

Magic Card Extra IV

User's Manual

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System Requirements

1. Pentium III and above compatible PC.
2. 80GB and above Hard Disk.
3. Minimum 5G of free hard disk space, recommended 16G.
4. BIOS must be able to support Hard Disk size over 8.4GB
5. 128MB of Memory
6. One free PCI slot.
7. Color monitor

Operating System Support

Instant Restore Mode

Support Windows 2000/XP/2003/Vista/Win7 x32, x64

Backup Restore Mode

Support 2000/XP/2003Server/Vista/Win7 x32, x64/ LINUX

No Restore Mode

Support 2000/XP/2003Server/Vista/Win7 x32, x64/ LINUX

1. Start Installation

Express Installation: Supplies an instant restore for **Windows 2000/XP/2003Server/Vista/Win7 operating systems**. All of the original data on the hard disk may be preserved. The default setting after Express install is Instant Restoration by every reboot. Express Installation can only be used when a Windows operating system has been pre-installed on the hard drive.

Custom Installation: Supports multi-boot functions by using the built-in FDISK utility. Each partition may be setup with the preferred restore type and restore interval. When choosing this installation type, all data and partitions will be destroyed and the hard disk will need to be repartitioned and formatted.

Keep C: By selecting this installation, only data on partition C will be kept. All other partitions will be deleted. Note that this installation does not support Win7.

Note! Before using Express installation, remember to run **SCANDISK** and **DISK DEFRAGMENTER** utilities provided by Windows for best performance. Also disable any anti-virus programs to avoid any possible conflicts.

1.1 Installation Steps:

- 1) Turn off the computer and remove the casing. Insert the Magic Card PCI card into slot. Secure the computer casing. Turn on the computer and insert the Magic Card install disk to start install.
- 2) Next you will see the menu of Install Setup. Select [**Express Installation**] [**Custom Installation**] or [**Keep C**] to start.

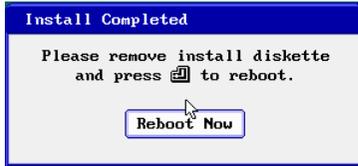
Note: If during installation you get an error message "**Installation error. Please check and reinstall again**" try to do the following: In "**Boot device priority**" of **BIOS** set Magic Card as first boot device, CD-ROM as second and HD as third boot device. When the installation screen appears press **F5** instead of **Enter**.



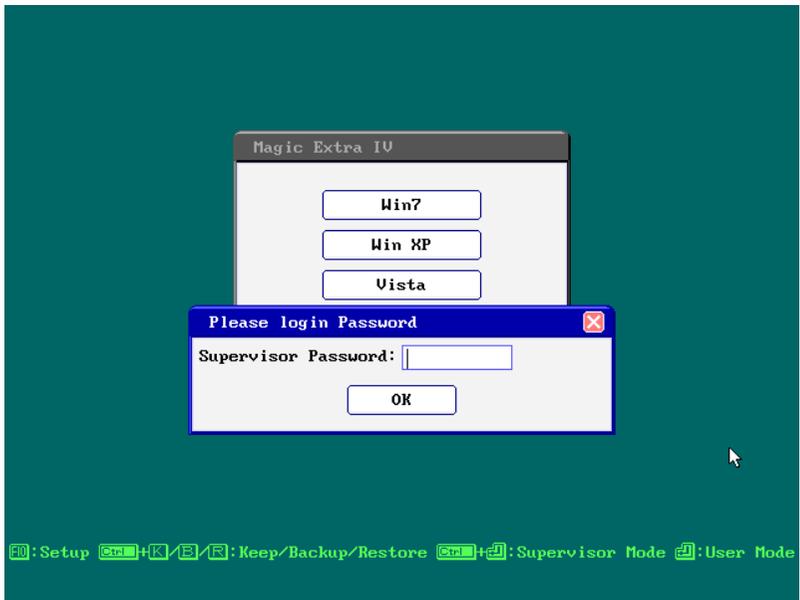
- 3) During the installation, please do not restart or power off your computer.

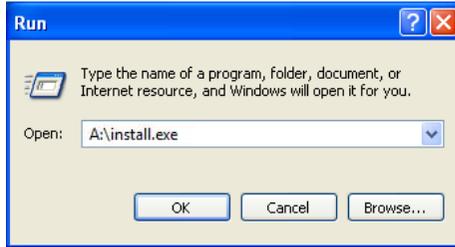


- 4) When [**Install completed**] shows up, remove the install disk and press Enter key to restart the computer.

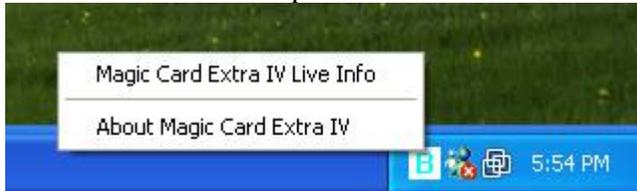


- 5) If you install by [Express Installation], you will only have three seconds to press F10 to enter Setup menu and change the preferred settings. After save the preferred settings, reboot and press [Ctrl+Enter], enter the Supervisor Password to enter Windows by Supervisor Mode. The default password is [ENTER] key. Once operating system is up, insert Magic Card install disk into the floppy drive. Click [Start\Run] and type **A:\Install.exe** to install Magic Card setup.



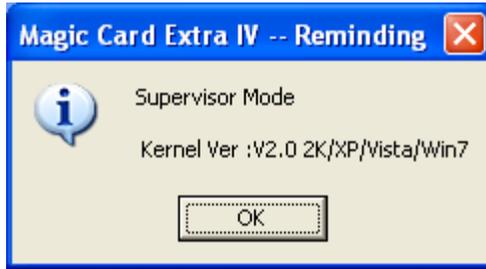


- 6) If install by [Custom Installation], the system will reboot into FDISK setup menu. Please refer Section [2: How to setup FDISK](#) to complete the hard disk partitioning and press [ESC] key to save and exit. Then you can start to install Operating System and execute Install.exe in every partition. Please refer Section [.3: Install Operating System](#))
- 7) After executing Install.exe, a [Shadow Space] tray icon will display in the Windows taskbar. This “Buffer Monitor” utility installed enables the user to receive status of buffer left for use by the card until a restart operation is needed.



When the free space is less than 200MB, the system will warn you with a beeping sound. Please save all files and restart the computer immediately or operate Restore function to release the new buffer zone.

- 8) When you are in Supervisor Mode, the system will pop up the following figure to warn you when Windows is up.



1.2 Supervisor Mode

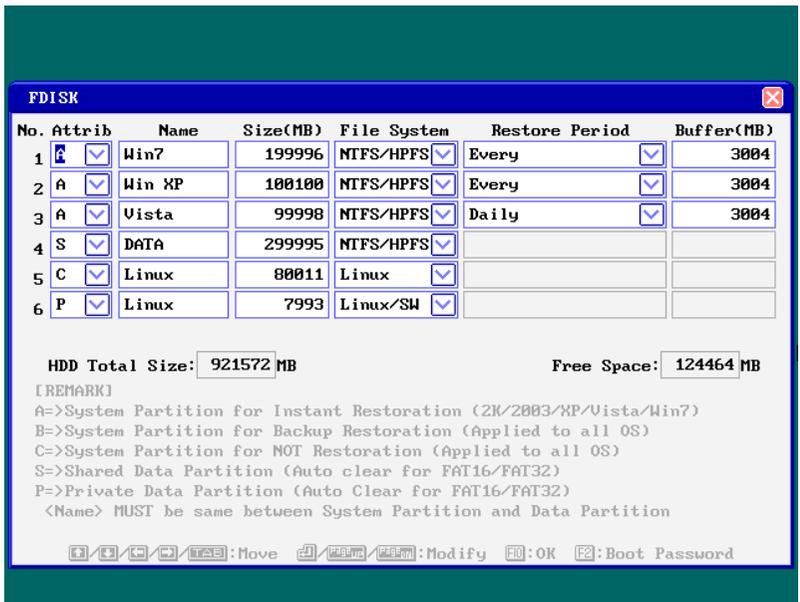
The **Supervisor Mode** is where the Magic Card is not active and is allowing full Read/Write access to all partitions on the hard disk drive. All of the changes are permanent. This Mode is only accessible from MIS or administrators. To enter Supervisor Mode, press [Ctrl+Enter] when you are at the boot menu of “Magic Card”. The supervisor Password will be required to enter in this mode. The default supervisor password is [ENTER] key.

1.3 User Mode:

The **User Mode** is where the Magic Card is active and is governing the access writes to the partitions on the disk drive. Any changes under this mode will be restored to its original settings after the PC is re-booted by the preset schedule.

Note! The relativity of Supervisor Mode and User mode is only existed when the attribution of boot partition is set to (A): system partition for instant recovery.

2. How to setup FDISK



The Magic Card supports multiple operating systems installed on one hard drive when using [**Custom Installation**]. Each operating system is in a different physical partition, allowing multi-booting up to 40 partitions.

2.1 Attribution

(1) A: System Partition for Instant Restoration:

Within this partition type, all changes will be instantly restored to its original state with a simple reboot. Various restore schedules are provided, including every reboot, daily, weekly, monthly, a given date and manually. **Supports Windows 2000/XP/2003Server/Vista/Win7.**

(2) B: System Partition for Backup Restoration:

Setup this partition type, you can backup data manually, or restore the original data with preset schedules. It supports almost all operating systems in the market.

(3) C: System Partition for No Restoration:

No protection or backup function is provided for this partition type. Any changes done in this partition are permanent and will remain. It supports almost all operating system in the market. It is mainly for networking environments.

(4) S: Shared Data Partition:

This partition type will be visible with every partition you choose to boot from. It is Excellent for sharing data between different operating systems.

(5) P: Private Data Partition:

This partition type will only be visible for the boot partition with the same name in the setup menu. It will be invisible when booting from any other partitions. This is excellent for constantly changing data that is exclusive to one operating system. For example, if the name of boot partition is [WinXP], then the name of its private data partition must be [WinXP] as well.

2.2 Name

Identify of the partition in Magic Card boot menu. Maximum length is 10 characters

2.3 Size

Setup preferred partition size.

Enter the preferred size or press [PageUp/PageDown] to adjust.

2.4 File System:

Choose appropriate file system for each operating system

FAT32: Support Win98/ME/2000/XP/2003Server/Vista

FAT16: Supports Win95/NT hard disks under 8.4GB. Total partition size cannot be more than 2000MB.

NTFS/HPFS: Supports

WinNT4.0/Win2000/XP/2003Server/Vista/Win7.

The boot sector of WinNT4.0 cannot be located over

2000MB. Total partition size cannot be more than 4300MB.

Win2000/XP does not have such restriction.

LINUX: Supports LINUX file system.

LINUX/SW: Supports LINUX Swap file system.

2.5 Restore Period

Set up restore time for System / data recovery.

- **Disable:** Shuts down Instant Restore function
- **Every:** The system will be instantly restored to its original state with every reboot.
- **Daily:** The system will be instantly restored to its original state at the first boot of every day.
- **Weekly:** The system will be auto restored to its original status at the first boot of every Sunday.
- **Monthly:** The system will be auto restored to its original state at the first boot of date 1st every month.
- **Manually:** Every access writes to the hard disk will be kept temporarily. The system will be restored to its original status by pressing [Ctrl+R] and the restore or supervisor password.
- **A Given date(1st~31st):** The system will be auto restored to its original status at the first boot of a specified date.
- **Auto-Clear:** Data partition will be auto cleared with every re-boot. Only supports FAT16 and FAT32 file systems.
- **With System: Private** data partition will follow the restore period of its boot partition.

2.6 Buffer:

- **For Instant Restoration type:**
Maximum buffer size is 4000MB and Minimum is 50MB.
Default value is 3000MB.
Move the cursor to the selected option and adjust the size by PageUP/PageDown.
- **For Backup Restoration type:**
It requires a buffer zone that is equal in size to the protected partition. The buffer zone will be automatically reserved within the remaining unpartitioned hard disk space.
- **For No Restoration type or Data partition:**

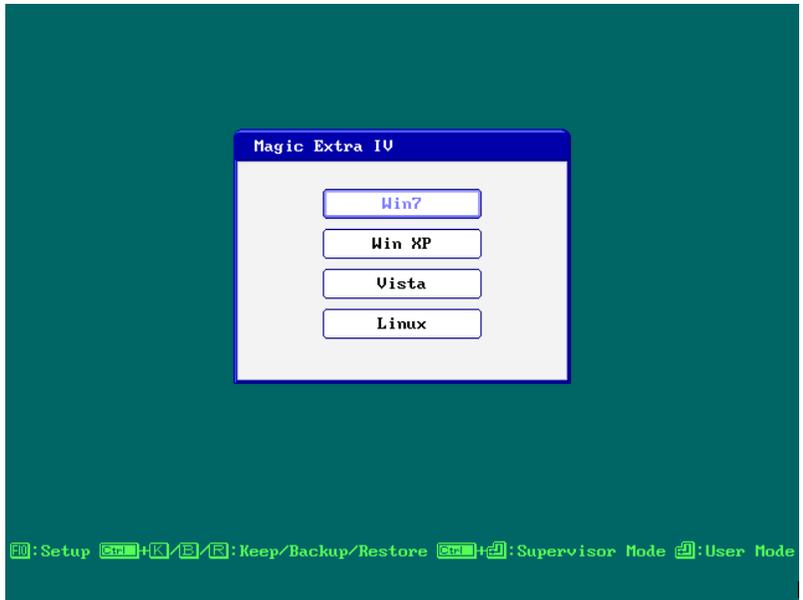
No buffer is required.

Note! When the settings in the FDISK are saved, the partition size will not be able to change. Please think twice before saving and exiting.

3. Install Operating System

3.1 Boot Menu:

After completed FDISK setup, press [ESC] key to save and exit. PC will automatically restart and will show the Magic Card boot menu as follow.



3.1.1 How to Install for DOS and Windows

Move the light bar to the selected partition and follow the steps below to start OS installation.

Note! Please prepare a boot CD or Diskette and format all system and data partitions.

3.1.2 For boot partition set to attribution (A)

- **Windows Operating System installation steps for [Instant Restoration Partition]:**

After rebooting your computer, the Magic Card boot menu will appear showing all the partitions you setup. At that time you can choose a partition and install the operating System. Follow the steps listed below:

Step 1. Start PC with boot diskette or boot CD.

Step 2. Select the desired partition with [Ctrl+Enter] and login using the Supervisor Password (default Password is [ENTER] key).

Step 3. Format C:

Step 4. Start installing desired operating system.

Note! During installation, windows will reboot several times. Make sure all the install procedures are done in the Supervisor Mode.

Step 5. Install Magic Card Setup Driver in Windows.

Make sure you are in Supervisor Mode first.

Step 6. Insert Magic Card install diskette in floppy drive.

Step 7. Click [Start\Run] and type **A:\Install.exe**

Buffer Monitor utility installed enables the user to receive status about the amount of free resources left for use by the card until a restart operation is needed.

- **Installing other applications and programs:**

To install other applications and programs (Office XP..etc.), please press [Ctrl+Enter] to go into desired partition under Supervisor Mode to begin installation.

3.1.3 For boot partition set to attribution (B)

Operating System installation steps for <Backup Restoration Partition>

Step 1. Start PC with boot disk or boot CD.

Step 2. Select the desired partition with [Enter] key.

- Step 3.** Format C:
- Step 4.** Start installing OS.
- Step 5.** Reboot computer.
- Step 6.** Select the same partition again with [Ctrl+B] keys and login with Supervisor Password (default Password is ENTER key) to backup the current partition's data → Done

Note! To restore the Backup Restoration partition, please select the partition with [Ctrl+R] keys and login with Supervisor Password. It will restore the system to its current backup.

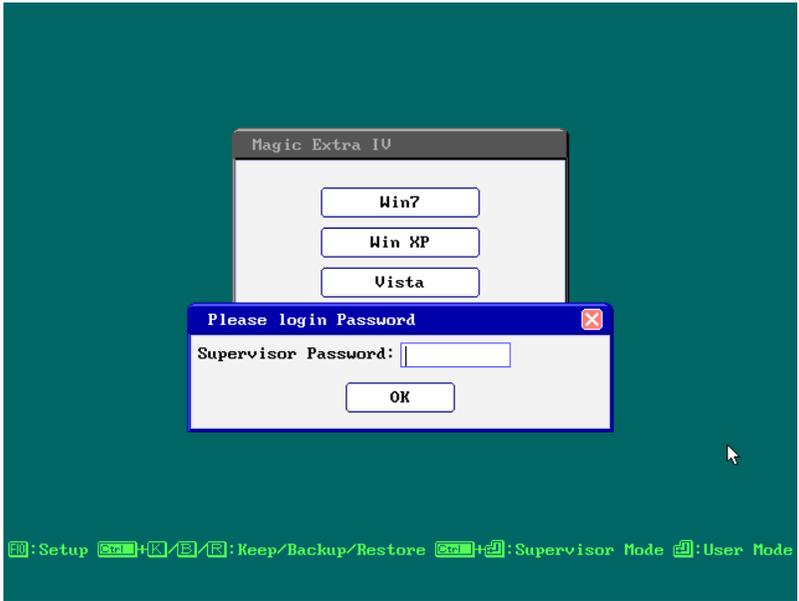
3.1.4 For boot partition set to attribution (C)

Attribution C is no Restoration Partition. In this partition, the operating system installing procedure is same as if no card were installed. No protection is provided under this partition.

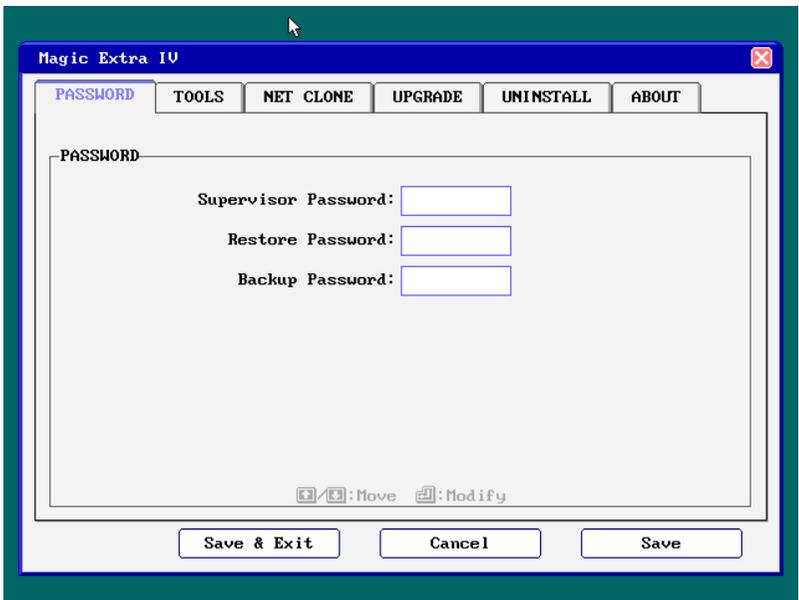
- Step 1.** Start PC with boot disk or boot CD.
- Step 2.** Select this partition with [Enter] key
- Step 3.** Format C:
- Step 4.** Start installing OS.
- Step 5.** Reboot computer.

4. Option Menu

After complete Magic Card installation, press [F10] key at the boot menu to enter Option Menu. Supervisor password will be asked to enter Option Menu. All the settings in this menu go into effect after saving the changes and restarting the computer.



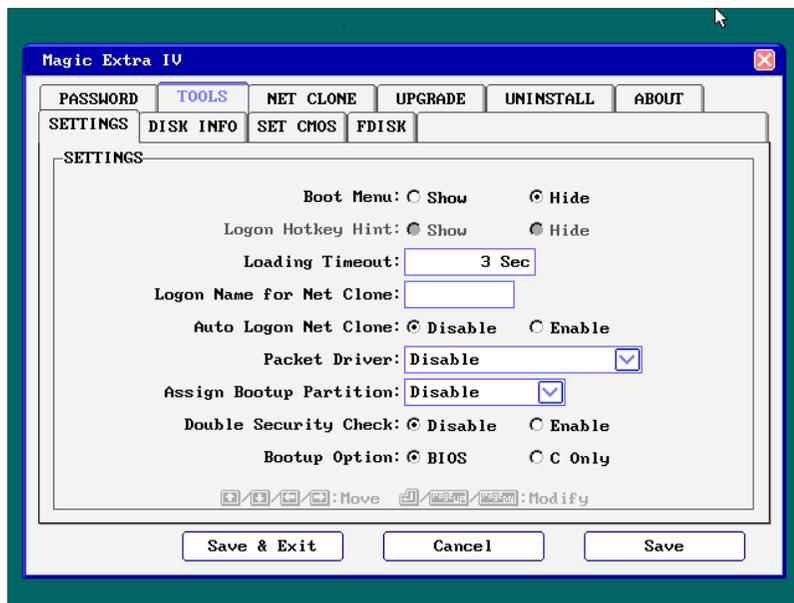
4.1 Password



The default Supervisor Password is [ENTER] key. UP to 10 characters are available. Press F1 will display the password. The supervisor password will be used to enter <Option Menu>, <Supervisor Mode>, or executing <Keep> <Backup> and <Restore> functions. Please REMEMBER to write this Password down and NEVER lost it or you will need to reinstall everything!

4.2 Tools

4.2.1 Settings



1. **Boot Menu:** Show/Hide(default)
Show: Show boot menu
Hide: Do not show boot menu
2. **Logon Hotkey Hint:** Show(default)/Hide

Show: Show hotkeys on boot menu

Hide: Do not show hotkey.

3. **Loading Timeout:** Disable/3-99 seconds/**3second(default)**

Disable: Do not auto enter the boot partition.

Setup the waiting time at the boot menu. After the waiting time, system will auto boot to the partition that the light-bar is on.

4. **Logon name for Net Clone:** Computer Name after Net Clone. If you leave it blank, the LOGON NAME will show [?] while running Net Clone.

5. **Auto Logon Net Clone:** **Disable(default)/Enable**

Disable: Disable auto connect.

Enable: Magic Card auto detects the connection and allows card to search for sending or receiving computers when powering on the machine.

6. **Packet Driver:** **Disable(default)/Realtek 8139/Intel 100Pro**

7. **Assign bootup partition:** Disable / boot partition name

Disable: Do not assign a boot partition.

Boot partition name: Pre-set a desired partition to boot.

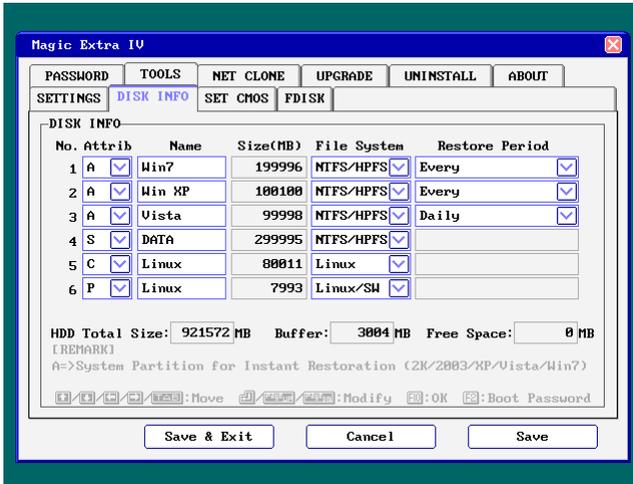
8. **Double security check:** **Enable/Disable**

9. **Bootup option:** **BIOS / C only**

BIOS: the boot sequence will follow the setting in the BIOS.

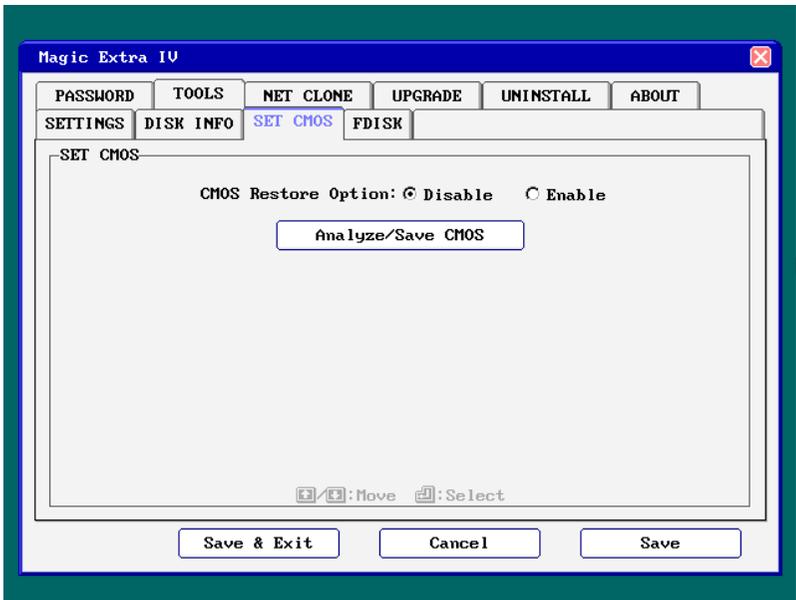
C only: Computer boots from C. Enabling this setting will protect your hard disk information from being destroyed in case the Magic Card is removed without going through the formal uninstall procedure first. If the card is removed or undetected for some reason, the system will warn you by beeping and the computer will be unbootable.

4.2.2 Disk Info



Please refer to Section [2. How to setup FDISK.](#)

4.2.3 Set CMOS



CMOS Restore Option: Disable (default) / Enable

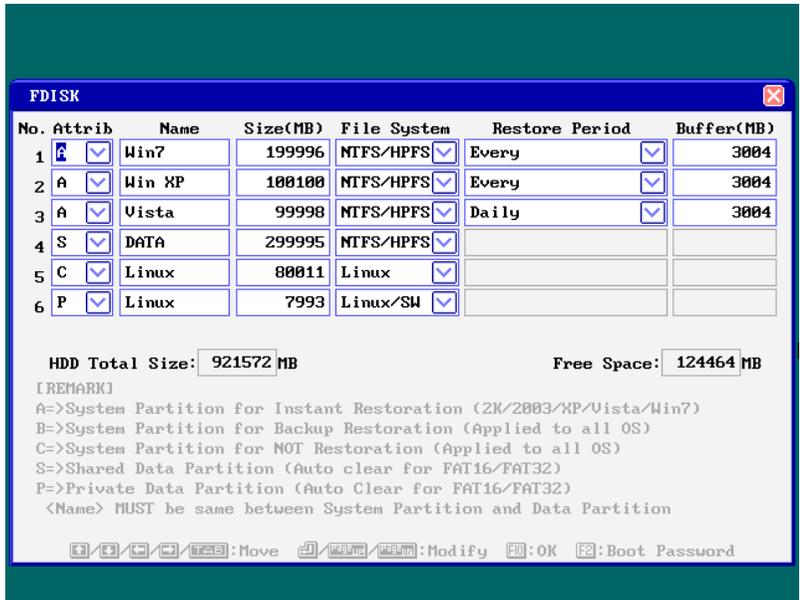
Disable: Do not restore CMOS.

Enable: If CMOS DATA is modified, it will be restored.

Analyze/Save CMOS data

Make a comparison of current CMOS data and the saved CMOS data in the hard drive for differences. You can run this selection when some settings or peripherals have been changed or replaced. If CMOS data is changed, the Magic Card will remind you to restore or backup when rebooting, even if you did not run this selection manually.

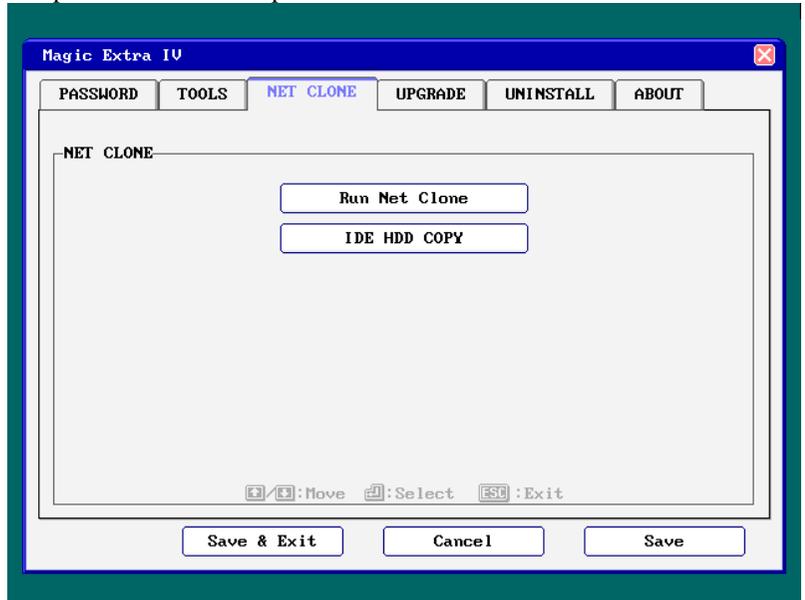
4.2.4 FDISK



To change the partition size requires you to use FDISK again in Tools menu. All data in hard disk will be destroyed if FDISK is used.

5. Net Clone

Net Clone allows you to maintain 200 PCs at the same time. You can use this function to transfer hard drive data through a master computer to the rest computer over network.



5.1 Net Clone running steps

Step 1. [F10]> [Upgrade]

For Sending computer, get to Magic Card Boot menu, enter [option] menu by pressing [F10]. Insert Magic Card LAN driver diskette into floppy drive and select [Upgrade] to load the packet driver. The following are the supported packet driver.

Realtek 8139x, Intel 10/100 PRO #, 3Com 3C905c, 3Com 3C905(b), 3Com 3C920, D-Link 500, D-Link 510TX, D-Link 530TX-A1, D-Link 530TX-B1, D-Link 530TX-C, D-Link 538TX, D-Link 550TX, Accton MPX EN1207D-TX, Accton MPX EN1207F-TX, VIA Rhine Family 4.26, VIA 1G(VT612x) V1.11t, VIA Tahoe Family(2), VIA PCI 10/100 V3.27, VIA VT610B V4.30, SMC 9432TX, AdmTek AN983B-NIC, RE100PD, DAVICOM DM9X Series, C83815 v12.2, IC Plus IP100 v3.03, MX32PD v2.00, Realtek 8169, AMD PCNET

v3.10, B57-NET 1G v1.05 After completed loading packet driver, restart your computer.

Step 2. [F10]> [Tools]> [Settings]

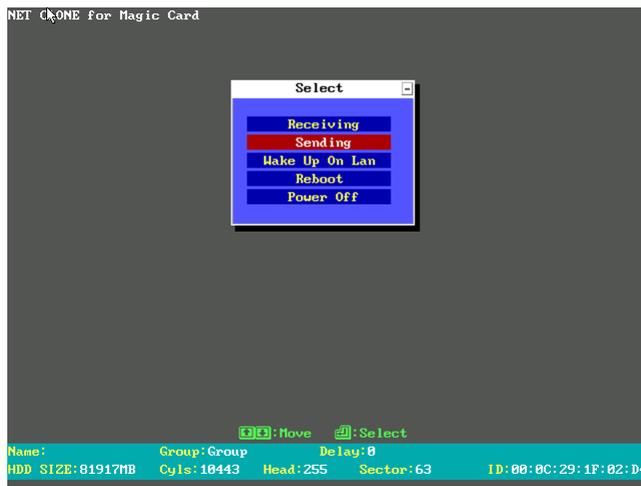
For the sending computer, enable [Auto Logon Net Clone] and select the packet driver that matched to your Network Card. Press ESC to save and exit.

Step 3. For Sending computer, run [Net Clone]. Select [Sending], then refer to section 5.2 Net Clone Logon.

Step 4. For receiving computers, run [Net Clone] > [receiving]. Then refer to section 6.3 NET CLONE Login.

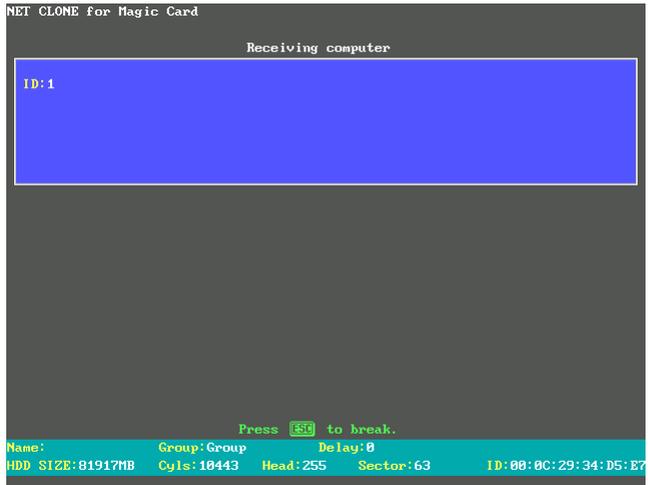
5.2 Net Clone Logon Menu

For Sending computer, press [F10] and get into Option menu. Run [NET CLONE] and you will see the following figure.



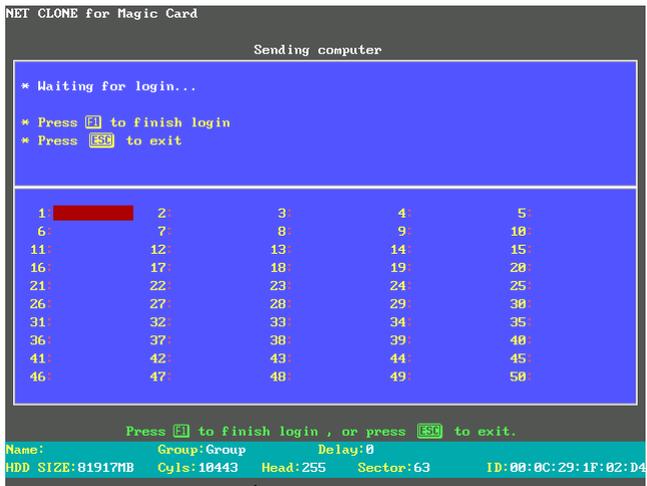
5.2.1 Receiving:

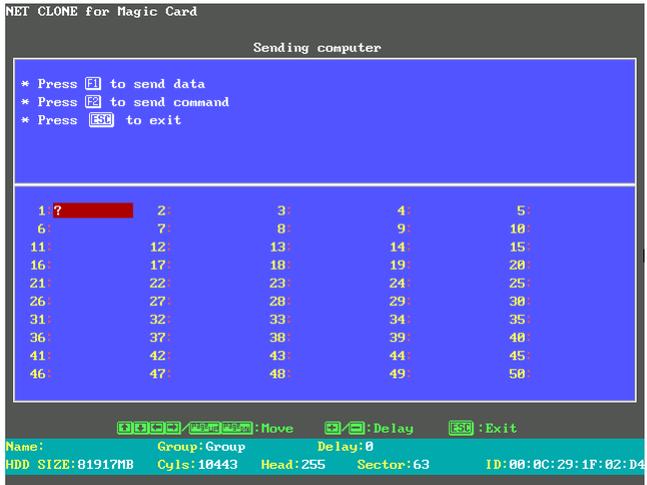
Target computer for receiving data from Sending Computer.



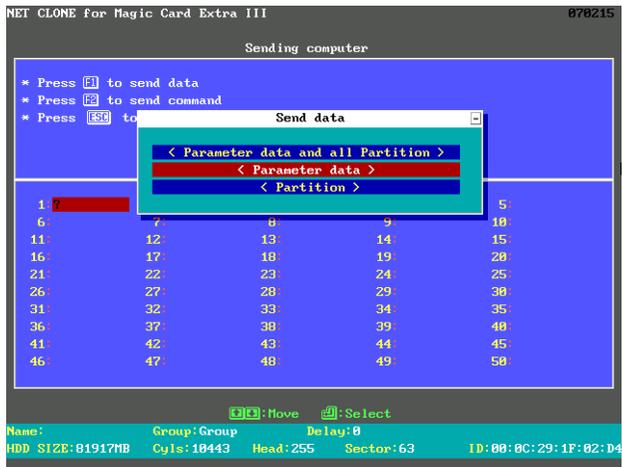
5.2.2 Sending:

Source Computer used to send data to receiving computers.





5.3 SEND DATA



5.3.1 Parameter data and all Partition:

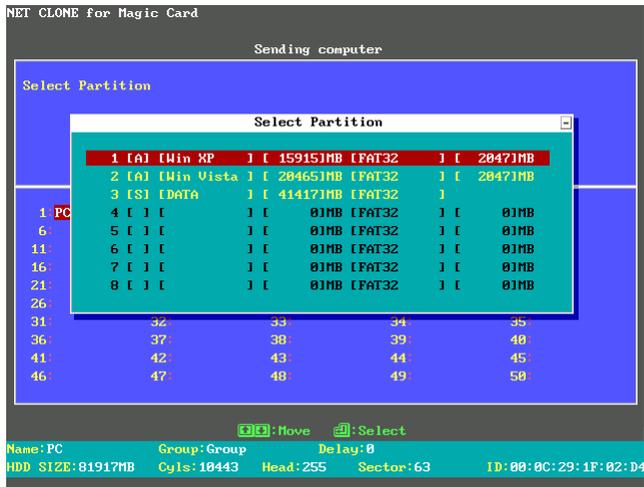
Copies and sends all data and the Magic Card information to receiving Computers. Highly recommended for first time installation.

5.3.2 Parameter data:

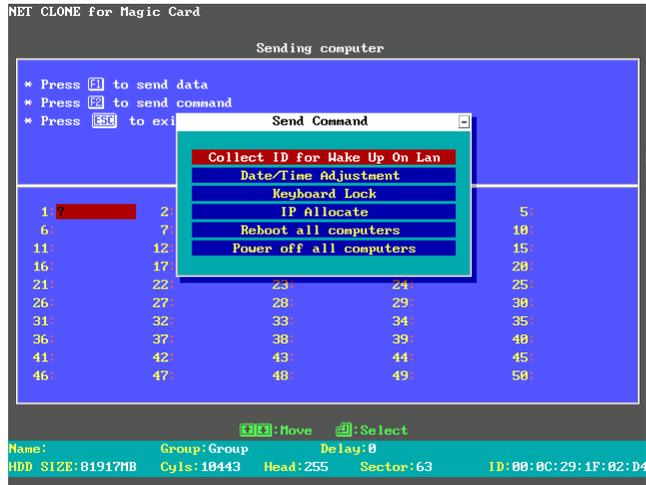
Copies only Magic Card information to receiving computers.
Recommend usage: Magic Card software version upgrades.

5.3.3 Partition:

Copy selected Partition to receiving computers. Recommended usage: When data of the selected Partition been updated (Time saving). **Time saving feature:** Run Disk Defragmenter before transmitting. Screen will show the disk information while transmitting. Press 「F5」 can abort transmitting.



5.4 SEND COMMAND



5.4.1 Collect ID for Wake up on LAN:

Record the Ethernet LAN Card ID of standby receiving computers. This function is for the following two purposes:

- (1) Auto IP utility
- (2) Wake up On Lan by remote control

5.4.2 Data/Time adjustment:

Match the receiving computers data and time as the sending computer.

5.4.3 Keyboard Lock:

Lock keyboards of all the receiving computers so nobody can access them during transmission.

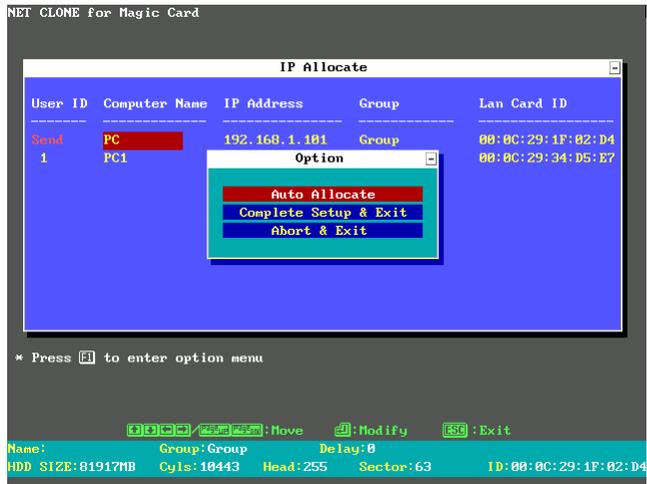
5.4.4 IP Allocate

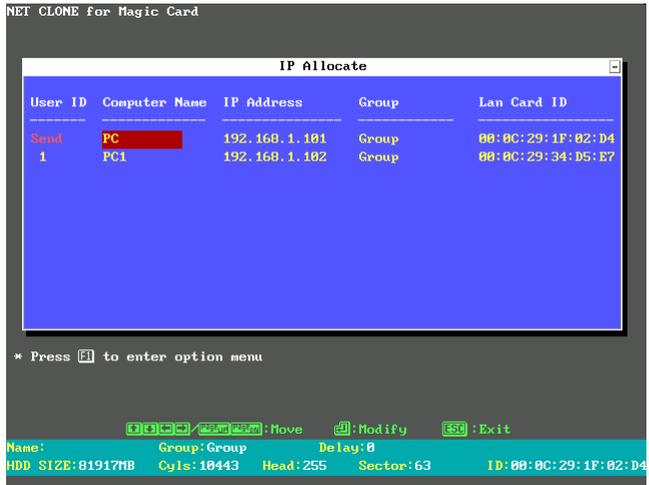
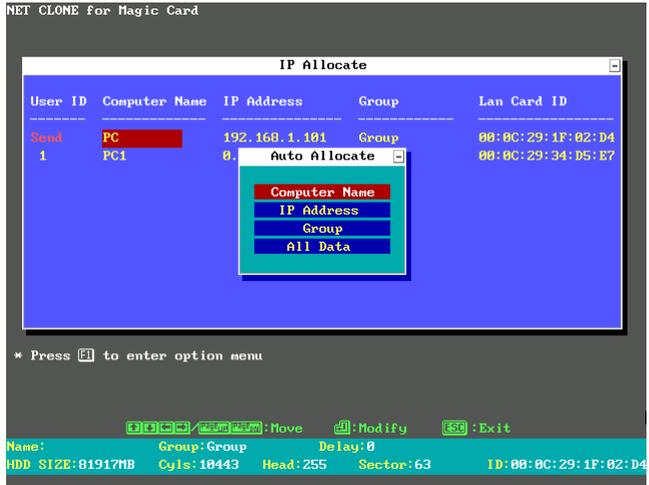
Setup Computer Name, IP Address, and Sncopy Group. The following settings can be setup one by one manually or auto allocated. After completed the following settings, press ESC and select [Complete Setup & Exit] or select [Auto Allocate] to start IP allocating.

A. User ID: Send / Receive

Identify the target and source machine

- B. Computer Name:** Computer Name after SNCOPY
Setup the sending computer name and the receiving computer name. If setup the Computer Name of the sending computer to be ABC, the receiving computer will be ABC1, ABC2, ABC3...after using [Auto Allocate] option.
- C. IP Address:**
Setup the IP address of the sending computer and receiving computers. If setup the IP address of the sending computer to be 192.168.1.1, the receiving computer will be 192.168.1.2, 192.168.1.3, 192.168.1.4,... after using [Auto Allocate] option.
- D. SNCOPY Group:**
Group name used during login. Only computers in this selected group can login. Many groups can be set for separation purposes. If setup the SNCOPY Group to be A, the receiving computer will be in the same group A after using [Auto Allocate] option.





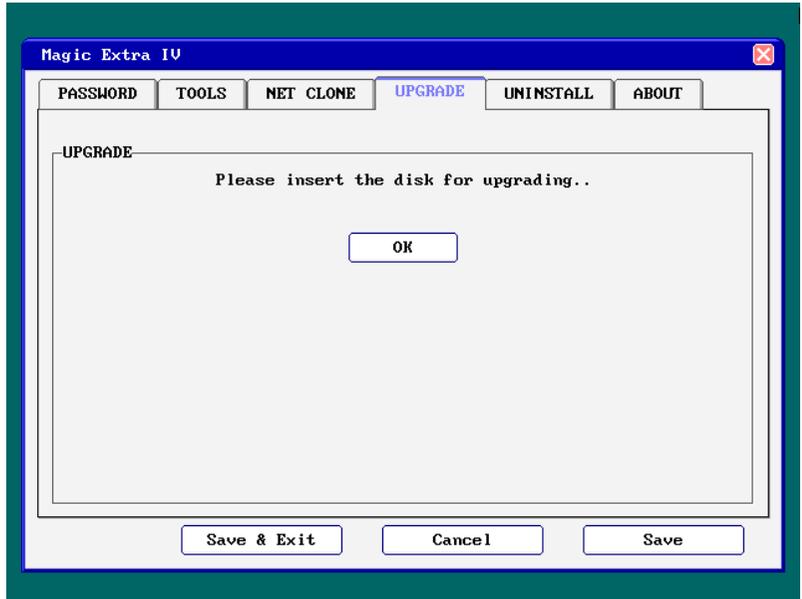
5.4.5 All computer Restart:

Restart the standby receiving computers along with the sending computer.

5.4.6 All computer Power off:

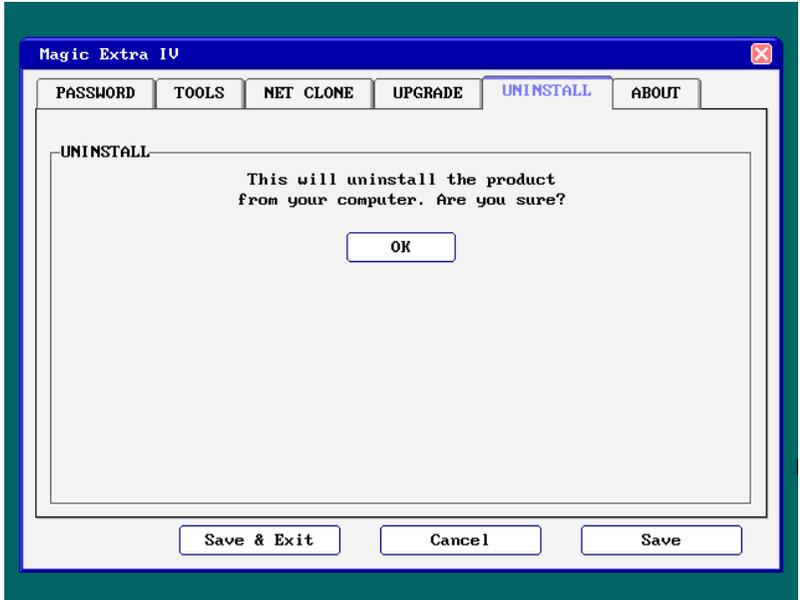
Power off the standby receiving computers along with the sending computers.

6. Upgrade



1. Get to the Magic Card boot Menu.
2. Place new installation disk into floppy drive
3. Press [F10]>[Upgrade]
4. After it is finished, the system will reboot.
5. Go into Windows in Supervisor Mode.
6. Place previous installation disk into floppy drive. Run A:\Install.exe to uninstall the previous setup in Windows.
7. The system will reboot.
8. Go into Windows in Supervisor Mode again.
9. Put new installation Disk in floppy drive. Run A:\Install.exe to install the new driver into Windows.
10. The system will reboot one more time.
11. Finished upgrading to the new version.

7. Uninstall



To uninstall Magic Card functions from this computer.

1. Place Magic Card Installation disk into floppy drive.
2. In Windows, click Start/Run and type A:\>Install.exe in Supervisor Mode



3. System reboots. Press [F10] during booting. Input Supervisor password and select [Uninstall].
4. Uninstall completed. You can now power off the system.

Note: If partition created by Magic Card it will be deleted during uninstall. Please backup important data before uninstall.

8. About



Information about Magic Card version.

9. Hotkey

- | | |
|----------------|------------------------------------|
| (1) F10 | Enters the "Option Menu" |
| (2) Ctrl+Enter | Enters "Supervisor Mode" |
| (3) Enter | Enters "User Mode" |
| (4) Ctrl+B | Executes the partition's "Backup" |
| Function. | |
| (5) Ctrl+R | Executes the partition's "Restore" |
| Function. | |
| (6) Ctrl+K | Enters "Keep Mode" and saves the |
| changes | temporarily in the next |
| boot. | |