

Magic Card

User's Manual

04/09/2002

(Extra version)

Total Service s.r.o.

<http://www.magic-card.cz>

E-mail: support@magic-card.cz

Copyright

Copyright © 2002 *Total Service s.r.o.* All rights Reserved. *Total Service*, *Total Service* logo, and other marks are owned by *Total Service s.r.o.* and registered. All other trademarks are the property of their respective owners. *Total Service* assumes no responsibility for any errors that may appear in this manual. Information contained here in is subject to change without notice.

NOTE:

1. Before entering in the Supervisor Mode, install new software, or execute backup function, please make sure it is virus free.
2. The Magic Card will use at least 5KB of main memory when using “Instant Restoration” under User Mode (depending on actual conditions), and 1KB in other instances. “Backup Restoration” and “No Restoration” use absolutely no memory at all.
3. After installing the Magic Card, anti-virus programs are not necessary. You need to make sure there are no viruses when you are managing or updating the partition in “Supervisor Mode”. Some anti-virus programs operate much like viruses and may cause conflicts with the Magic Card. (Making the Magic Card think there is a boot virus.)
4. For more information about our products, please visit our website.
<http://www.magic-card.cz>

0. Hardware Requirement	3
1. First Installation	4
2. Express Installation	5
2.1 Steps of Express Installation	5
3. Custom Installation	6
3.1 Steps of Custom Installation	7
3.2 Hard Disk Partitioning	9
3.3 Installing the Operating System	13
3.3.1 Boot menu	13
3.3.2 How to Install for DOS and Windows	14
1. System partition for Instant Restoration (A)	14
2. System partition for Backup Restoration (B)	16
3. System partition for No Restoration (C)	16
3.3.3 How to install for a Linux OS	17
4. SETUP	17
4.1 Password Setup	18
1. Supervisor Password	18
2. Backup Password	18
3. Restore Password	18
4.2 Option Menu	19
4.3 Disk	21
4.4 Tools	22
5. SNCOPY Instruction	26
5.1 How to use SNCOPY	26
5.1.1 PCI Version	26
5.1.2 WOL Version	26
5.2 First use of SNCOPY & Auto-IP Configuration	27
5.3 LOGIN	29
5.4 SEND DATA	32
5.5 SEND COMMAND	33
6. FDISK	35
7. UPGRADE	35
8. UNINSTALL	36
9. ABOUT	36
10. FAQ (Frequency Asked Questions)	37
11. Magic Card Installation Flow Chart for Windows NT/2000/XP	39
12. Magic Card Installation Flow Chart for Windows 98/ME	40

0. Hardware Requirements

- 80386 and above IBM compatible PC.
- Minimum 500 MB of free hard disk space with LBA support.
- 32MB of Memory
- One free PCI slot.
- Color monitor

Operating System Support

- Instant Restore Mode
(DOS/Win3.1/95/98/ME/NT/2000/XP)
- Backup Restore Mode (support DOS/
Win3.1/95/98/ME /NT/2000/XP, LINUX,
FreeBSD, Venix, Amoeba, BBT...)

1. First Installation

The Magic Card Extra version may be installed three different ways.

- 1) **Express Installation:** Supplies an instant restore for DOS and all Windows operating systems. All of the original data on the hard disk may be preserved.
- 2) **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 schedule. When choosing this installation type, if original data is not preserved, all data and partitions will be destroyed and the hard disk will need to be repartitioned and formatted.
- 3) **SNCOPY:** SNCOPY is a built-in feature of the Magic Card. It enables you to image partitions, install software and to maintain an entire network of computers all at once.

Useful Hotkeys

- (1) **F10** Enters the "Setup Menu"
- (2) **Ctrl+Enter** Enters Instant Recovery Partition's "Supervisor Mode"
- (3) **Enter** Enters Instant Recovery Partition's "User Mode"
- (4) **Ctrl+B** Executes the partition's "Backup" Function.
- (5) **Ctrl+R** Executes the partition's "Restore" Function.
- (6) **K** Enters "Keep Mode" and saves the changes temporarily in the next boot when the card is set to Instant Restoration Mode.

2. Express Installation

Express Installation can keep the original Operating System Win95/98/Me/NT/2000/XP and all data partitions on the hard drive.

Note: Before installing, please run the SCANDISK and DISK DEFRAGMENTER utilities provided by Windows for best performance. Also disable any anti-virus programs to avoid any possible conflicts.

2.1 Steps of Express Installation

1. Turn the Power off to the computer and then open the case. Plug the Magic Card into a free PCI expansion slot.
2. Turn the Power on. As the computer boots, you will see [**Magic Card initialize....**] on the screen. Next the Magic Card menu with hardware version and hard disk information appears. If the hard disk information is correct, insert the Magic Card install diskette into the floppy drive, then press [**Enter**] to continue.
3. Select [**Express Installation**] and press [**Enter**] to start the install.
4. When [**Install completed**] shows up, press any key to restart the computer. (Be sure to remove floppy disk)
5. Computer should restart with [System] shown on the boot menu. Press [**Ctrl + Enter**] to go into Supervisor Mode and continue to load operating system. (Default Password is [**Enter**]).
6. Once operating system is up, insert Magic Card install diskette into the Floppy Drive and run **Setup.exe**.
7. Restart the computer to complete the installation.

3. Custom Installation

Custom Installation is designed for advanced users who wish to install more than one operating system and data partition on one hard disk. It provides different restoration modes and operating surroundings for flexible use of each workstation.

1. **System Partition for Instant Restoration (A):** By restarting the computer, all changes will be instantly restored to the original status. Various restore schedules are provided in this partition type, including every reboot, daily, weekly, monthly, at any given date, and manually. Supports Dos, Win95, 98, ME, NT, Win2000 and XP.
2. **System Partition for Backup Restoration (B):** Setup this partition type and you can manually backup or restore the original data by preset schedule. Supports almost all OS's on the market.
3. **System Partition for No Restoration (C):** No protection or backup functions are provided in this partition type. Any changes to this partition will remain. Supports almost all OS's on the market. Used more in network surroundings.
4. **Shared Data Partition (S):** This partition will be visible no matter which boot partition you choose to boot from. Excellent for sharing data among different operating systems. (Documents, etc.)
5. **Private Data Partition (P):** This partition will only be visible if it was the partition booted from. It will be invisible when booting from any other partitions. Excellent for constantly changing data exclusive to one operating system. (Logs, etc)
6. **Supervisor Mode:** Press **[Ctrl + Enter]** in the Magic Card boot menu to run in Supervisor Mode. The

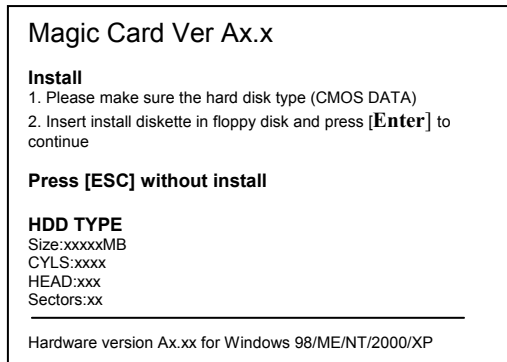
Supervisor Mode is where the Magic Card is not active and is allowing full Read/Write access to all partitions on the hard disk drive. All of the changes are permanent. This Mode is only accessible from MIS or administrators. The supervisor Password will be required to enter in this mode.

7. **User Mode:** Press **[Enter]** in the Magic Card boot menu to enter the 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.

3.1 Steps of Custom Installation

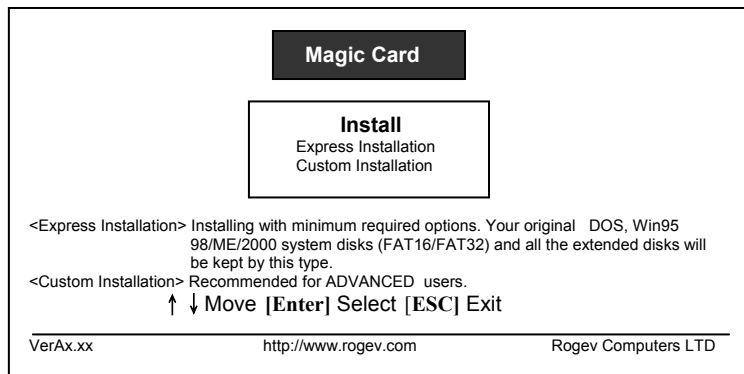
1. Turn the Power off the computer and then open the case. Plug the Magic Card in a free PCI expansion slot.
2. Turn the Power on. As the computer boots, you will see **[Magic Card initialize...\]** on the screen. Press **[Enter]** to continue thru the welcome message screen.
3. Next, the Magic Card menu with the hardware version and hard disk information appears. If the hard disk information is correct, please insert the Magic Card install diskette into the Floppy Drive and press **[Enter]** to continue.

Figure 1:



4. If the hard disk information is incorrect, restart the computer and enter the BIOS to re-configure hard disk size and information.
5. After [**Reading...**] is completed, select [**Custom Installation**] and press [Enter] to continue to the FDISK setup menu. (Figure 3)

Figure 2.



3.2 Hard Disk Partitioning:

The Magic Card supports multiple operating systems installed on one hard drive when utilizing the **<Custom Installation>** feature. Each operating system is in a different physical partition, allowing multi-booting up to 40 partitions. Continue to follow the instructions by moving the light navigator bar to **<Custom Installation>** and press [Enter]. You will have two options, either to keep drive C only or destroy all partitions and create new ones.

1) Keep data on drive C only:

All data (FAT16 / FAT 32/NTFS) in drive C will be kept. All the extended partitions (D, E...) will be destroyed. The remaining free space can be used for further partitioning, if needed.

2) Destroy all partitions:

You can re-arrange the space of your hard drive and create the desired partitions.

Note1: All data on the Hard Drive will be destroyed. Please backup important data in advance.

Note2: Magic Card doesn't currently support multiple physical hard drives. Two or more physical hard drives would be regarded as data disks, and are not under control by Magic Card, but are still seen in the OS.

Figure 3

Magic Card						
FDISK						
No	Partition	Name	SIZE (MB)	File system	Restore Schedule	Buffer (MB)
1	[A]	[SYSTEM]	[XXXXXX]	FAT32	Every	[502]
2	[]					
3	[]					
4	[]					
5	[]					
6	[]					
7	[]					
8	[]					
HDD total Size: xxxxxMB			Free space: xxxxxMB			
A System partition for instant restoration (for DOS/95/98/Win2000/XP)						
B System partition for backup restoration (Apply to all operating systems)						
C System partition for No restoration (Apply to all operating systems)						
S Share data partition (Auto clear for FAT16/FAT32)						
P Private data partition (Auto clear for FAT16/FAT32)						
↑ ↓ Modify [F1] Description [F2] Password [ESC] Exit						
Ver Ax.x		http://www.rogev.com			Rogev Computers LTD	

FDISK Menu Details

1. Attribution (Partition Type):

1) System Partition for Instant Restoration (A):

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 Dos, Win95/98/ME/NT/2000/XP.

2) System Partition for Backup Restoration (B):

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

3) System Partition for No Restoration (C):

No protection or backup function is provided for this partition type. Any changes done in this partition are permanent and will remain. Supports almost all operating system in the

market. Mainly for networking environments.

4) Private Data Partition (P):

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. (Logs, etc.)

5) Shared Data Partition (S):

This partition type will be visible with every partition you choose to boot from. Excellent for sharing data between different operating systems. (Documents, etc.)

Note: Enter Magic card disk setup menu, disable “Auto-clear” option and add a “&” mark in the partition description by pressing F1 at Private Data Partition can setup “instant+every” restoration schedule.

2. EXPRESSION

1) **Name:** Identify of the partition in Magic Card boot menu. Maximum length is 10 characters.

2) **Size:** Setup preferred partition size
Press [Shift+Pg Up or Pg Dn] to adjust.

3) **File System:** Choose appropriate file system for each operating system

FAT32: Support Win98/ME/2000/XP (Recommended)

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

NTFS/HPFS: Supports WinNT4.0/Win2000/XP. 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 limitations.

EXTEND: Enables extended hard disk partitions thru FDISK (MS-DOS).

OS/2 BOOT: Supports hard disks under 8.4GB and partitions under 2000MB.

LINUX: Supports LINUX file system.

LINUX/SW: Supports LINUX Swap file system.

4) **Restoration Schedule:** System data recovery

Disable: Shuts down Instant Restore function

Every: The system will be instantly restored to its original state with every reboot.

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.

Weekly: The system will be auto restored to its original status at the first boot of a specified date every week.

Monthly: The system will be auto restored to its original state for the first boot of a specified date every month.

Auto-Clear: Data partition will be auto cleared with every re-boot. Only supports FAT16 and FAT32 file systems.

5) **Buffer:**

For Instant Restoration type: Maximum buffer size is 1004MB and Minimum is 0MB. **Default value is 502MB.** Move the cursor to the selected option and adjust the size by **[Pg Up]** or **[Pg Dn]**.

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.

3. Other Setup Options:

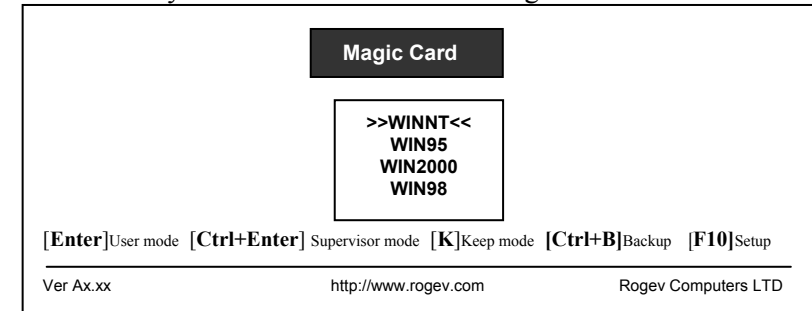
- 1) **[F1]:** Partition description or remarks.
Describe the partition within 50 characters. Displays on boot menu.
- 2) **[F2]:** Password feature.
Password setup for each partition. 10 characters are available for Password setting.
[Enter] Key is the default password.
- 3) **[ESC]:** Save/Exit

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

3.3 Installing the Operating System

3.3.1 Boot menu

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



3.3.2 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.

1. System partition for Instant Restoration (A)

1. Install Operating System:

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.



2. Install 32bit Magic Card Driver in Windows

Make sure you are still in Supervisor Mode first.

Step 1. Insert Magic Card install diskette in floppy drive.

Step 2. Click [Start/Run] and type A:\Setup.exe

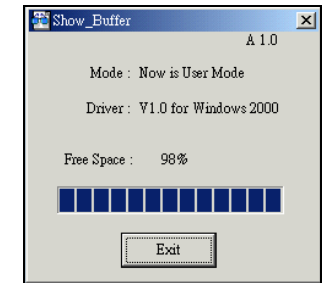
Step 3. Choose correct hard disk type (IDE or SCSI) to install the driver.

Step 4. When finished, a [ShowBuff] icon will be added into the Windows program file menu. The "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.

Click [ShowBuff] icon in programs menu to see one of these messages.



Supervisor Mode



User Mode

When the buffer gets lower than 10%, the system will warn you with a beeping sound. Please save all files and restart the computer immediately to release the new buffer zone.

3. Installing other applications and programs:

To install other applications and programs (Office 2000..etc.), please press [Ctrl+Enter] to go into desired partition under Supervisor Mode to begin installation.

2. System partition for Backup Restoration (B):

Operating System installation steps:

- 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) to backup the current partition's data → Done

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. System partition for No Restoration (C) :

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.

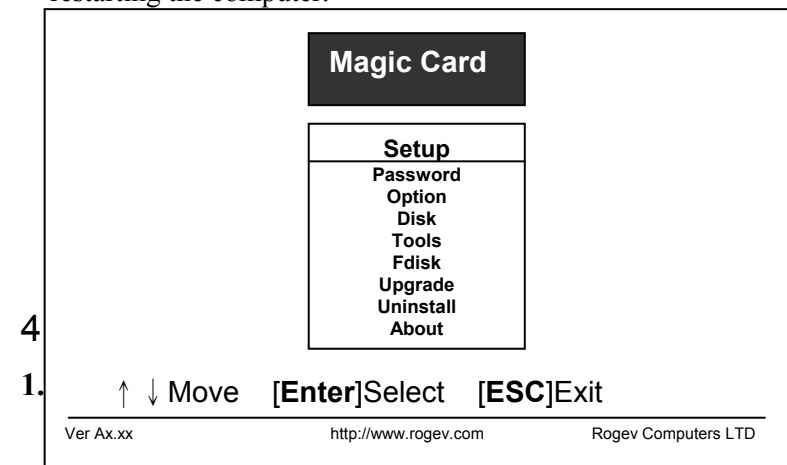
3.3.3 How to install for a Linux OS

Linux can only be installed in a partition less than 2000MB.

- Step 1.** Create two partitions for Linux by choosing Custom Installation. One is the Linux file system, and the other is the Linux/SW file system.
- Step 2.** With the Disk Druid partition program, put the Linux partition under root (/), Mont point), and set SWAP to LINUX/SW partition.
- Step 3.** Start the installation.

4. SETUP

In the boot menu, press [**F10**] and login with your Supervisor Password. The Setup menu appears. (See the figure below) All the setting in this menu goes into effect after saving the changes and restarting the computer.



<Setup Menu>, <Supervisor Mode>, or executing <Backup> and <Restore> functions. Please REMEMBER to write this Password down and NEVER lose it or you will need to reinstall everything!

Note: The “Supervisor Password” can be used for all functions of the Magic Card. Please remember this when you give someone this password.

2. Backup Password

Up to 10 characters are available for the backup password. If you need to backup a system partition's system data (Backup Restore manually), you will need to enter this Password. (Entering “Supervisor Password” is fine as well).

3. Restore Password

Up to 10 characters are available for the restore password. If you need to restore a system partition's system data to the earliest state (Instant Restore manually) or the last backed up state (Backup Restore), you will need to enter this Password. (Entering “Supervisor Password” is fine as well).

4.2 Option Menu

Option	
Boot Sequence :	BIOS
Auto restore CMOS data :	Disable
Safety enforcement :	Disable
Boot menu hotkey hint :	Disable
Show brandname :	Enable
Default select :	Last select
Force select :	Disable
Auto select :	Disable
Auto select & disable hint :	2 Sec

- 1. Boot Sequence: BIOS (default) / C only / A, C**
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 being uninstalled first. If the card is removed, the system will warn you by beeping and the computer will be unbootable.
A, C: Computer can boot from A or C.
- 2. Auto Restore CMOS data: Disable (default) / Enable**
Disable: Default Value
Enable: If CMOS DATA is modified, it will be restored.
- 3. Safety Enforcement: Disable (default) / Enable**
Disable: Default value
Enable: Enhances the security level
Note: Enable this option might lower the compatibility.
- 4. Boot menu hotkey hint: Enable (Default) / Disable**
Enable: Show hotkeys on boot menu
Disable: Do not show hotkey.
- 5. Show brand name: Enable (default) / Disable**
Enable: Show brand name [Magic Card] on boot menu
Disable: Do not show brand name.
- 6. Default select: Last select (default) / Boot Partition name**
Last select: When booting, the light-bar will automatically select the partition that the user last booted from.

Boot Partition Name: Administrator can set the Magic Card to choose the desired partition at boot.

7. **Force select: Disable (default)** / Boot partition name

Disable: Do not force select partition.

Boot partition name: This function enables the administrator to preset the Magic Card to boot only from a predetermined partition.

8. **Auto select: Disable (default)** / 1~99 seconds

Disable: Do not auto select partition.

1~99 seconds: Count down the predefined seconds, and then automatically boots to the partition that the light-bar is on.

9. **Auto select & disable hint – 2 Sec. (Default)** / 1~99 Sec.

Hide menu of the Magic Cards and disables all Hot Keys (Except F10 Key).

When enabling this option upon restarting the computer, a black screen with dots will appear. When the dots are on the screen the only Hot Key that is enabled is F10. If you disable this option the Magic Card menu will appear and all operations will be enabled.

10. **Auto Power off: Disable (default)** / 1~60 minutes

Disable: Do not auto power off computer.

1 to 60 minutes: Setup the idle time of the boot menu.

When the boot menu reaches the predetermined time without entering any boot partition, the computer will be shut down automatically.

11. **Title: blank (default)**

Enter the title of this computer within 40 characters.

4.3 Disk

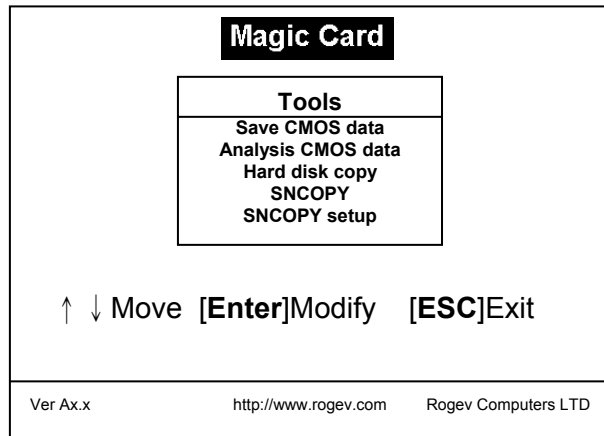
The size setting **CANNOT** be changed after Save and Exit. To change the partition size requires you to use FDISK again in Setup menu. All data in hard disk will be destroyed if FDISK is used. Changing File Systems is also not recommended unless you are installing a new operating system in that partition. All other fields can be changed at will.

Note: All recovery mode partition types can be changed at any time, but all partition and buffer sizes will remain the same.

Magic Card						
FDISK						
No	Partition	Name	SIZE (MB)	File system	Restore Schedule	Buffer (MB)
1	[B]	[WINNT]	[2000]	NTFS	[Manual]	[2000]
2	[A]	[WIN95]	[2000]	FAT16	[Every]	[502]
3	[]	[A]	[WIN98]	[4000] FAT32	[Every]	[1000]
4	[P]	[WINNT]	[2500]	NTFS	Auto Clear [Disable]	
5	[S]	[]	[5000]	FAT32	Auto Clear [Disable]	
6	[]					
7	[]					
8	[]					
HDD total Size: 20 000MB			Free space: 0 MB			
A System partition for instant restoration (for DOS/95/98/Win2000/XP) B System partition for backup restoration (Apply to all operating systems) C System partition for No restoration (Apply to all operating systems) S Share data partition (Auto clear for FAT16/FAT32) P Private data partition (Auto clear for FAT16/FAT32)						
↑ ↓ Modify		[F1]Description	[F2]Password	[ESC]Exit		
Ver Ax.x		http://www.rogev.com		Rogev Computers LTD		

4.4 Tools

There are several advanced utilities, and innovated features (SNCOPY, Hard Disk copy) provided in the tools menu.



1. Save CMOS data

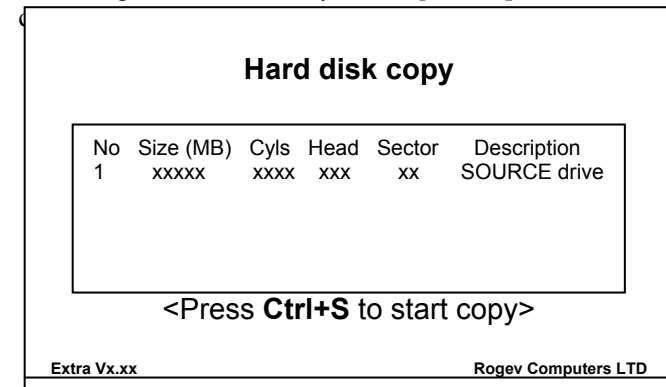
Saves the current CMOS data in the hard drive. (If CMOS data is changed, the Magic Card will remind you to restore or backup when rebooting, even if you did not run this selection manually)

2. Analyze 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.

3. Hard disk copy (mirror)

When the administrator has thoroughly prepared the hard disk, he/she can use this function to duplicate or mirror hard disks by utilizing IDE cables. Up to three hard disks can be copied simultaneously. Press [**Ctrl+S**] to start



Note: When copying hard disks of different capacity, you can only copy from the small hard disk to the larger hard disk.

4. SNCOPY (Serverless network copy)

With the Magic WOL Card, the administrator can take advantage of our Fast Ethernet 10/100mbps feature to manage up to 300 computers at the same time with just a click of a button. All computers must have the Magic WOL Cards installed. The computers will be controlled by preset [SNCOPY Receive Connect Instructions] for simultaneous maintenance. For detailed operation, please refer to section [SNCOPY Instruction]

5. SNCOPY Setup

Serverless Network COPY Setup functions:

- A. SNCOPY Receive connect:** ENABLE / DISABLE
ENABLE: Magic Card auto detects the connection when powering on the machine.
DISABLE: Disable auto connect.
- B. SNCOPY Group:**
 Group name used during login. Up to 2 characters.
 Only computers in this selected group can login.
 Many groups can be set for separation purposes.
 (similar to a VLAN)
- C. SNCOPY name:**
 Sending machine login name while running SNCOPY.
 Up to 5 characters.
 If you leave it blank, the LOGIN NAME will show [?] while running SNCOPY.
- D. Computer Name:**
 Computer Name after SNCOPY
- E. User Name:** User Name after SNCOPY
- F. IP:** Local IP Address setting

Example:

SNCOPY Group: A
 SNCOPY Name: B
 Computer Name: Class
 User Name: A-User
 IP: 192.168.1.1

After Auto IP Configuration, you will find:

SNCOPY Group: A
 SNCOPY Name: B1 (B2, B3...etc)
 Computer Name: Class1 (Class2, Class3...etc)

User Name: A-User1 (A-User2, A-User3...etc)
 IP: 192.168.1.2 (192.168.1.3...etc)

6. Schedule (WOL Card Only)

- You can setup 5 different schedules to maintain your lab computers during a specific time. Use any computer in your lab as a sending machine and SNCOPY will copy partitions and data parameters from the sending machine to receiving machines at the same time. (**Note: Up to 300 computers can be receiving at one time**)
- This feature can work with Wake On LAN. Power on the computers before executing the maintenance schedules, The Sending machine will wake up every computer in the lab and maintain the network automatically.

Schedule		
Mode:	Disable	Execution Cycle: Disable/Just 1 time/Every Day
Start Time (Hour):	0-23	Setting Execution Hours (0-23)
Start Time (Minute):	0-59	Setting Execution Minutes (0-59)
SNCOPY Delay:	99	SNCOPY response time. (99 means auto analysis)
Login wait time:	XX min	
Wake up On LAN:	Enable	
System LAN Off:	Disable	
Auto IP Configuration:	Enable	
Date/Time Adjustment:	Enable	Reset data/time in the labs
Entire HDD:	Disable	
Parameter Data:	Enable	
Partition: -	WIN-2K	1 st sending partition
Partition: -	WIN-ME	2 nd sending partition
Partition: -	WIN-98	3 rd sending partition
Partition: -		4 th sending partition

Partition: - 5th sending partition

5. SNCOPY Instruction

5.1 How to use SNCOPY

5.1.1 PCI Version

Please follow the step-by-step guideline to maintain computers over Network.

- Select SNCOPY, and the Magic Card will request you to reboot and put packet drive in the A drive.
- Boot from the A drive.
- Run NIC Card "Packet Driver". The packet driver is easily found in the NIC card install/driver diskette. (i.e. E2000.COM, PKTDRV.COM, DLKPCI.COM, DE22X.COM, RTFPKT.COM...)

E.X. A:\>E2000 0x60
- Run A:\>SCxx.EXE from Magic Card install diskette.

5.1.2 WOL version

Please follow the step-by-step guideline to maintain computers.
[F10] > [SETUP] > [Tools] > [SNCOPY].

5.2 First use of SNCOPY & Auto-IP Configuration

1. If the system boot partition is setup as “Instant Recovery”, make sure the Magic Card has been installed successfully. Please refer to the Instant Restoration setup.
2. If the partition is setup for “Backup Restoration” or “No Restoration”, please access Windows directly.
3. In Supervisor mode, run X-user.exe in all OS. You can download X-user program from our webpage.
Note: If you have more than one bootable partition, you must install X-User respectively in each OS.
4. Reboot the sending computer after X-User has been run. In the boot menu, press [**F10**], type supervisor password and press <Enter>. Go to <Tools> <SNCOPY> <SYSTEM LAN OFF>. The System will then reboot and enter each boot partition one by one to disable the Network function.
5. After network function in each boot partition has been disabled, system will return to SNCOPY main menu.
6. Select “Sending” to enter Login Menu
7. Power on receiving computers for first time installation. Select SNCOPY for auto Login to the sending computer.
8. Press [**F1**] in sending computer when all receiving computers are finished with their login.

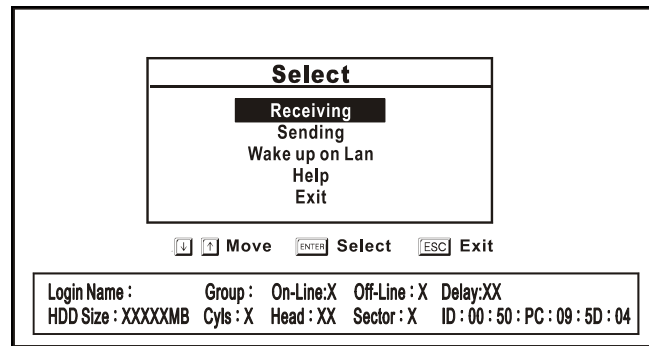
9. Press [**F2**] in sending computer to enter [Send Command] menu. Select [Collect ID for Wake Up on LAN]. System will return to login menu when completed.
10. Press [**F1**] in sending computer to enter [Send Data] menu. Select [Parameter Data and All Partition]. System starts sending data to receiving computers. Note: Multi-casting will take a few minutes to hours depending on the physical data capacity. Generally speaking, 100MB will take one minute to complete. A beeping sound will remind you the multicasting is finished. Press any to get back to the login menu
11. In the login menu, press [**F2**] to enter [Send Command] menu. Then select [Allocate Name/Group/IP] and set the value for IP address.
Example:
SNCOPY Name: A
SNCOPY Group: B
Computer Name: Class
User Name: A-User
IP: 192.168.1.1
12. After IP setting completed, press [**F10**] to save and exit.
13. In sending computer, run [Auto-IP configuration].

All receiving computers will auto-reboot and start to update IP addresses by entering each partition separately. System will then automatically power off. All the Receiving Computers have been completely updated with IP address allocation.

5.3 LOGIN

Once a computer's hard disk has been prepared, the administrator can run the SNCOPY function to multi-cast to other computers easily. For the Receiving computers, please choose [SNCOPY] function for the first time installation. This function will support up to 300 computers simultaneously.

For Sending computer, press **[F10]** and get into setup menu. Go to [SETUP] [TOOLS] [SNCOPY]. The select menu appears. (see figure below)



Select Menu Options

1. **Receiving:**
Target computer for receiving data from Sending Computer.
2. **Sending:**
Source Computer used to send data to receiving computers.
3. **Wake up On LAN (WOL):**
Used by sending computer to Wake up or turn on receiving

computers for maintenance or copying. Can be used with schedules for automatically maintaining networks or labs.

Notes before using Wake up On LAN (WOL) function:

- A. Machine must have ATX style POWER and motherboard.
 - B. The motherboard must support with WOL function.
 - C. Need to be using WOL Magic Card, or an Ethernet LAN Card or LAN chipset with WOL.
 - D. You must plug the wire connector of the WOL Magic Card or Ethernet LAN Card into the designated area of the motherboard.
 - E. The first time when running this function from Magic Card, you must run [Sending] **[F2]** [Collect Net Card ID] to record all receiving Ethernet LAN Card ID's to the Sending Computer.
4. **Help:** Shown SNCOPY help message
 5. **Exit:** Exit SNCOPY select menu.

The Login Figure

SNCOPY V Ax.xx		Sending Computer									
		1	2	3	4	5	6	7	8	9	10
0	V	.	.	.	.	.	.	.	.	.	.
1	V	.	.	.	.	.	.	.	.	.	.
2	V	.	.	.	.	.	.	.	.	.	.
3	V	.	.	.	.	.	.	.	.	.	.
4	V	.	.	.	.	.	.	.	.	.	.
5	V	.	.	.	.	.	.	.	.	.	.
6	V	.	.	.	.	.	.	.	.	.	.
7	V	.	.	.	.	.	.	.	.	.	.
8	V	.	.	.	.	.	.	.	.	.	.
9	V	.	.	.	.	.	.	.	.	.	.

Send data Send Command Delay Move Exit

Login Name : Group : On-Line:X Off-Line : X Delay:XX
 HDD Size : XXXXXMB Cyls : X Head : XX Sector : X ID : 00 : 50 : PC : 09 : 5D : 04

Function Keys

- [F1]: Send Data**
Send data, partition, or parameters to Receiving computers.
- [F2]: Send command**
Send commands to receiving computers. (i.e. power on/off, date, etc...)
- [+ -]: Delay**
Adjust the transmission speed of Ethernet LAN Card for best performance. Please leave this value untouched if the default value is running normally.
- ↑ ↓ ← → : Move**
Move light bar to selected function.
- [F10]:EXIT**
Exit from SNCOPY function.

5.4 SEND DATA

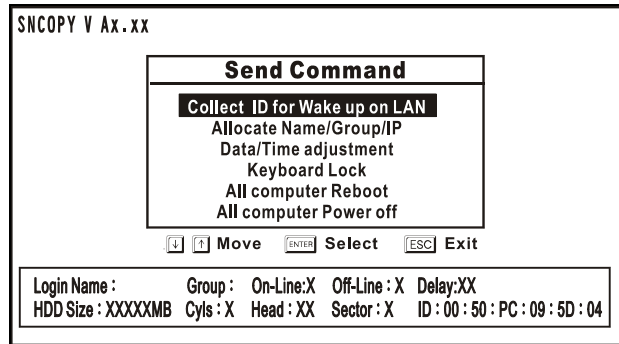
SNCOPY V Ax.xx											
<table border="1"> <thead> <tr> <th colspan="2">Send Data</th> </tr> </thead> <tbody> <tr> <td colspan="2" style="text-align: center;"> <table border="1"> <thead> <tr> <th colspan="2">Parameter data and all Partition</th> </tr> </thead> <tbody> <tr> <td colspan="2" style="text-align: center;">Parameter data</td> </tr> <tr> <td colspan="2" style="text-align: center;">Partition</td> </tr> </tbody> </table> </td> </tr> </tbody> </table>		Send Data		<table border="1"> <thead> <tr> <th colspan="2">Parameter data and all Partition</th> </tr> </thead> <tbody> <tr> <td colspan="2" style="text-align: center;">Parameter data</td> </tr> <tr> <td colspan="2" style="text-align: center;">Partition</td> </tr> </tbody> </table>		Parameter data and all Partition		Parameter data		Partition	
Send Data											
<table border="1"> <thead> <tr> <th colspan="2">Parameter data and all Partition</th> </tr> </thead> <tbody> <tr> <td colspan="2" style="text-align: center;">Parameter data</td> </tr> <tr> <td colspan="2" style="text-align: center;">Partition</td> </tr> </tbody> </table>		Parameter data and all Partition		Parameter data		Partition					
Parameter data and all Partition											
Parameter data											
Partition											
<input type="checkbox"/> Move <input type="checkbox"/> Select <input type="checkbox"/> Exit											
Login Name : Group : On-Line:X Off-Line : X Delay:XX HDD Size : XXXXXMB Cyls : X Head : XX Sector : X ID : 00 : 50 : PC : 09 : 5D : 04											

- Parameter data and all Partition:**
Copies all sends all data and the Magic Card information to receiving Computers. Highly recommended for first time installation.
- Parameter data:**
Copies only Magic Card information to receiving computers. Recommend usage: Magic Card software version upgrades.
- Partition:**
Only 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. Advanced users may adjust the transmission speed with the [+ -] keys for better performance if needed. Press [Alt+ESC] to abort transmitting.

5.5 SEND COMMAND



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

2. Allocate Name/Group/IP

Setup SNCOPY name/group, Computer Name, User Name and IP information. After IP setting completed, press **[F10]** to save and exit.

- A. **SNCOPY Name:**
Sending machine login name while running SNCOPY.
Up to 5 characters.
If you leave it blank, the LOGIN NAME will show [?] while running SNCOPY.
- B. **SNCOPY Group:**
Group name used during login. Up to 2 characters. Only computers in this selected group can login. Many

groups can be set for separation purposes.

C. Computer Name:

Computer Name after SNCOPY
Setup the sending computer name to be "ABC" for example, the receiving computer name after SNCOPY will be ABC₁, ABC₂, ABC₃...

D. User Name:

User Name after SNCOPY
Setup the User Name in sending computer to be "DEF" for example, the User name in receiving computer after SNCOPY will be DEF₁, DEF₂, DEF₃,.....

E. IP :

Setup the IP address of the sending computer to be 203.69.159.1 for example, the receiving computer after SNCOPY will be 203.69.159.₂, 203.69.159.₃, 203.69.159.₄...

3. Auto IP Configuration

All receiving computers will auto-reboot and start to update IP addresses by entering each partition separately. Press **[ENTER]** to start, or press **[ESC]** to stop.

Note: To exclude any system partition of executing Auto IP configuration, you could just enter Magic Card Disk Setup menu and add an exclamation mark "!" in the selected partition description (press **[F1]** and type !), the partition will be bypassed while updating IP information.

1. Data/Time adjustment:

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

2. Keyboard lock:

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

3. **All computer Reboot:**
Restart the standby receiving computers along with the sending computer.
4. **All computer Power off:**
Power off the standby receiving computers along with the sending computers.

6. FDISK

You can find it in [Magic Card Boot Menu]. Press **[F10]** > **[FDISK]**
This feature is for repartitioning hard disk space without uninstalling Magic Card. Notice: All the data in the hard drive will be deleted permanently. Please think twice before using this function.

7. UPGRADE

1. Get to the Magic Card boot Menu
2. Place new installation disk in floppy drive
3. Press **[F10]**>**[Setup]**>**[Upgrade]**
4. After it is finished, the system will reboot
5. Go into Windows in Supervisor mode
6. Place previous installation disk in floppy drive.
Run A:\setup.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:\setup.exe to install the new drivers into Windows
10. The system will reboot once more
11. Finished upgrading to the new version

When you see “**Upgrade Completed, press any key to continue**”, that means you succeeded in upgrading.

If you see “Hardware Error”, or “Data Read Error, please check install diskette”, that means that you applied incorrect software for your Magic Card. Please visit our web site for downloading correct software. <http://www.rogev.com>

8. UNINSTALL

To uninstall Magic Card functions from this computer.

1. Run A:\>setup.exe in supervisor mode
2. Complete uninstall
3. The system will reboot
4. [Magic Card Boot Menu]->**[F10]**->Uninstall
5. Power off the system
6. Remove Magic Card
7. Finished

After the uninstall is complete:

All data and partitions will be restored to their original state if you selected “Express Installation” when you first installed the Magic Card. All data and partitions will be gone permanently if you selected “Custom Installation” when you first installed the Magic Card.

9. ABOUT

Information about Magic Card hardware and software versions can be obtained at <http://www.rogev.com>

10. FAQ (Frequency Asked Questions)

1. **Q.** What if the Magic Card is not active or bypassed by the computer?
 - A.** Reboot your system and press [**Ctrl+H**] to go into the Magic Card hardware settings and change modes right after seeing **<Magic Card hardware version: A X.X >**. The default Password is [**Enter**] key.
 - A. Hardware Mode:**
The different modes are Normal, Mode1, 2, 3, 4, 5, 6, 7 or selection to meet all different types of computers once the Magic Card is not active.
 - Disable:** Disable all Magic Card functions.
 - B. Hardware Password:**
Setting Magic Card hardware Password. Up to 10 characters for login. Default Password is [**Enter**] key.
 - C. Hotkey Hint:**
To enable or to disable Magic Card hardware [**Ctrl+H**] message. Default value is **enabled**.
2. **Q.** Why is there an exclamation mark (!) on the IDE Controller of Device Manager of Win 95/98/ME in Instant Restoration Mode under User Mode?
 - A.** That generally happens when A:\Setup.exe" has not been installed in Windows under Supervisor Mode. You can find this file on the Magic Card install diskette.

NOTES

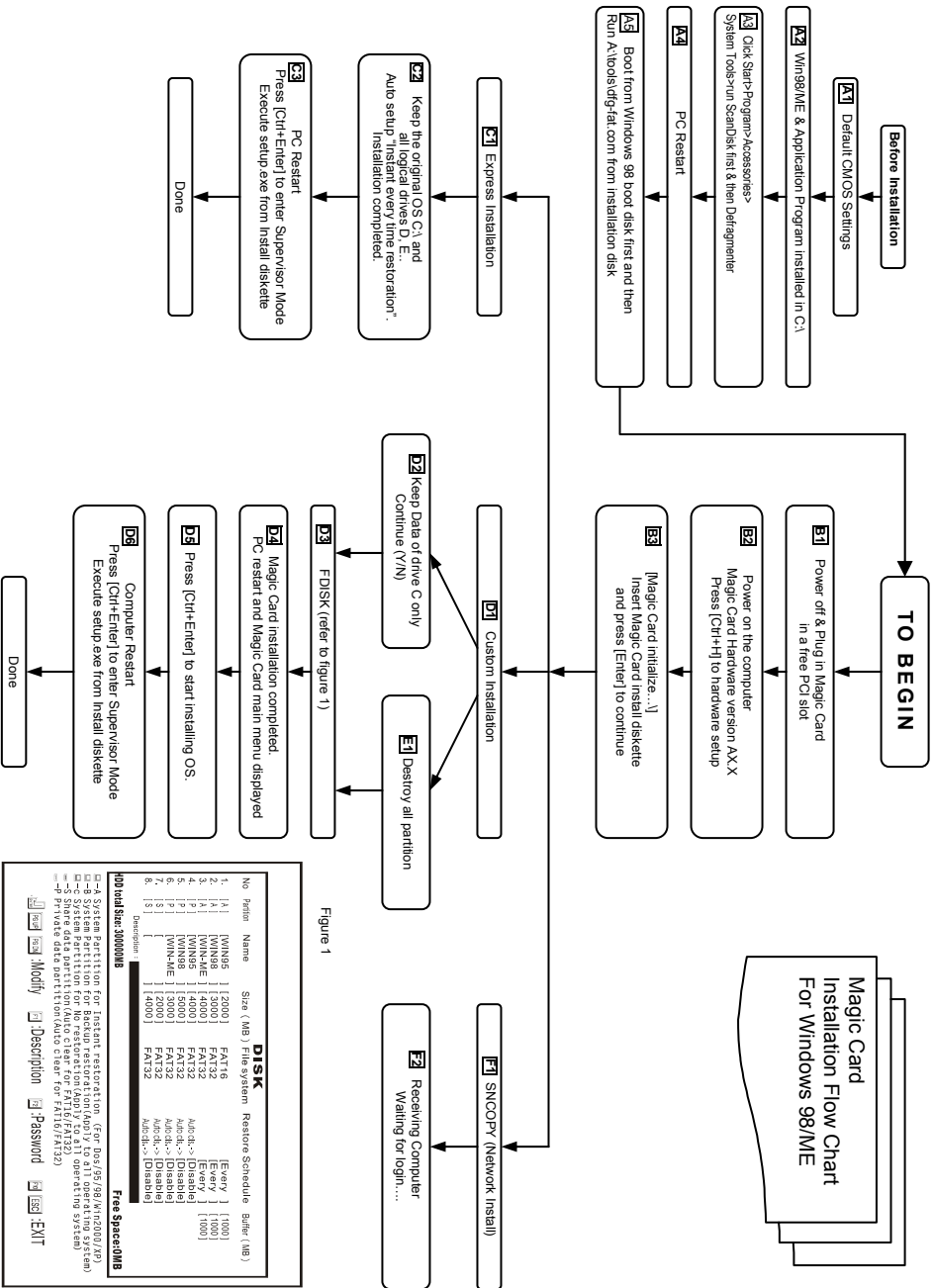


Figure 1

Partit	Name	Size (MB)	Filesystem	Restores Schedule	Enter (MB)
1	[A:]	[3900]	FAT16	[Every]	[1000]
2	[A:]	[3900]	FAT32	[Every]	[1000]
3	[A:]	[4000]	FAT32	[Every]	[1000]
4	[A:]	[5000]	FAT32	[Every]	[1000]
5	[A:]	[3900]	FAT32	[Every]	[1000]
6	[A:]	[3900]	FAT32	[Every]	[1000]
7	[A:]	[3900]	FAT32	[Every]	[1000]
8	[A:]	[3900]	FAT32	[Every]	[1000]
9	[A:]	[3900]	FAT32	[Every]	[1000]

Global Size: 39000MB

Free Space: 0MB

Options: [M] Modify [D] Description [P] Password [E] EXIT

NOTES

NOTES