

**Memory Card Explorer™ for RICOH  
(MCERICOH)**

**Version 1.11 in CD-ROM**

# **User Guide**

*IMPORTANT*

*Please refer to the following URL regarding MCERICOH information updates.*

<http://support.aficio.com/mcericoh/home.html>

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## **DOCUMENT REVISION HISTORY**

December 22, 2000	First release
January 15, 2001	Minor modifications (Spelling and grammar mistakes corrections)
March 14, 2003	Second release for applying to the MCERICOH in CD-ROM.

# **1. SYSTEM REQUIREMENTS**

## **Operating Systems**

- Windows 98 Operating System, including the Second Edition
- Windows Me (Millennium Edition)
- Windows NT 4.0 (Intel) Workstation, service pack 4 or later
- Windows 2000 Professional

**Note:** This program does not support Windows XP and Windows 95.

## **Computer Hardware**

- Desktop or laptop computer with Intel 82365 compatible PCMCIA or CardBus controller
- At least 1 PC Card slot
- At least 1 CD-ROM drive
- Must meet the operating systems' system requirements.

## **Card Services**

- Operating system's built-in card services are supported.
- 3rd party card services are not supported.

## **Applications**

- A standard web browser for on-line Help.
- Adobe Acrobat Reader for User Guide.

## **Memory Window**

- A 16 kbyte memory window (d000 – d3ff at default) required

## **Flash Memory Card**

- A Ricoh supplied flash memory card is required.

## **Important Notices**

1. Whenever Windows 2000 detects a new flash memory card in a PC Card slot, it requests you to select a driver for the card. However, no driver is available for the flash memory card. So you have to cancel the Add New Hardware dialog box every time you insert a new flash memory card. Although this is inconvenient, it is a specification of Windows 2000.
2. Because Windows NT 4.0 and Windows 2000 do not have card services, you have to manually select the card slot(s) to use with the software. Refer to "5. Getting Started" for more details.
3. The software does not work on computers that have 3rd party card management software.

## **2. SOFTWARE LICENSE**

One installation disk comes with a single software license. This license allows you to install the software on one computer. Installation of this software to multiple computers is prohibited unless you have enough multiple licenses to install the software on multiple computers. Please refer to the software license agreement.

## **3. BEFORE INSTALLING THE SOFTWARE**

Please be aware that even if computers meet the above requirements, some may not be compatible with this software. For example, some do not allow the software to use a 16kb memory window, and some do not have a PC Card controller that is fully compatible with the Intel 82365. If you wish to confirm the software compatibility with your computer, try the 30-day free demo version before installing this software. Please contact your local Ricoh headquarters to obtain this demo version.

## **4. SOFTWARE INSTALLATION**

### **IMPORTANT**

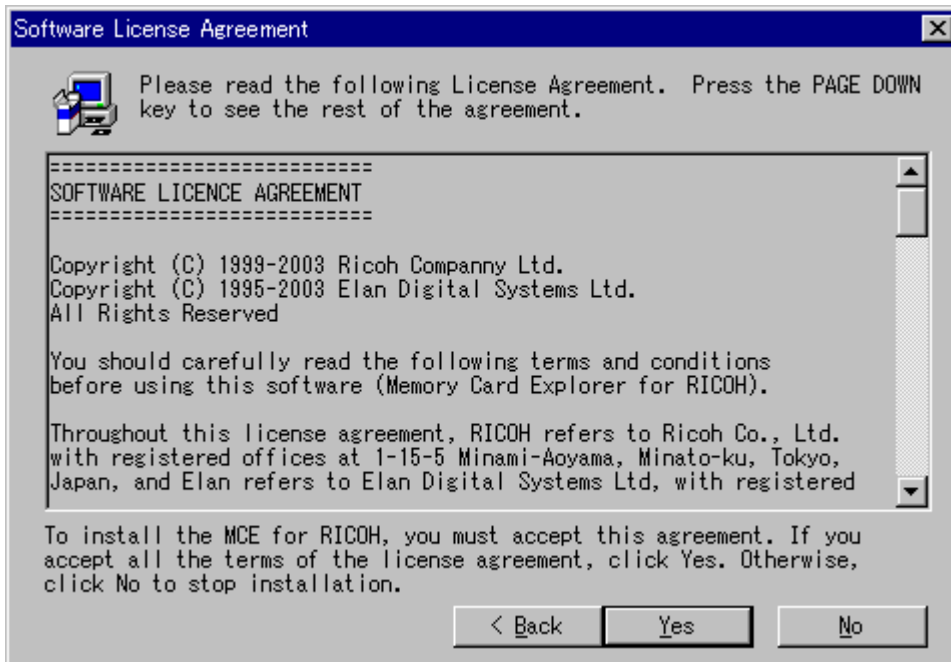
1. If you are installing the software on a Windows NT 4.0 workstation or Windows 2000, you must login as a user who has Administrative access privileges on the local computer.
2. If anti-virus software is running, disable it prior to installing the software.

### **4.1. Step-by-Step Installation Procedure**

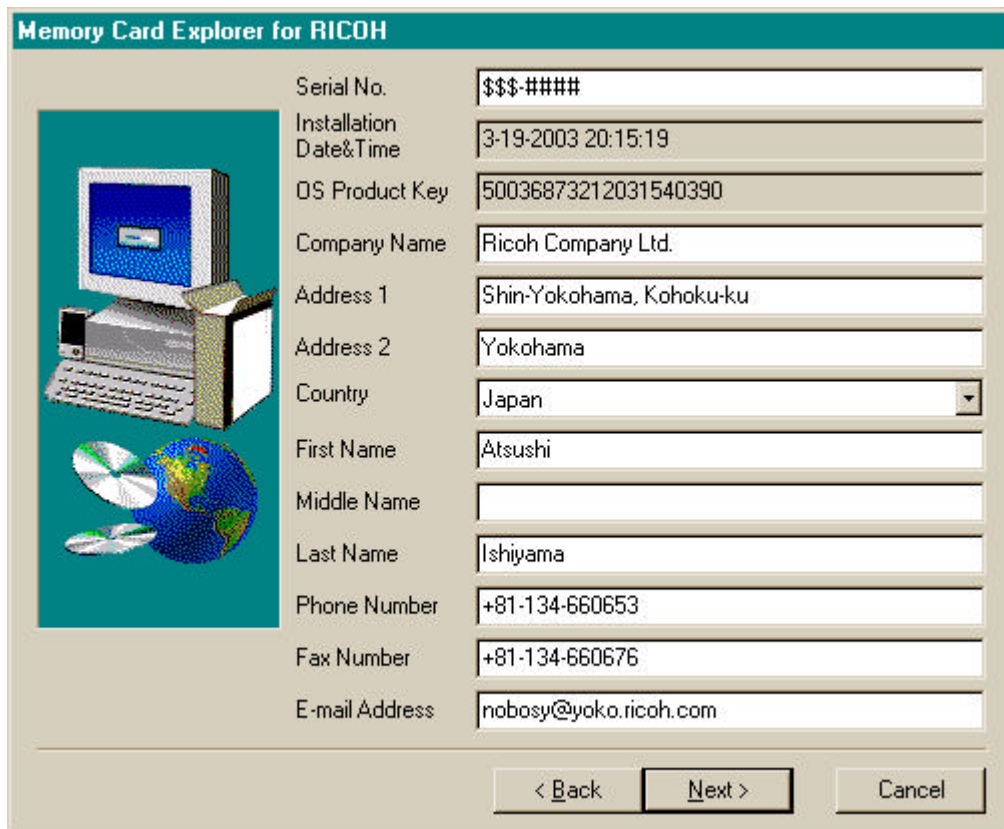
1. Insert the MCERICOH Installation Disk into CD-ROM drive.
2. The MCERICOH Installation Disk is automatically running and the Welcome dialog box appears.  
**TIP:** If the Welcome window does not appear, select “Run” from the Start menu. Type “D:\Setup.exe”, replacing “D” with the letter of your CD-ROM drive, and click “OK”.
3. Click “Next” in the Welcome dialog box.



4. Click “Yes” in the Software License Agreement dialog box if you agree with all the terms and conditions.



5. Input the registration information and click “Next”.



Memory Card Explorer for RICOH	
Serial No.	\$\$\$#####
Installation Date&Time	3-19-2003 20:15:19
OS Product Key	50036873212031540390
Company Name	Ricoh Company Ltd.
Address 1	Shin-Yokohama, Kohoku-ku
Address 2	Yokohama
Country	Japan
First Name	Atsushi
Middle Name	
Last Name	Ishiyama
Phone Number	+81-134-660653
Fax Number	+81-134-660676
E-mail Address	nobosy@yoko.ricoh.com

< Back    Next >    Cancel

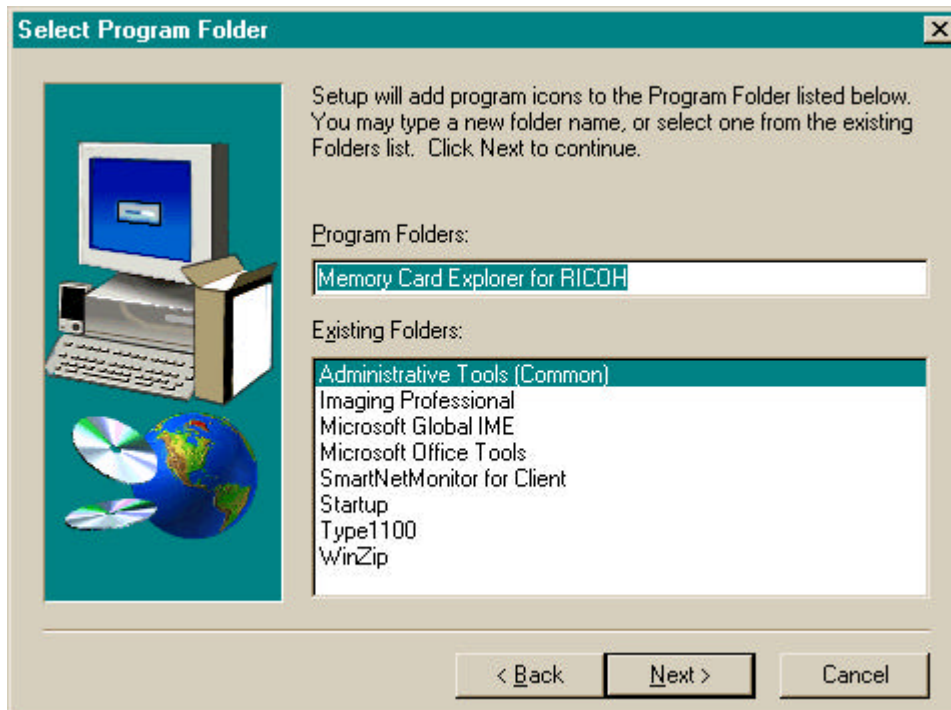
To go on to the next step, the following fields must be entered. This information will be used to detect an illegal installation.

1. **Serial No.:** Enter the serial number found on the installation CD case.
2. Company Name
3. Address 1
4. Country
5. First Name
6. Last Name
7. Phone Number
8. Fax Number

6. Click “Next” in the Choose Destination Location dialog box.

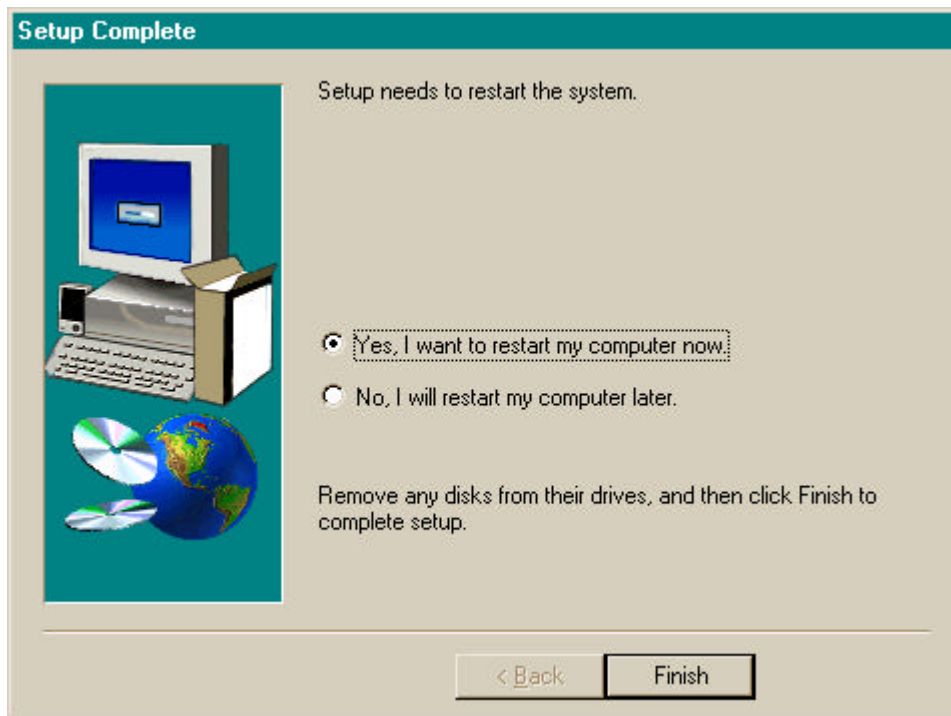


7. Click “Next” in the Select Program Folder dialog box. The installer then starts copying files.





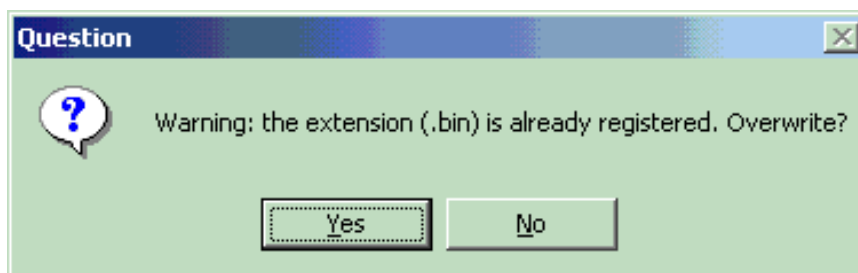
8. If “Warning: the extension (.bin) is already registered. Overwrite?” is displayed, click Yes.  
If “Setup is about to modify the Config.sys and System.ini files. Do you allow Setup to modify these files automatically?” is displayed, click Yes.  
If “Setup has modified the Config.sys and System.ini files. Original files are backed up as Config.mce and System.mce.” is displayed, click OK.
9. When the installation is completed, the Setup Complete dialog box appears.
10. Click “Finish” to restart the computer. Then, Windows restarts.



**TIP:** If your computer does not shut down and restart automatically, you must shut it down manually and restart for the changes to save.

**Note:**

1. You may be asked whether to use MCERICOH as a default application for \*.bin files. If you select “Yes”, you will be able to open \*.bin files by double clicking on them from the Windows Explorer. Otherwise, you open \*.bin files from within MCERICOH application.



2. Keep the installation disk in a safe place.

**License Warning:**

Please make absolutely sure to install the software on only one computer per software license.

**4.2. Un-installation Procedure**

Un-installing is required if you are upgrading the software or if your installation fails.

1. Select “Add/Remove Programs” from the Control Panel.
2. Select “Memory Card Explorer for RICOH V1.11”, and click “Add/Remove...”.
3. When your computer confirms your selection, click Yes. The program and all its components are removed from your computer.
4. When un-installation is done, click OK.

## **5. GETTING STARTED**

Before you start MCERICOH, you may have to adjust your BIOS and OS configurations.

### **BIOS Setup Check**

Make sure that:

\* Shadowing between d0000-d3fff is off.

For ISA connected PCMCIA hardware:

\* Any ISA Plug-n-Play options allow a shared block from d0000-d3fff (or greater).

\* The ISA bus is set to run at 8MHz max (i.e. not enhanced mode).

### **Windows 98/Me Memory Window Reservation [Important]**

#### **IMPORTANT**

*The MCERICOH program installer modifies the CONFIG.SYS and SYSTEM.INI files during installation. If MCERICOH should have a problem detecting your flash memory card, follow the instructions below.*

By default, MCE requires the exclusive use of a block of real mode memory at linear address d0000H to d3fffH. If MCERICOH does not detect the flash memory card with the default memory block settings, this indicates that the default memory block is already in use. Try one of the following settings:

- (D0) D000-D3FF (default)
- (D4) D400-D7FF
- (D8) D800-DBFF
- (DC) DC00-DFFF
- (E0) E000-E3FF
- (E4) E400-E7FF
- (E8) E800-EBFF
- (EC) EC00-EFFF

System config.sys (found in c:\ & applies only to Windows 98 installations)

-If the himem.sys & emm386 drivers appear in config.sys, add the exclusion block x=d000-d3ff as shown in the example below. If they do not appear, you do not need to do anything.

```
device=c:\windows\himem.sys
```

```
device=c:\windows\emm386.exe noems x=d000-d3ff
```

Windows system.ini (found in c:\windows & applies only to Windows 98 installations)

-The installer should have added the EMMExclude line to the [386Enh] section of system.ini.

```
[386Enh]
```

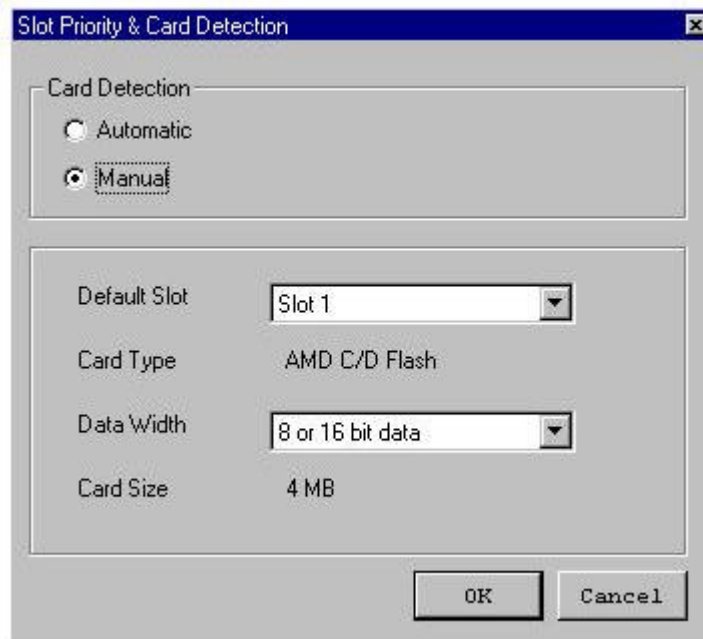
```
EMMExclude=d000-d3ff
```

Once you have changed the setting, reboot the computer and start MCERICOH using the /w command line option. Refer to section “7. Troubleshooting” for more details.

### Windows 98/Me Slot Selection [Important]

By default, MCERICOH uses manual card detection. Therefore you must select a PC Card slot to use for memory card read and write operations.

Before using MCERICOH on a Windows 98/Me computer, you must start MCERICOH without cards inserted in the slots, select the [Setup] – [Slot Priority & Card Detection] menu, and select a PC card slot for MCERICOH.



- Default Slot: Select the PC Card Slot you wish to use for MCERICOH.
- Data Width: Leave this at the default setting.

#### **TIP**

MCERICOH uses slot numbers 1, 2, 3 and so on, but your operating system may use slot numbers 0, 1, 2, and so on (starting from zero). So if you find slot "0" in the PC Card (PCMCIA) properties of the Control Panel, remember that slot 0 (zero) for Windows is slot 1 for MCERICOH, slot 1 for Windows is slot 2 for MCERICOH, and so on.

### **Important**

Once you have selected a slot for MCERICOH, remember that you cannot use any other I/O card in that slot. If you start MCERICOH while an I/O card is present in the selected slot, the I/O service (e.g., network connections) will be terminated.

For the advantages of Automatic card selection, refer to the section on *Using Automatic Card Detection*.

## Windows NT4.0/2000 Slot Selection [Important]

### Introduction

MCERICOH does not require Card and Socket services to operate.

The product supports Intel compatible 82365 card controllers on both ISA and PCI buses.

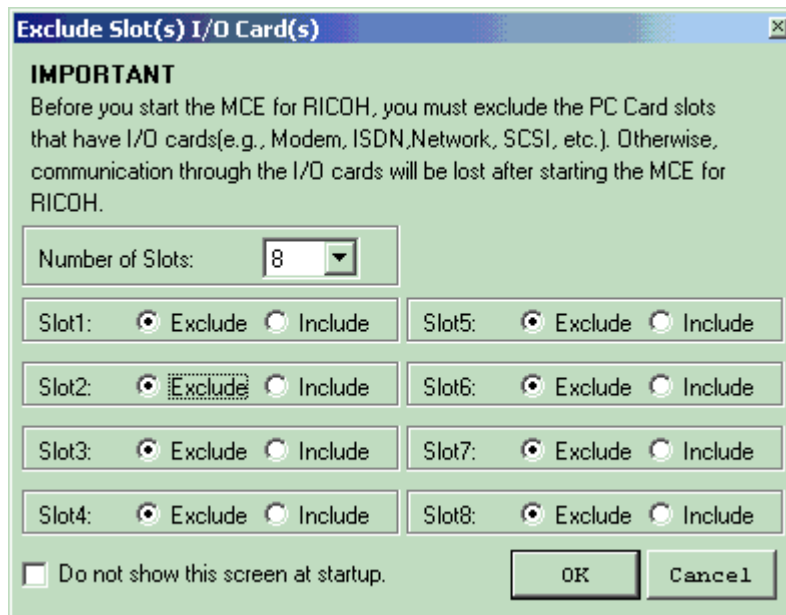
CardBus Controllers having Intel 82365 compatible register sets are also supported.

### Important

You must specify the card slot(s) to use before starting the software.

Because Windows NT 4.0/2000 do not have card services, the software cannot recognize what type(s) of card(s) are now in the slot(s). This could cause an I/O disconnection problem with I/O cards (e.g., Modem, Ethernet, SCSI, ISDN, etc.).

To avoid any I/O disconnection problems, you must select valid slot(s) before starting the software.



Select the number of physical slot(s) first, then select slots for MCERICOH operations.

### TIP

MCERICOH uses slot numbers 1, 2, 3 and so on, but your operating system may use slot numbers 0, 1, 2, and so on (starting from zero). So if you find slot "0" in the PC Card (PCMCIA) properties of the Control Panel, remember that slot 0 (zero) for Windows is slot 1 for MCERICOH, slot 1 for Windows is slot 2 for MCERICOH, and so on.

**Troubleshooting**

- \* CardWare or Card Wizard products should be disabled when running MCE.
- \* Check your PCMCIA hardware type and make sure that it is Intel 82365 compatible.
- \* If MCE fails to identify a card on start-up, there is a 90% probability that MCE's default memory window conflicts with another utility and/or hardware. Refer to the "/w command line" option explained in section "7. Troubleshooting" for how to change the default memory window.

**Installation Notes**

The resource requirements for Windows NT4 are the same as for Windows 98.

## **6. USING MCERICOH**

### **STARTING THE APPLICATION**

You can start MCERICOH application using any of the following methods:

- Double-click on the MCERICOH application shortcut on the desktop.
- Select [Start] – [Program] – [Memory Card Explorer for RICOH], then select the MCERICOH application icon.
- If you have selected MCERICOH as the default application for \*.bin files during installation, double-click a binary file (\*.bin).

### **ON-LINE HELP**

For how to use the MCERICOH functions, refer to the on-line help document. The help document explains the functions that are accessible from menus and buttons of the MCERICOH application.

**NOTE:** A standard web browser is required to access the help document.

### **SETUP MENU FUNCTIONS [Important]**

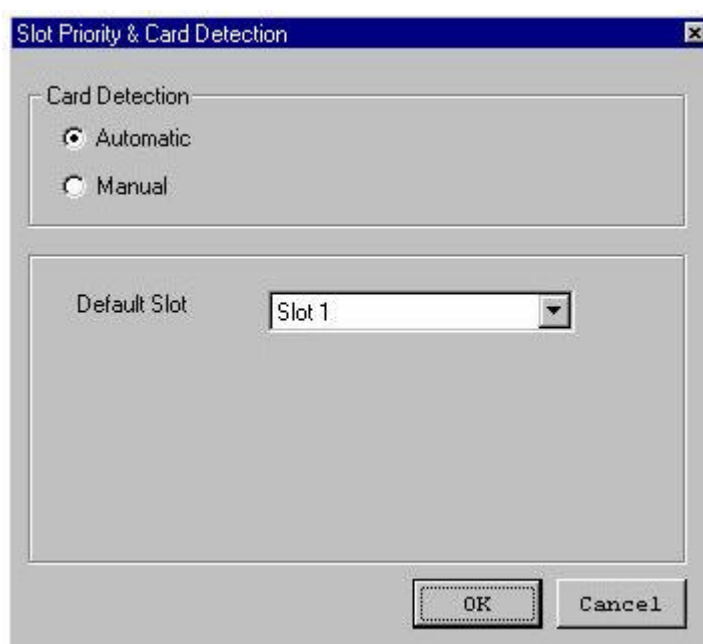
The setup menu functions allow you adjust MCERICOH settings for your computer hardware.

Before you modify the settings, be aware that it is possible for MCERICOH to cause a problem once these settings are applied. This is because some computer hardware, CardBus (PCMCIA) controllers, and PC card combinations do not allow MCERICOH access to necessary computer resources, or these combinations do not apply the correct power supply voltage to the memory card. Therefore, to minimize any potential problems, please be sure to carefully follow the instructions below. If a problem should still occur even after this procedure, please refer to the URL listed on the cover page above.

### *Using Automatic Card Detection*

The default card detection setting is “Manual” to avoid potential problems caused by hardware combinations. If you change the card detection setting to “Automatic”, the MCERICOH automatically detects a type of card in the current slot selected, and prevents the card services from being interrupted by the MCERICOH access. You will also be able to use any PC card slots with the MCERICOH. However, this does not work with all types of hardware, so you will need to confirm the following before you use the “Automatic” card detection setting.

To start the following checks, it is necessary to enable Automatic card detection using [Setup] – [Slot Priority & Card Detection].



1. Insert a memory card into one slot and make sure there are no PC cards in any of the other slots. Start MCERICOH and check if it is able to detect the card correctly, write to the card and read from the card.
2. Start MCERICOH with no PC card inserted in any slot. Once MCERICOH is running, insert a memory card in one slot and make sure there are no PC cards in any of the other slots. Then, check if MCERICOH is able to detect the card correctly, write to the card and read from the card.
3. Insert an I/O card (e.g., Ethernet card) in one slot and make sure its service is active (e.g. network connection is available). Start MCERICOH and access the slot with the I/O card. Then, check if the card service is still active.



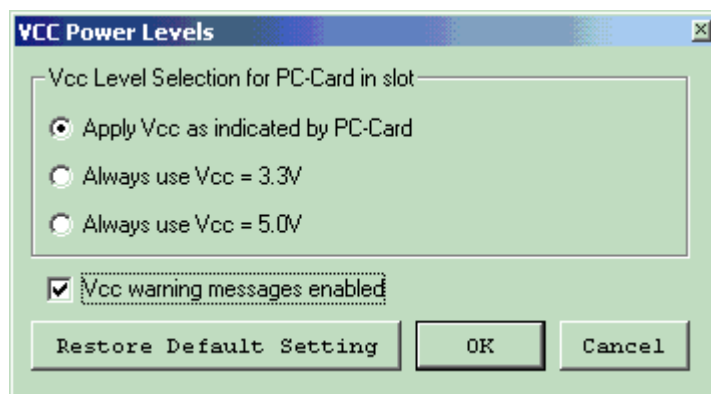
4. Start MCERICOH with a memory card inserted in one slot and make sure there are no PC cards in any of the other slots. Click on the Refresh button on the toolbar several times and verify that no problems occur. Remove and insert the card several times, checking to see that no problems occur.
5. If your computer has two PC Card slots, insert an I/O card in one slot and a memory card in the other. Start MCERICOH and execute tests 1 through 4 without removing the I/O card.

If you do not find any problems through these tests, your computer is compatible with the MCERICOH card detection function. Some types of CardBus controllers can be relatively slow in card detection. With the slowest controller, MCERICOH may take more than 30 seconds to detect the type of card, but this is not a problem.

### ***Changing the Supplied Voltage***

The correct power supply voltage must be supplied to the memory card so that MCERICOH can identify card types automatically, read from the card and write to the card. Some computers may not supply the correct voltage to the card, which causes the system to hang-up when MCERICOH tries to detect the card type automatically.

If you have a system hang-up problem, try changing the Vcc Level setting to “Always use Vcc = 5.0V” in the [Setup] – [Vcc Power Levels] menu.



If this change does not solve the problem, use Manual card detection.

## **7. TROUBLESHOOTING**

### **COMMAND LINE OPTIONS**

#### **/w Option**

Use this option to change the default memory window for MCERICOH.

Usage: > mcericoh /wnn

nn refers to the values described in the brackets below.

- (D0) D000-D3FF (default)
- (D4) D400-D7FF
- (D8) D800-DBFF
- (DC) DC00-DFFF
- (E0) E000-E3FF
- (E4) E400-E7FF
- (E8) E800-EBFF
- (EC) EC00-EFFF

For example, if your computer allows MCERICOH to use the memory window

D800-DBFF(h) only, type the following command at the command prompt.

> *mcericoh /wD8*

#### **/d Option**

Use this option to generate debug information files at the root directory of the C-drive.

## KNOWN PROBLEMS AND WORKAROUND

Refer to the following Internet URL for the most updated information.

<http://support.aficio.com/mcericoh/>

<b>Problem</b> MCERICOH does not detect a card when Automatic detection is selected in the [Setup] – [Slot Priority & Card Detection] (Windows 98/Me).
<b>Possible Causes</b> <ol style="list-style-type: none"><li>1. PC Card was not successfully configured.</li><li>2. The default memory window (D000-D3FFh) is not available.</li></ol>
<b>Workaround</b> <ol style="list-style-type: none"><li>1. Open the Control Panel and double click on the PC Card icon. If PC Card has not been configured, the PC Card Wizard will start. Configure the PC Card by following the Wizard instructions.</li><li>2. Try adjusting the default memory window by editing the CONFIG.SYS and SYSTEM.INI files as described in section “5. GETTING STARTED”. If you are not successful even after trying all possible settings, this means that your computer is not compatible with MCERICOH. * Please be sure to use the free DEMO version prior to purchasing MCERICOH to confirm that your computer is compatible with MCERICOH.</li></ol>

<b>Problem</b> The MCERICOH does not detect a card when Automatic detection is selected in the [Setup] – [Slot Priority & Card Detection] (Windows NT4.0/2000).
<b>Possible Cause</b> The default memory window (D000-D3FFh) is not available.
<b>Workaround</b> Try using the /w command line option to adjust the default memory window. If you are not successful even after trying all possible settings, this means your computer is not compatible with the MCERICOH. * Please be sure to use the free DEMO version prior to purchasing MCERICOH to confirm that your computer is compatible with the MCERICOH.

<b>Problem</b> Windows 2000 requests a driver installation for the flash memory card
<b>Possible Cause</b> This is not a problem, but a Windows 2000 specification that unfortunately cannot be bypassed with MCERICOH.
<b>Workaround</b> None. Cancel the Hardware Wizard before using MCERICOH.

<b>Problem</b> MCERICOH does not detect a card that has been programmed with a specific binary file. Typically, MCERICOH indicates “Unknown” or “I/O card (not memory)” as the card type.
<b>Possible Cause</b> The data programmed in the card causes MCERICOH to misdetect the card type as a non-memory card. Because the 4MB flash memory card available from Ricoh does not have an attribute memory, MCERICOH reads the data stored in main memory (4MB area) as attribute information.
<b>Workaround</b> Use [Setup] – [Slot Priority & Card Detection], and select “Manual” card detection. You have to select the correct card slot in order to avoid having MCERICOH access a slot other than the slot with the I/O card (e.g., Ethernet).

<b>Problem</b> I/O card connection is lost after starting MCERICOH (Windows 98/Me).
<b>Possible Cause</b> You have selected “Manual” card detection in [Setup] – [Slot Priority & Card Detection] (default setting). If the slot selected has an I/O card (Ethernet, Modem, etc.), this problem will occur.
<b>Workaround</b> In the Slot Priority and Card Detection dialog box, select the correct slot in which the 4MB flash memory card is installed.

**Problem**

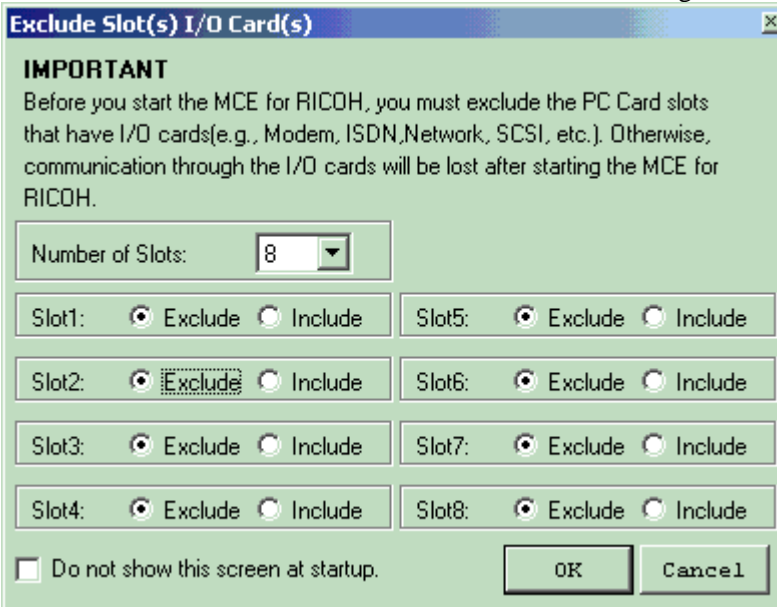
I/O card connection is lost after starting MCERICOH (Windows NT4.0/2000).

**Possible Cause**

In the Startup dialog box, you have selected the slot with the I/O card.

**Workaround**

You need to Exclude the slot with the I/O card before starting MCERICOH.



**Problem**

The Exclude Slots dialog box is not displayed at MCERICOH startup (Windows NT4.0/2000).

**Possible Cause**

You have checked the “Do not show this screen at startup” checkbox.

**Workaround**

Start MCERICOH with no PC cards in any of the slots, select [File] – [Settings] to access the dialog box below and uncheck the “Do not show this screen at startup” checkbox.

