multiple, large presentation files, designers who need to back-up files for graphic work, and students who need to submit data intensive reports and also enjoy media (video, audio) files. With Plug & Play function, using Mobile Disk is easy – just plug it into the PC or the notebook and use it anywhere, anytime. In addition, with its security and locking functions, Mobile Disk allows you to prevent both unauthorized access to your files as well as mistaken erasing of important files.

Plug & Play via USB port

You can use the Mobile Disk simply by plugging it into the USB® port of your PC or notebook. USB stands for *Universal Serial Bus* and is recognized as the world standard computer peripheral connections.

Operating Systems

The device supports all series of Windows as well as Macintosh and Linux (Windows 2000, XP, ME, Macintosh 8.6 or higher, Linux 2.4 or higher).

Power Source

Mobile Disk does not require any power supplies. It receives its required power from your computer through the USB port.

Security

You can designate a "Public area" on the Mobile Disk, in which files can be freely accessed, and an additional password-protected "Secure area". You can set up the "Public area" and "Secure area" to the ideal size for your needs.

LED Indicator

The Mobile Disk's LED briefly turns on when you plug the disk into the USB port. LED steadily blinks during read and write. This allows users to recognize ongoing procedures accurately and promptly.



Speed

1,000 Kilobytes per second for reading and 600 Kilobytes per second for writing.

Capacity Partition

You can more easily use the Mobile Disk by partitioning it into multiple drives, just like you would in a normal hard disk. For additional security, and to maximize the storage area for confidential files, you can also set up the "Secure area" to the ideal size for your needs, with the rest of the available space automatically designated as the "Public area".

The partitioning function is used in the same way as the password function- simply enter your password and click the "Secure area" button to obtain access.

Mode Change File Restore

When you, by mistake, deleted the **ModeChange.exe**, which is the partitioning program in the partitioned Mobile Disk, you cannot change mode of Public/Secure. In this case, you can copy ModeChange.exe by using the Manager Program (see page 11).



- Remove the drive only when the LED light is not blinking. Otherwise, data may become corrupted.*

- In order to remove the drive safely, click on the **Unplug or Eject Hardware** icon in the Tray and then choose **Stop USB Mass Storage Device**.



* Hana Micron, Inc. does not assume any responsibility for corrupted data due to customer negligence.

2. Operating Instructions

You can connect the drive to the USB port by directly plugging it in to the USB socket or through an extension cables. With most operating systems, you can input/output and edit/delete data right away by simply connecting the Mobile Disk to the port.

Supported Operating Systems	Driver
Windows XP	No driver required
Windows 2000	No driver required
Windows Me	No driver required
Windows CE 3.0 or higher	No driver required
Macintosh 8.6 or higher	No driver required
Windows 98 Second Edition	See below for driver installation instructions
Linux 2.4 or higher	See page 10 for mounting instructions

2.1 Driver Installation for Windows 98 Second Edition

Since Windows 98(SE) does not support mass storage devices, a one-time installation of the device driver is required.

- Plug the Mobile Disk into the computer's USB port. The **Add New Hardware Wizard** will start automatically. Click **Next**.



- Select **Search for the best driver for your device** and then click **Next**.



- **Insert Disk** appears. Insert the included CD. Click **OK**.



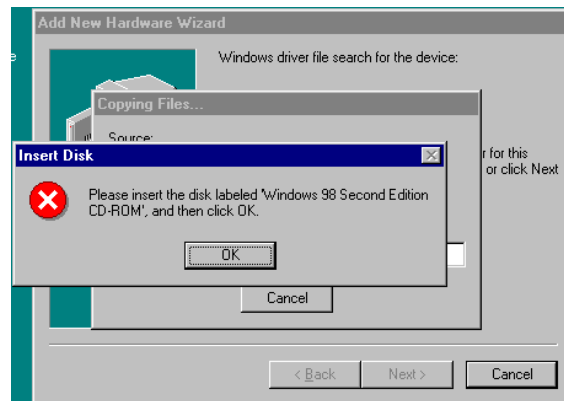
- Check the **Specify a location** box.
- Click on **Browse...** and navigate to the **hana_flash_win98drv** directory on the CD.
- Click **Next**.



- Locate the file **BW_USB.INF** and click **Next**.

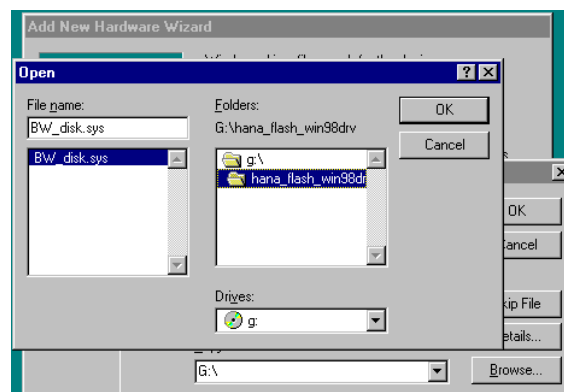


- **Insert Disk** appears once again. Just click **OK**.



- Locate the file **BW_DISK.SYS** (it is in the same directory as **BW_USB.INF**).

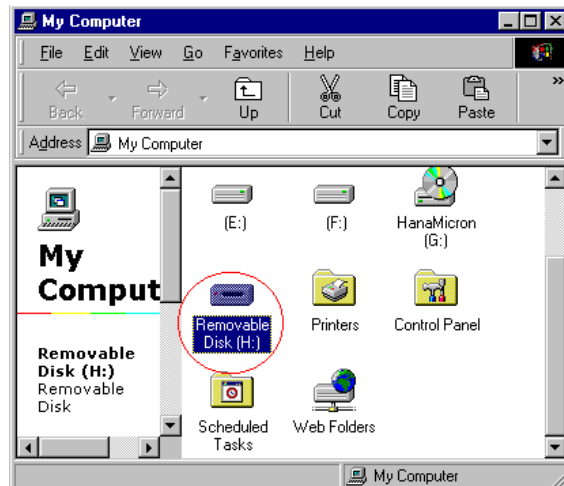
- Click **OK**.



- Installation is completed. Click **Finish**.



- Once the installation process is complete, a drive icon for the Removable Disk appears in the My Computer.



2.2 Operating in Boot Mode

- Perform system format (making a MS-DOS boot disk) for windows 98, and make a boot drive.
- Select **USB ZIP** (Award Bios) or **FDD-Emulation** (AMI Bios 8.0) from **1st BOOT DEVICE** in the CMOS setup menu of your PC
- Restart the system. Booting will be done with the **MOBILE DISK**.

Once a booting function is installed, this function can be run for any kind of Windows version.



2.3 Instructions for Linux

Operating in Linux (Using Linux Kernel 2.4.X Mount Command):

- Log in to **root**
- Connect the product into the USB port.
- Pop up the terminal (xterm, hanterm).
- With the command **mkdir /mnt/disk**, generate a folder **disk**. (Just once initially)
- Mount the device with the command **mount /dev/sda1 /mnt/disk**.
- With the command **df**, command that the following mount was done.
/dev/sda1 127684 8 127684 1%/mnt/disk
- With the command **cd/mnt/disk**, move to **disk** folder.
- Now you can use the mounted folder.

After completing read and write, dismount with the command **unmount/dev/sda1** and remove the product from the USB port.



3. Manager Program

The Manager program is a convenient way for you to format the entire disk in case of data corruption, to password-protect your entire Mobile Disk, or to designate only a portion of the Disk as your password-protected Secure area and leave the rest of the disk as a Public area for sharing with other users.

To launch the Manager Program insert the CD in your computer's CD Drive and then go to Window's **Start** menu, click on **Run...**, and then browse to locate **diskmanager_v12e.exe** on your CD. Then click **OK** to run the program.

The Manager program offers three main functions:

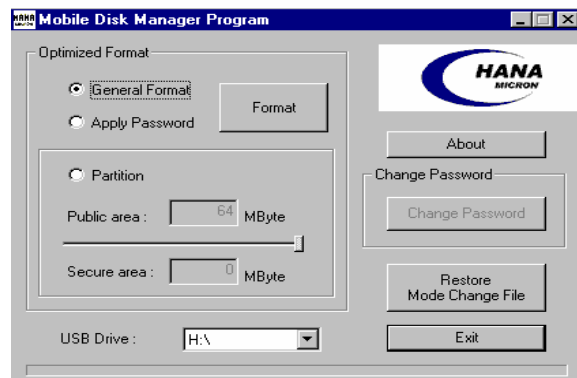
- Format by clicking the **General Format** button will format the whole storage area without partition.
- Format by clicking the **Apply Password** button will designate the whole storage area as a Secure area (except a capacity of approximately 430KB) requiring a password to access the disk.
- Format by clicking the **Partition** button will divide the storage area into Secure and Public areas. A program called **ModeChange.exe** will be automatically copied onto the disk for switching between Secure and Public areas.

Following are detailed descriptions for each of the above functions:

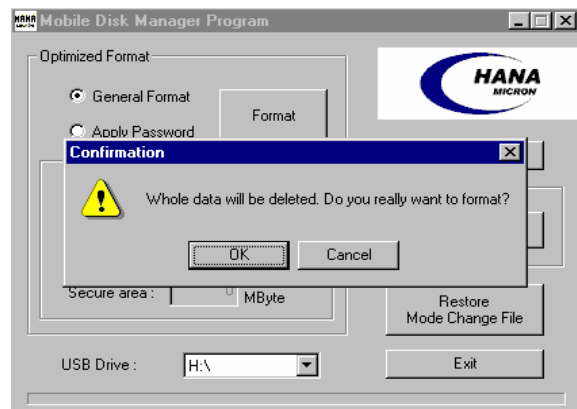
3.1 General Format

Although Mobile Disk is optimized in its initial state, low-level formatting may be required to eliminate bad blocks caused by an improper shut-down or repetitious read and write.

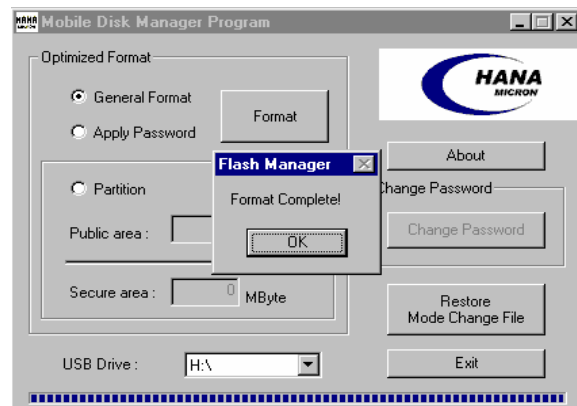
- The following window indicates the stage of general formatting. Select **General Format** and click the **Format** button.



- A warning message about loss of data will appear. Formatting will start after clicking **OK**.



- Once the format is complete, a window with confirmation message appears. Click **OK**.

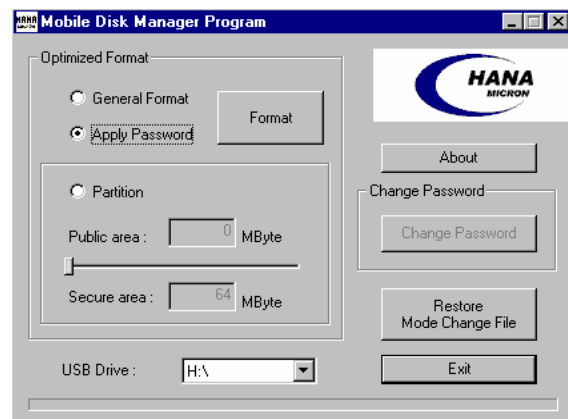


3.2 Apply Password

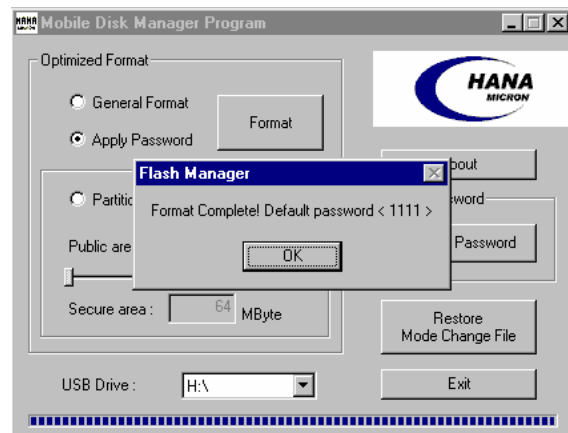
When you password-protect your Mobile Disk, the Manager program puts an executable file (**Password.exe**) on your Disk, which can be launched at any time to allow you access to the secured files. Unlike many other similar products, this convenient program eliminates the need to carry around a media or make additional installations on every computer that you need to plug the Disk into.

Apply Password will password-protect your entire Disk (with the exception of approximately 430KB).

- Select the **Apply Password** button and then click **Format**.
- Click **OK** in the warning message about the loss of data.



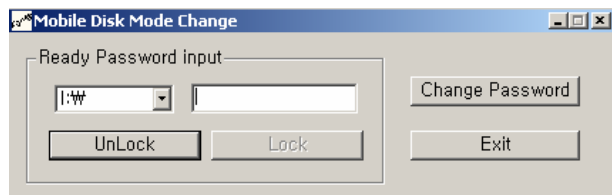
- The disk will be formatted with a default password of 1111 (see below for instructions on how to change the password).



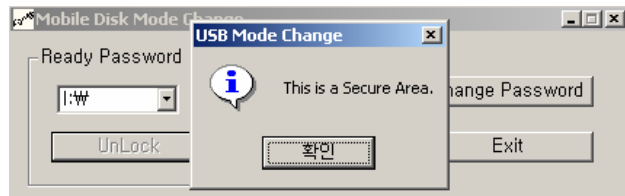
The following steps explain how you can access the password-protected area of your disk:

- Find the Removable Disk from Windows Explorer or My Computer and click on it. You will see the **Paasword.exe** executable file. Run this program by opening it.

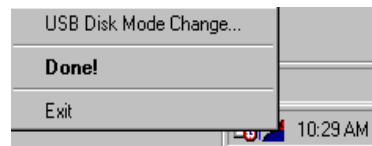
- Enter the password and click on the **Unlock** button.



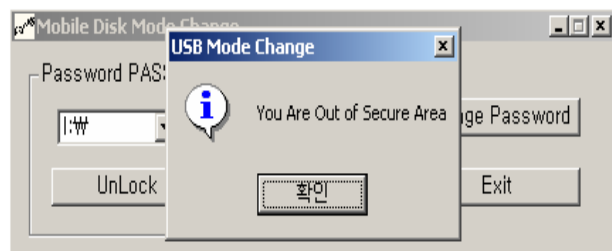
- Click **OK**. The password-protected area of the disk (excluding 430 KB) is now available to use.



- As the program is launched, an icon also appears on the Tray. **Password.exe** can be launched again at any time either by double clicking this icon or by positioning the cursor on the icon and clicking your right mouse button to select **USB Disk Mode Change...**

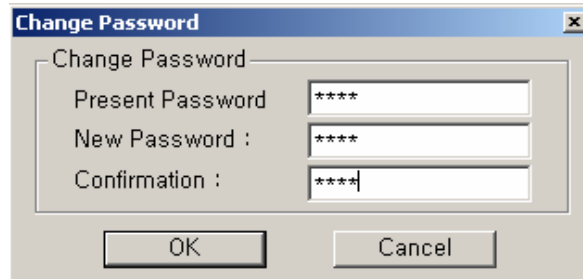


- To exit the Secure area, simply launch the **USB Disk Mode Change** program from the Tray, and then click on **Lock**.



- Click **OK**.

- To change a password, click the **Change Password** button on the password function window. If it is the first time you change the password, the default password needs to be entered. Then enter new password, new password once again and click **OK** to complete password change.



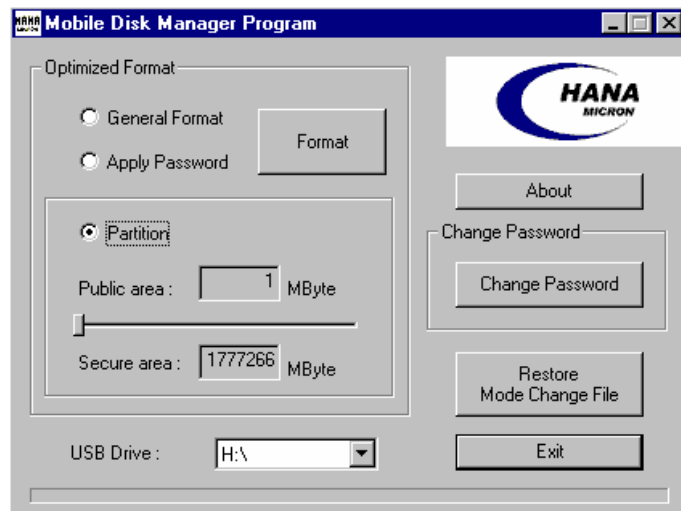
Unlike many other password programs that stay in the computer's RAM (which may cause memory overflows and collisions) the password window, as well as the password function icon, disappear when the disk is removed from the PC.

Once created, **Password.exe** cannot be deleted unless the Disk is reformatted. If you accidentally attempt to delete **Password.exe** off your Mobile Disk, you might see the file disappear from Windows Explorer. However, by properly ejecting the Disk and then plugging it back into your computer, the file will appear again in Windows Explorer.

3.3 Partition

Your Mobile Disk can be formatted so that only a certain portion of the Disk is password-protected.

- Select the **Partition** button.
- Scroll the horizontal dial to adjust the desired allocation between Public and Secure portions. For example, in this picture, the position of the dial corresponds to 8 Mbytes of Public area versus 24 Mbytes of Secure area (on a 32 Mbytes Mobile Disk).
- Click **Format**
- Click **OK** in the warning message.
- Click **OK** in the message indicating that the default password is 1111.

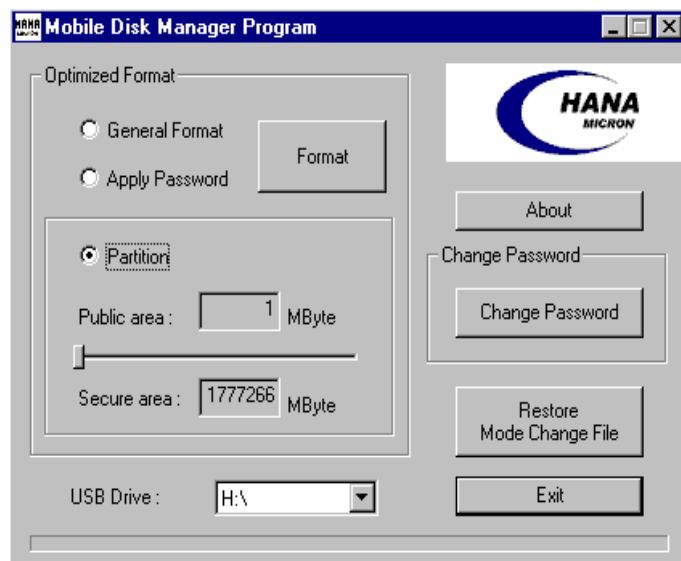


The Manager Program copies a file called **ModeChange.exe** onto your Mobile Disk. You will need to launch this program to switch between the Secure and Public areas of the Disk.

3.4 Mode Change File Restore

If the partition program, *i.e.* **ModeChange.exe**, is deleted from your Mobile Disk, mode conversion between Public and Secure areas will not be possible. In this case, **ModeChange.exe** can be copied again onto your Mobile Disk by using the Manager Program.

- Click the **Mode Change File Restore** button.
- Click **OK**.



4. Troubleshooting

- **My computer doesn't recognize the Mobile Disk!**

First, check whether you are using an operating system that automatically supports the Mobile Disk – auto-supported operating systems include Microsoft® Windows® ME, 2000 and XP; Mac® OS 9 and OS X and Linux® versions 2.4.X and higher. If the drive is being used on one of these systems and is still not functioning, try it on a different system using one of these operating systems. If the drive fails to be recognized on a second system, then it is possible the drive may be defective. Please contact a customer service center and we will arrange for an immediate, free replacement drive to be shipped to you (assuming the drive is still under its 1 year warranty period).

- **When I connect the Mobile Disk to a Macintosh computer, it recognizes it but asks if I want to format it.**

This means your Macintosh computer cannot read any Windows-formatted files currently on the drive. Please refer to your computer user's manual and enable the Windows file read functionality for your Mac. Note that if you follow the message and format the Mobile Disk on a Macintosh, it will NOT read or write on Windows PCs, so it is strongly recommended NOT to do this.

- **The Windows ME/2000/XP Operating System recognizes the Mobile Disk, but will not install the device driver.**

It is possible you may have deleted a portion of the standard driver for the operating system. Please try and download the necessary device driver from the Microsoft Website.

- **The indicated capacity of the Mobile Disk is less than the maximum capacity of 16MB, 32MB, 64MB or 128MB.**

Mobile Disk calculates its storage amount as 1KB=1000 Bytes and 1MB=1,000,000 Bytes. As a result, the actual capacity may be indicated as 15.3MB, 30.8MB, 62.1MB and 124MB respectively. The drive may also only be showing the available disk space in the 'public' part of the drive (if drive security is being used).

5. Technical Specifications

Interface	USB Specification 1.1/2.0
Operating System	Windows 98(SE) – driver required (included in CD) Windows ME, 2000, NT, XP, CE 3.0 or higher, Macintosh OS 8.6 or higher, LINUX 2.4.0 or higher – no driver required
Capacity	16MB, 32MB, 64MB, 128MB, 256MB, 512MB, 1GB, 2GB
Data Retention	10 Years
Speed	Read 1,000KB/sec, Write 600KB/sec
Source	USB Bus-powered (No other power sources needed)
Contents	Mobile Disk, CD, USB Cable, Warranty
Manufacturer	HANA Micron Inc., +82-2-2057-4787
Additional Function	Password, Capacity Partition



6. Warranty

Mobile Disk has been manufactured through strict quality management and inspection. If any faults or natural breakdown occurs within the warranty term, HANA Micron will remedy the malfunction according to the guarantees outlined in the warranty statement.

Please record the following information for future reference:

Product Name			
Model Number			
Date of Purchase		Warranty:	1 Year
Purchase Price			
Store	Name		
	Location		
	Phone		

Free Services

Free services are available from the customer service center for 1 year after the Date of Purchase.

Fee-Based Services

Service charge is incurred when:

- Problem occurs due to improper use (damaged by impact or inserting improper materials).
- Problem occurs after any repairs or handling not performed by HANA Micron's customer service center.

Many products brought to the service center do not have any problems. So please see the Troubleshooting section of this manual before returning the product.

Customer Service Center

HANA Micron Inc.
6th Floor, Myeong-Seong B/D
Dogok-Dong, Kang Nam-Gu
Seoul, Korea 135-271
Tel : 0502-111-7272
Fax : 02-2057-4635
E-Mail : support@hاناusb.com

7. FCC Information

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This Device may not cause harmful interface, and*
- (2) This device must accept any interference received, including interference that may cause undesired operation.*

Note: This equipment has been tested and found to comply with the limits for CLASS B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try correct the interference by one or more of the following measures:

- 1.1. Reorient or relocate the receiving antenna.
- 1.2. Increase the separation between the equipment and receiver.
- 1.3. Connect the equipment into an outlet on a circuit different from that to which receiver is connected.
- 1.4. Consult the dealer or experienced radio/TV technician for help.

WARNING

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.