

Memory Card Explorer™ for RICOH (MCERICOH) Version 1.10 User Guide

IMPORTANT

If you are installing the software from the MCERICOH version 1.00 disks, install the MCERICOH version 1.00 first according to the instructions in section 4 of this manual.

Then, you need to install the version 1.10 patch program onto it before you use the software.

The patch program is available from the following URL.

<http://support.aficio.com/mcericoh/v110patch/110update.exe>

Also, please refer to the following URL regarding MCERICOH information updates.

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

SOFTWARE LICENCE AGREEMENT

Copyright (C) 1999-2000 Ricoh Company Ltd.
Copyright (C) 1995-2000 Elan Digital Systems Ltd.
All Rights Reserved

You should carefully read the following terms and conditions before using this software (Memory Card Explorer for RICOH). Throughout this license agreement, RICOH refers to Ricoh Co., Ltd. with registered offices at 1-15-5 Minami-Aoyama, Minato-ku, Tokyo, Japan, and Elan refers to Elan Digital Systems Ltd, with registered offices at Elan House, Little Park Farm Road, Segensworth West, Fareham, Hants.

Your use of this software indicates your acceptance of RICOH and Elan's license agreement and warranty.

Disclaimer of Warranty

THIS SOFTWARE AND THE ACCOMPANYING FILES ARE SOLD "AS IS" AND WITHOUT WARRANTIES AS TO PERFORMANCE OR MERCHANTABILITY OR ANY OTHER WARRANTIES WHETHER EXPRESSED OR IMPLIED.

Because of the various hardware and software environments into which this software may be installed, NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS OFFERED.

Good data processing procedure dictates that any program be thoroughly tested with non-critical data before relying on it. The user must assume the entire risk of using the program. ANY LIABILITY OF THE SELLER WILL BE LIMITED EXCLUSIVELY TO PRODUCT REPLACEMENT OR REFUND OF PURCHASE PRICE.

Usage

This software licence grants the end-user the right to use a single copy of Memory Card Explorer for RICOH. Multiple installations may be made as long as only one is in use at any instant. Network installations are prohibited in any case. If at any time, more copies of Memory Card Explorer are running than the number of licences granted for the end-user's work site or place of business, this shall constitute an offence.

This software must not be reverse engineered or in any way altered or modified. It cannot be resold without the prior written consent of RICOH with appropriate licensing provisions. It must not be copied to third parties outside of the end-user's organisation.

It must not be offered on any public or private network e.g. the Internet.

Duration

This license is effective until terminated. The license will terminate where you fail to comply with the terms of this Agreement. Upon termination, you agree to destroy all copies of the Software and its documentation.

Viruses

RICOH has taken reasonable steps to ensure that this software is virus free but cannot guarantee this fact due to reliance on 3rd party virus detection tools.

Exporting Law

You acknowledge that the export of the Software is governed by the export control laws of the United States and other countries. You agree to comply with all such export control laws.

Governing Law and Jurisdiction

Even if any provision or portion of this Agreement is found to be illegal, invalid or unenforceable, the remaining provisions shall still remain valid and in full force. This Agreement shall be governed by the laws of the United Kingdom.

TRADEMARK NOTICES

Microsoft, Windows, and Windows NT are registered trademarks of Microsoft Corporation.

Memory Card Explorer and MCE are trademarks of Elan Digital Systems Ltd.

Intel is a registered trademark of Intel Corporation.

AMD is the registered trademark of Advanced Micro Devices, Inc.

All other company and product names are the names, trademarks, or registered trademarks of their respective companies.

DOCUMENT REVISION HISTORY

December 22, 2000	First release
January 15, 2001	Minor modifications (Spelling and grammar mistakes corrections)

1. SYSTEM REQUIREMENTS

Operating Systems

- Windows 95 Operating System, service pack 1 or later
- 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

Computer Hardware

- Desktop or laptop computer with Intel 82365 compatible PCMCIA or CardBus controller
- At least 1 PC Card slot
- At least 1 floppy disk 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 set of installation disks 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

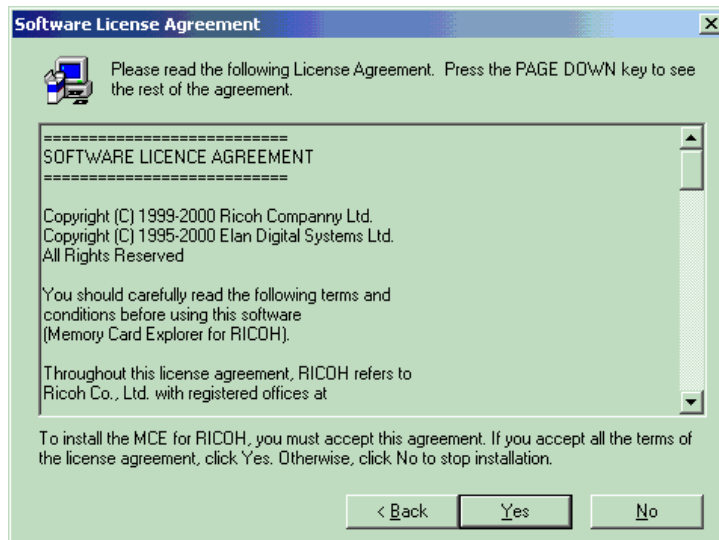
1. If you are installing the software on a Windows NT 4.0 workstation or Windows 2000, you must login as a user who has Administrative access privileges on the local computer.
2. If anti-virus software is running, disable it prior to installing the software.

Step-by-Step Installation Procedure

1. Insert the MCERICOH Installation Disk #1 into floppy disk drive A or B.
2. Select “Run...” from the Start menu and execute the installation program (A:\Setup.exe).
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.



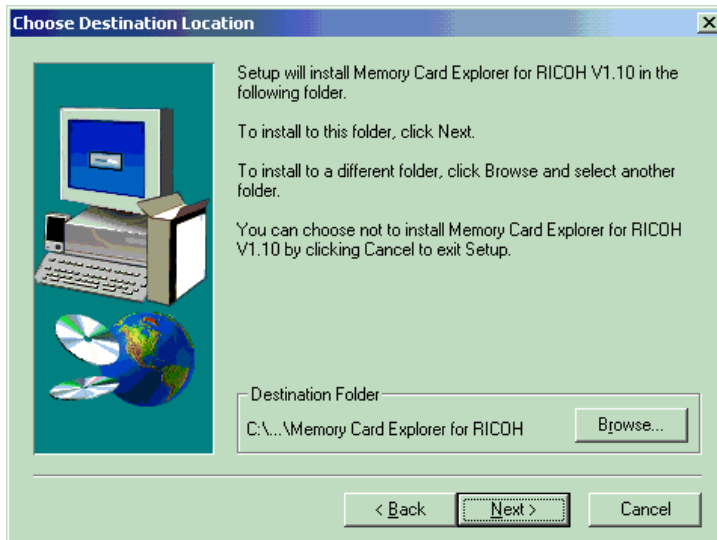
5. Input the registration information and click “Next”.

Serial No.	20000319
Installation Date&Time	1-11-2001 14:09:57
OS Product Key	51873-006-1992696-09872
Company Name	Ricoch Co.,Ltd.
Address 1	Shin-Yokohama, Kounan-ku
Address 2	Yokohama
Country	Japan
First Name	Yoshiki
Middle Name	
Last Name	Furuoya
Phone Number	+81-134-660653
Fax Number	+81-134-660676
E-mail Address	nobody@yoko.ricoh.com

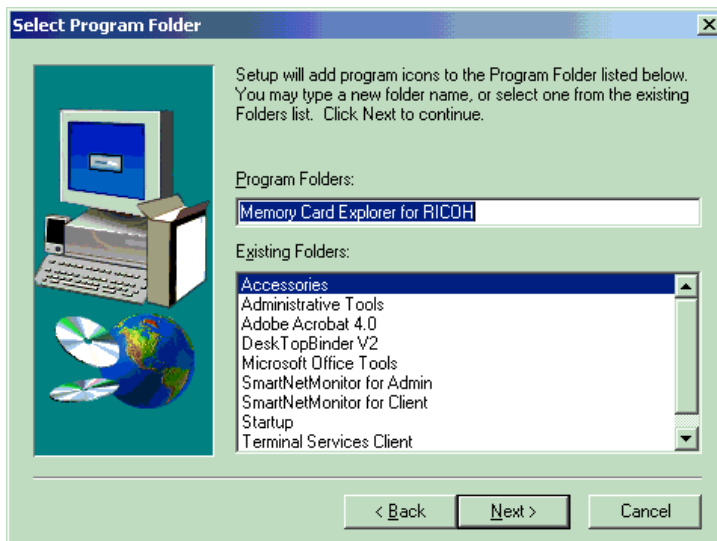
To go on to the next step, the following fields must be entered. This information will be used to detect an illegal installation.

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

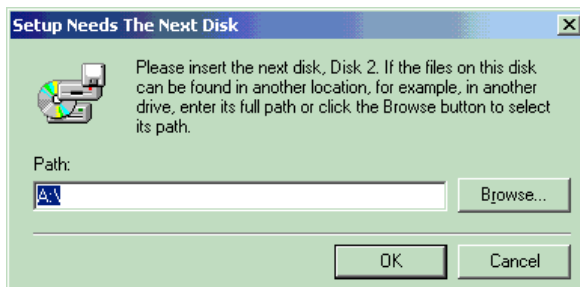
6. Click “Next” in the Choose Destination Location dialog box.



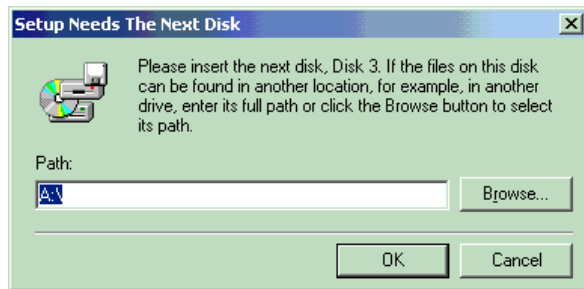
7. Click “Next” in the Select Program Folder dialog box. The installer then starts copying files.



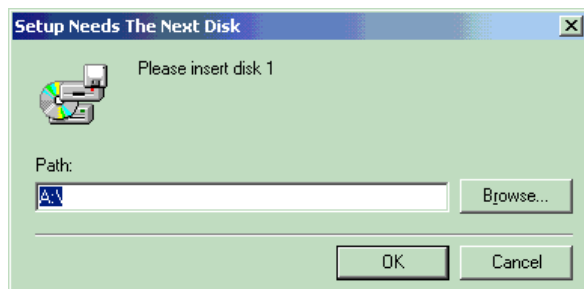
8. Replace the floppy disk with Installation Disk #2 when prompted.



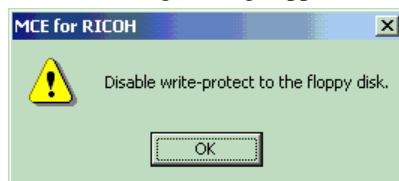
9. Replace the floppy disk with Installation Disk #3 when prompted.



10. After copying all the program files, the installer will prompt you for Installation Disk #1 again.



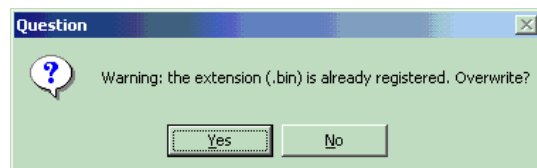
If the following message appears, disable the write-protect switch on the disk and try again.



11. Follow the installer messages from this point onward.
12. Restart the computer after the installation is complete.
13. Write-protect Installation Disk #1 and keep all the disks in a safe place.

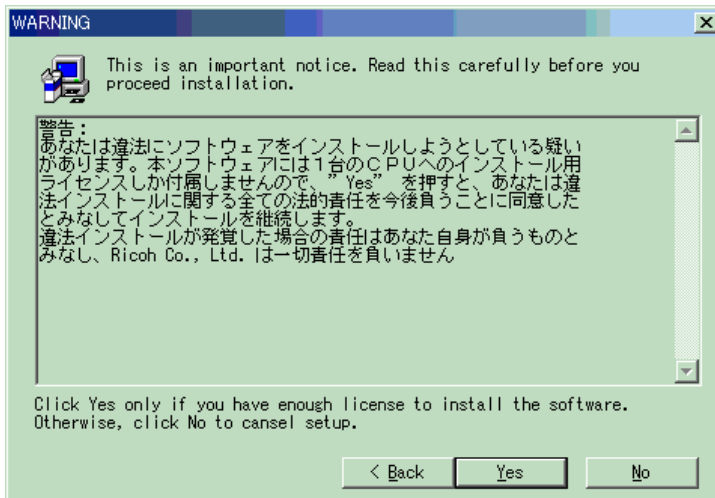
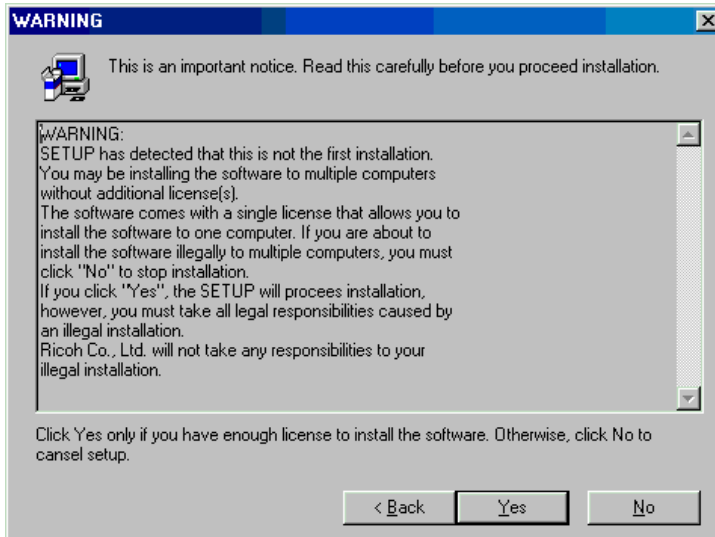
Note:

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.



License Warning

If you attempt to use the same installation disk to install the software to other computers, you will receive the following warning before starting the installation.



For the DEMO version software, you can click “Yes” to install the software without multiple licenses. The warning text in the above screenshot appears in Japanese if you are using a computer with a Japanese operating system. For all the other languages, the warning appears in English.

NOTE: For the production version software, please make absolutely sure to install the software on only one computer per software license.

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 95/98/Me Memory Window Reservation [Important]

IMPORTANT

The MCERICOH version 1.10 installer and the MCERICOH version 1.10 patch modify 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 Windows95/98 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 Windows95/98 installations)

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

```
[386Enh]
```

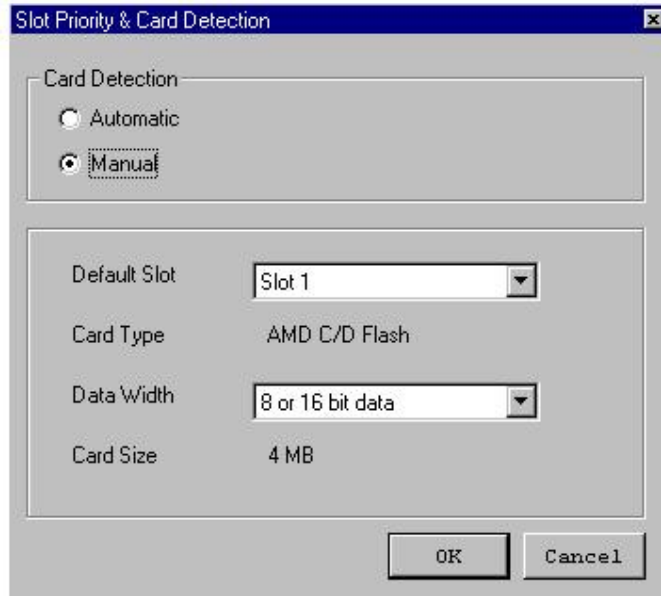
```
EMMExclude=d000-d3ff
```

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 95/98/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 95/98/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.

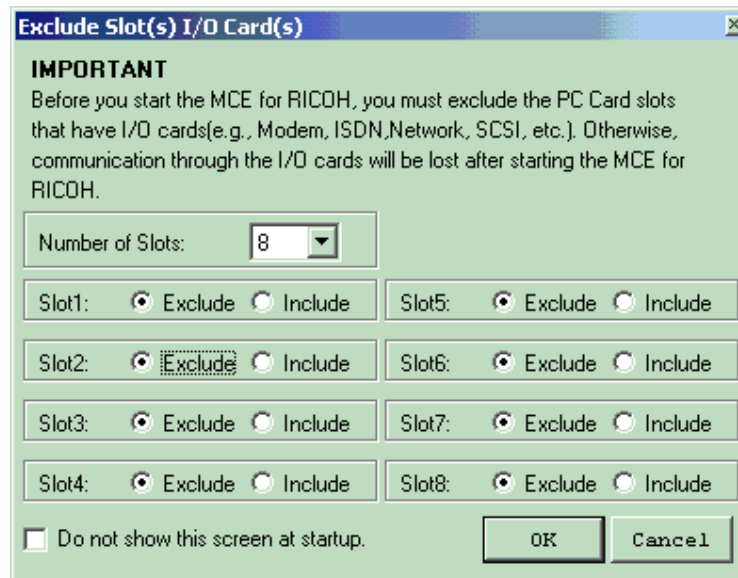
CardBus Controllers having Intel 82365 compatible register sets are also supported.

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 95/98.

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.

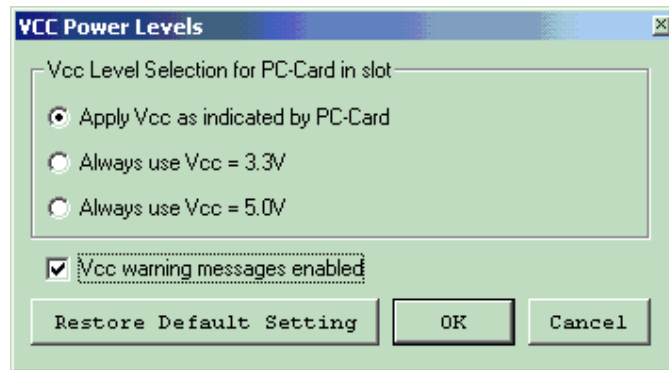
4. Start MCERICOH with a memory card inserted in one slot and make sure there are no PC cards in any of the other slots. Click on the Refresh button on the toolbar several times and verify that no problems occur. Remove and insert the card several times, checking to see that no problems occur.
5. If 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/>

Problem MCERICOH does not detect a card when Automatic detection is selected in the [Setup] – [Slot Priority & Card Detection] (Windows 95/98/Me).
Possible Causes 1. PC Card was not successfully configured (Windows 95). 2. The default memory window (D000-D3FFh) is not available.
Workaround 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. 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.

Problem The MCERICOH does not detect a card when Automatic detection is selected in the [Setup] – [Slot Priority & Card Detection] (Windows NT4.0/2000).
Possible Cause The default memory window (D000-D3FFh) is not available.
Workaround 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.

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

Problem 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.
Possible Cause 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.
Workaround 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).

Problem I/O card connection is lost after starting MCERICOH (Windows 95/98/Me).
Possible Cause 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.
Workaround In the Slot Priority and Card Detection dialog box, select the correct slot in which the 4MB flash memory card is installed.

Problem

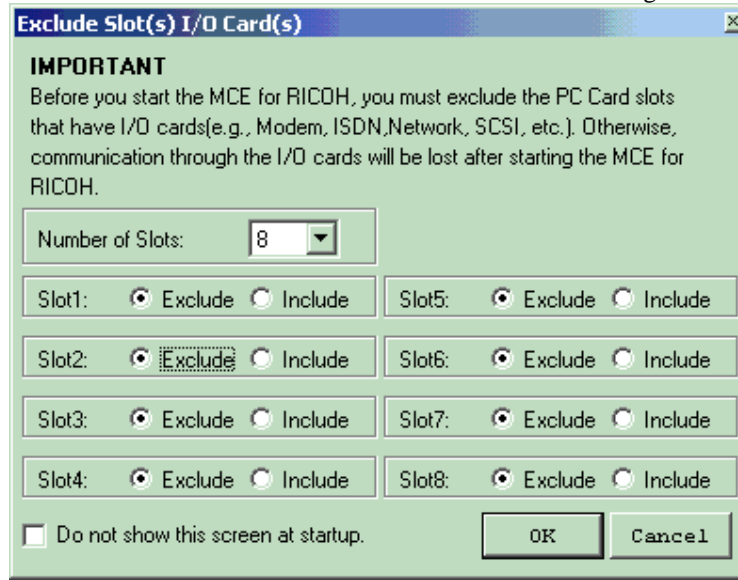
I/O card connection is lost after starting MCERICOH (Windows NT4.0/2000).

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.

