

SmartMedia Adpter PC Card SMA01U

User's Guide

July 2000 Rev. 3.0

RATOC Systems, Inc.

SMA01U

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1. Introduction

Thank you for purchasing the SMA01U. This guide contains the most complete information for installation and operation of the SMA01U Smart Media Adapter PC Card at press time. Be sure to read this guide before using the SMA01U for the first time. The README file included on the supplied disk may contain more recent information which may not be included in this guide. Be sure to read the README file as well.

1-1. Features

- •TYPE II 16bit PC Card with built-in SmartMedia socket.
- Supports both 3.3V and 5V SmartMedia
- •Supports up to 128MB SmartMedia.
- •Linear type Flash memory control architecture. (Non-ATA type)
- •Easy to use.
 - Provides floppy disk-like SmartMedia change.
 Allows for change of SmartMedia without "PC Card Registration" and "Stop PC Card" procedures.

1-2. About User Guide

- •Information in this document is subject to change without notice.
- •If you have any questions or find errors in this guide, do not hesitate to let us know.

2. Before using the SMA01U

2-1. Cautions

- •Never attempt to disassemble the adapter PC Card.
- •Do not bend, drop or strike the adapter PC Card, or subject it to heavy pressure.
- •Do not insert things other than SmartMedia into the slot of the adapter.
- •Do not remove the adapter from the PC Card slot during write or read operation.
- Never remove SmartMedia when the computer gets access to SmartMedia.
- •Store the support software floppy disk for safekeeping.
- This product is a non-ATA type adapter. This product should not be used with digital cameras which use ATA type-II PC Card as external storage media.
- •Notice that surface of the PC Card gets hotter.
- •Information in this document is subject to change without notice.
- •If you have any questions and find errors in this manual, do not hesitate to let us know.

2-2. Package

- •SMA01U SmartMedia Adapter PC Card
- •Setup CD-ROM for Windows/Macintosh
- •User's Guide(This document)

NOTE:

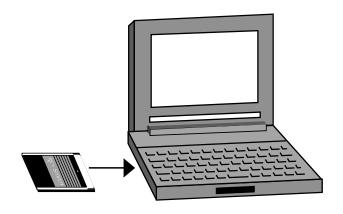
If any of these items are missing from this package, contact your store or RATOC Systems immediately.

3. Setup

3-1. Setup for Windows 95

3-1-1. Installing the SMA01U

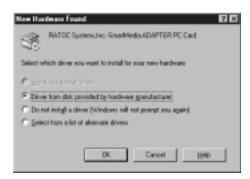
Turn on your PC, insert the SMA01U into the PC Card slot. SmartMedia need not be inserted in the SMA01U.



- •If the New Hardware Found window appears, refer to 3-1-2. When the New Hardware Found window appears.
- •If the **Update Device Driver Wizard** window appears, refer to **3-1-3**. When the **Update Device Driver Wizard window appears**.

3-1-2. If the New Hardware Found window appears

 When the New Hardware Found window appears, select Driver from disk provided by hardware manufacturer and click OK.



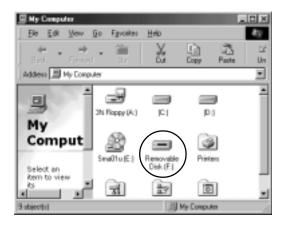
- 2. Insert the SMA01U CD-ROM into your PC.
- Type D:\Win9x\ in the Copy Manufacturer's files from: box and click OK. D means your CD-ROM drive.



4. If installation is successful and the SMA01U is recognized by the system, the **SMA01U indicator** will appear on the Task bar.



Also you can find "Removable Disk" icon in "My Computer".



When installation is completed, remove the SMA01U CD-ROM from the CD-ROM drive of your PC.

3-1-3. If the Update Device Driver Wizard window appears

 When the Update Device Driver Wizard window appears, insert the SMA01U CD-ROM into your PC and click Next.



2. When the following window appears, click **Finish**.



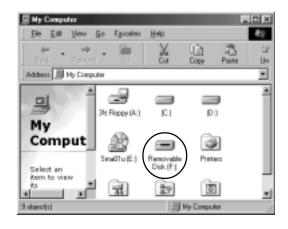
- 3. If a message requesting insertion of a CD-ROM appears, click **OK**.
- 4. When the Copying Files... window appears, you will see a message prompting you to insert the disk that is already in the CD-ROM drive. Continue by typing D:\Win9x for the source of files and click OK. D means your CD-ROM drive.



5. If installation is successful and the SMA01U is recognized by the system, the **SMA01U indicator** will appear on the Task bar.



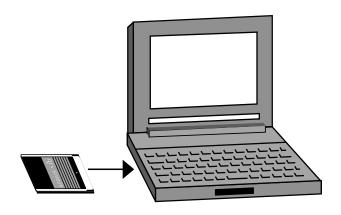
Also you can find "Removable Disk" icon in "My Computer".



When installation is completed, remove the SMA01U CD-ROM from the CD-ROM drive of your PC.

3-2. Setup for Windows 98

Turn on your PC, insert the SMA01U into the PC Card slot.
 SmartMedia need not be inserted in the SMA01U.



When the Add New Hardware Wizard window appears, insert the SMA01U CD-ROM into your PC and click Next.



When the following window appears, select Search for the best driver for your device (Recommended) and click Next.



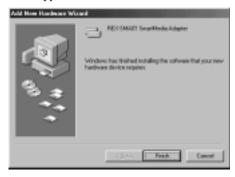
4. When the following window appears, check **Specify a location** and type **E:\Win9x**.E means your CD-ROM drive letter. Click **Next**.



5. When the following window appears, click **Next**.



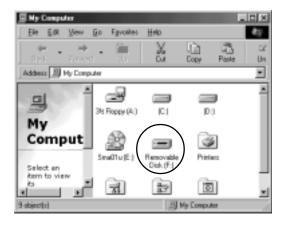
6. When the following window appears, click **Finish**.



6. If installation is successful and the SMA01U is recognized by the system, the **SMA01U indicator** will appear on the Task bar.



Also you can find "Removable Disk" icon in "My Computer".

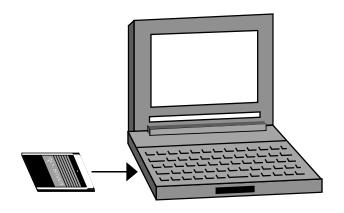


When installation is completed, remove the SMA01U CD-ROM from the CD-ROM drive of your PC.

3-3. Setup for Windows NT4.0

You need at least Service Pack 3 distributed by Microsoft. If you have not installed Service Pack 3 on WindowsNT4.0, you have to install at least Service Pack 3 first.

Turn off your PC, insert the SMA01U into the PC Card slot.
 SmartMedia need not be inserted in the SMA01U.



2. Open "Control Panel" in "My Computer".

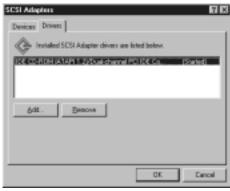
Double click "SCSI Adapter".



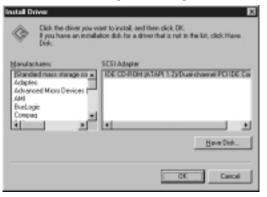
3. You will see the screen below. Click the [Drivers] tab.



4. You will see the screen below. Click the [Add] button.



5. You will see the screen below. Click the [Have Disk...] button.



 You will see the screen below.Insert the SMA01U CD-ROM and type E:\WINNT40. E means your CD-ROM drive letter. Click OK.



 You will see the screen below.Select [REX-SMA01 SmartMedia Adapter for PC/AT] and click OK.

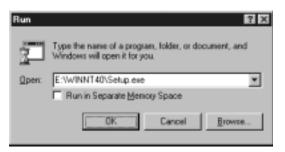


8. You will see the screen below. Click **NO**.



9. Click the [Start] button and select [Run].

Type E:\WINNT40\Setup.exe. E means your CD-ROM drive.



10. You will see the screen below. Click **Next**.



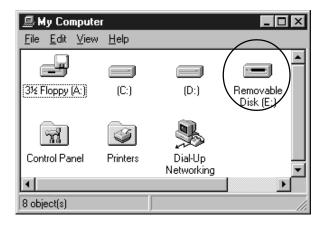
11. You will see the screen below. Select [Yes, I want to restart my computer now]. Click Finish.



12. If installation is successful and the SMA01U is recognized by the system, the **SMA01U indicator** will appear on the Task bar.



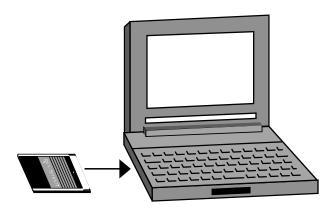
Also you can find "Removable Disk" icon in "My Computer".



When installation is completed, remove the SMA01U CD-ROM from the CD-ROM drive of your PC.

3-4. Setup for Windows2000

Turn on your PC, insert the SMA01U into the PC Card slot.
 SmartMedia need not be inserted in the SMA01U.



2. Found New Hardware wizard will appear automatically.



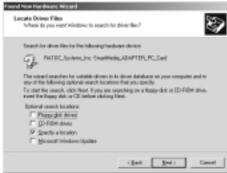
When the Found New Hardware Wizard window appears, insert the SMA01U CD-ROM into your PC and click Next.



 When the following window appears, select Search for a suitable driver for my device (Recommended) and click Next.



When the following window appears, check **Specify a location** and click **Next**.



When the following window appears, type G:\Win2000.G means your CD-ROM drive. Click OK.



7. When the following window appears, click **Next**.



8. When the **Digital Signature Not Found** window appears, click **Yes**.

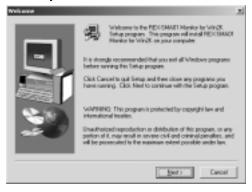


When the following window appears, click Finish. You have now completed the installation of the driver.



 Open "CD-ROM" icon in "My Computer" and double click on the Setup.exe file to install utility. You will see the screen below.

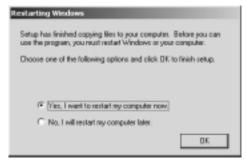
Click Next.



11. You will see the screen below. Click Next.



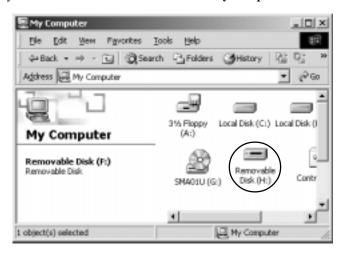
12. You will see the screen below. Select [Yes, I want to restart my computer now]. Click OK.



13. If installation is successful and the SMA01U is recognized by the system, the **SMA01U indicator** will appear on the Task bar.



Also you can find "Removable Disk" icon in "My Computer".

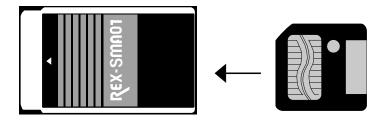


When installation is completed, remove the SMA01U CD-ROM from the CD-ROM drive of your PC.

4. Using the SMA01U

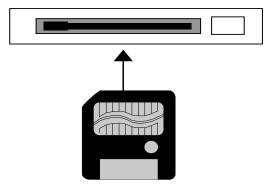
4-1. Inserting SmartMedia

Turn the **SMA01U** label on the SMA01U and the contact area on the SmartMedia upwards and insert the SmartMedia into the SMA01U fully. e.g. Inserting 3.3V SmartMedia into the SMA01U



You may insert SmartMedia into the SMA01U after the SMA01U is inserted into the PC Card slot.

e.g. Inserting 5V SmartMedia into the SMA01U

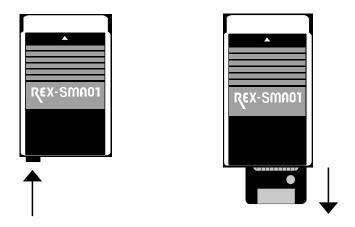


NOTE

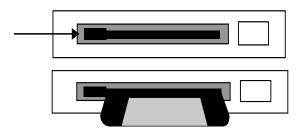
 SmartMedia inserted incorrectly will not be recognized by the PC. Take extra care to insert it in the correct direction. Note that 5V SmartMedia has a notch on the upper left and 3.3V SmartMedia has one on the upper right.

4-2. Removing SmartMedia

Press the eject button to release the SmartMedia, then pull the SmartMedia straight out from the SMA01U.



You may remove SmartMedia from the SMA01U before the SMA01U is removed from the PC Card slot.



NOTE

 Never remove SmartMedia when the computer gets access to the SmartMedia.

4-3. Removing the SMA01U

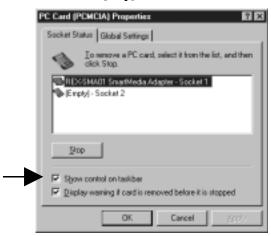
4-3-1. Removing the SMA01U for Windows 95/98/2000

 Double click on the PC Card symbol on the taskbar to open the PC Card (PCMCIA) Properties window.



NOTE

 If the PC Card symbol does not appear on the taskbar, click Start and select Settings - Control Panel, then double click PC Card (PCMCIA) icon to open PC Card (PCMCIA) Properties. Check the Show control on taskbar check box, and click OK.
 See the next page screen. 2. Select **REX-SMA01** and click the [Stop] button.



When the window which says You may safely remove this device appears, click OK.



4. Press the eject button of the PC Card slot to remove the SMA01U.



4-3-2. Removing the SMA01U for Windows NT

- 1. Shut down the PC.
- 2. Press the eject button of the PC Card slot to remove the SMA01U.

NOTE

- Make sure to shut down the PC before removing the SMA01U.
- The SmartMedia may be removed from the SMA01U before shutting down the PC.

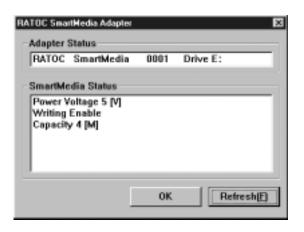
4-4. Using the SmartMedia

4-4-1. How to check status of the SMA01U and SmartMedia

If you double click on the SMA01U Indicator, status of the SMA01U and SmartMedia appears.



This window below indicates that the SMA01U is allocated to drive E: and a 5V 4MB writing-enable SmartMedia is inserted in the SMA01U.



NOTE

- After SmartMedia is changed, click on the SMA01U Indicator with the right-mouse button to refresh the information.
- If the PC does not get access to SmartMedia for a few seconds, the SMA01U cuts off the power supply to SmartMedia. In this case, Power OFF appears in the SmartMedia Status list.

4-4-2. How to check if your PC gets access to the SmartMedia

While the PC gets access to the SmartMedia, the SMA01U Indicator flashes on and off. When reading, the indicator is green, and writing, red.



NOTE

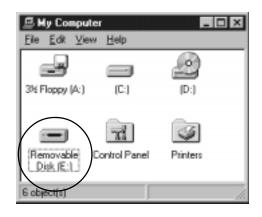
 Never remove SmartMedia when the computer gets access to the SmartMedia.

4-4-3. Using the SMA01U with My Computer and Explorer

The files in a SmartMedia inserted in the SMA01U can be used with **My** Computer and Explorer in Windows like any other files. (Regarding **My** Computer and Explorer, refer to the Windows manual.)

They can also be used by any other application software by selecting the drive where the SMA01U is allocated.

e.g. The SMA01U as it appears in My Computer

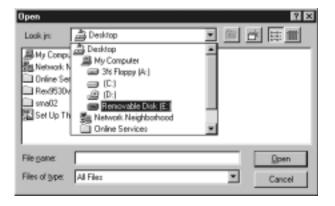


SMA01U appears as **Removable Disk** in **My Computer** or **Explorer**. In this example, SMA01U is allocated to drive E.

4-4-4. Using the SmartMedia

You can handle the SmartMedia in the SMA01U as like a floppy disk.

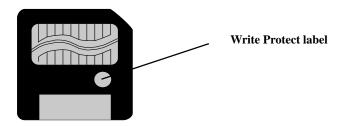
e.g. Opening file on the SmartMedia in the SMA01U



You can edit digital images on the SmartMedia with image editing application. Using image organizing applications which show thumbnails of digital images or image viewers allows you to handle digital images on the SmartMedia easily.

4-4-5. Write Protection

To prevent unintended writing to, erasing from, or formatting of the SmartMedia, put a Write-Protect label on the SmartMedia. For details, refer to the manual of the SmartMedia.



If the PC tries to write to write-protected SmartMedia in the SMA01U, the following window appears. The message will depend on the application.



4-4-6. Formatting of SmartMedia

Open "My Computer". Click on the Removable Disk icon with the rightmouse button. Select Format....

For details about formatting, refer to **Help** or to the Windows manual.



NOTE

- Before formatting SmartMedia, be certain that no important data is on the SmartMedia. When formatting, all previously-saved data will be erased.
- If you plan to use SmartMedia with digital cameras, you may have to format SmartMedia with the digital camera. Refer to the manual of the digital camera.

When you **can not** read/write SmartMedia after using MP3 player and so on,you need to execute "**Physical Format**" on SmartMedia.

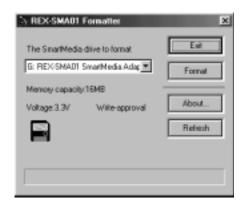
The SMA01U CD-ROM includes such a Physical Format utility: Sma01fmt.exe in the Win9x folder. This Sma01fmt.exe support only Windows95 or Windows98 and you have to use it with the SMA01U.

NOTE

- Before formatting SmartMedia, be certain that no important data is on the SmartMedia. When formatting, all previously-saved data will be erased.
- Don't get access to the SmartMedia while this utility is running.
- When using the SmartMedia with a digital camera after using this utility, re-format the SmartMedia on a digital camera.

Follow the steps through to execute Sma01fmt.exe.

- 1. Close the other application.
- 2. Make sure the SMA01U is inserted in the PC Card slot.
- 3. Insert the SMA01U CD-ROM into the CD-ROM drive.
- 4. Open the Win9x folder in the CD-ROM.
- 5. Double click on the sma01fmt.exe icon.
- You will see the screen below.



Description for each button.

[Format]

To format SmartMedia, click on this button.

If SmardMedia is not in SMA01U, this button is disabled.

If it finds fail block, it shows [Erase Fail Block = xxx].

When click on the [OK] button, it will continue formatting and fail block will be marked. The fail block won't be used.

[Exit]

Close this utility. When closing this utility after formatting,

a dialog will appear as shown below.

This dialog won't disappear until you remove the SmartMedia.

Please eject the SmartMedia in this case.



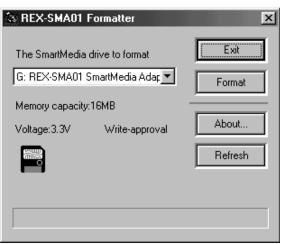
[Refresh]

Click on this button after you exchange the SmartMedia.

[About...]

Information for this utility's version.

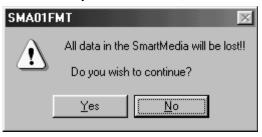
7. You will see the screen below.Click **Format**.



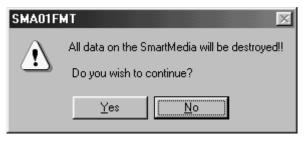
8. You will see the screen below. If you want to start to format, click Yes.



9. You will see the screen below. If you want to continue, click Yes.



10. You will see the screen below. If you want to continue, click Yes.



11. You will see the screen below. If you are sure to continue, click Yes.



12. You will see the screen below. Click **OK**.



13. After formatting the SmartMedia, you have to remove the SmartMedia once and put it back to to refresh the format information.

5. Troubleshooting

5-1. SMA01U is not recognized by my PC!

Cause The driver of SMA01U may not be installed correctly.

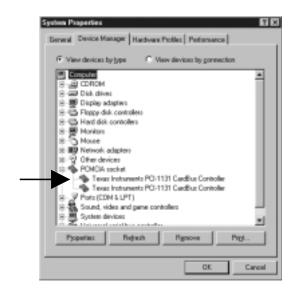
Solution If This device is not present, not working properly, or

does not have all the drivers installed appears under **Device Status**, click on the **Driver** tab and install the

driver again by Update Driver

Cause Solution

Your PC Card slot may not be enabled on Windows95/98. Double click on **System** in **Control Panel** and click on the **Device Manager** tab in the **System Properties** window. Click **PCMCIA socket**. Select **PCMCIA controller**. Click on **Properties**. Description depends on kinds of PC Card Adapters.



•Windows 95/95a

When the **PCMCIA controller Properties** window appears, check **Original Configuration box** under **Device usage** and click **OK**.



Windows 95B or later/ Windows 98

When the **PCMCIA controller Properties** window appears, remove the check from the **Disable in this hardware profile** box under **Device usage**, then click **OK**.



Cause Solution

Your PC Card slot may not be enabled on Windows2000. Open **Device Manager**.Click **PCMCIA adapters**. Select **PCMCIA controller**. Double click it. Description depends on kinds of PC Card Adapters.



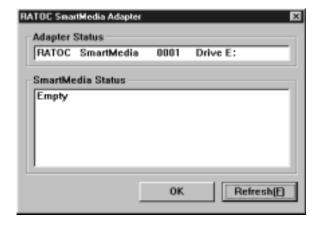
•Windows 2000

When the **PCMCIA controller Properties** window appears,set [Use this device(enable)] under Device usage, then click OK.



5-2. My PC can not get access to SmartMedia!

If the SmartMedia is not inserted correctly, double-clicking on the SMA01U Indicator will cause No Media to appear in the SmartMedia Status list. If the PC tries to get access to the SmartMedia, a message such as The device is not ready. appears. This message will depend on the application. This window indicates SMA01U is allocated to drive E.



Cause SmartMedia is not inserted correctly.

Solution Make sure SmartMedia is inserted in the right direction until

the SmartMedia fully mates with the SMA01U.

Refer to Inserting SmartMedia.



5-3. Writing, erasing or formatting failed!

Cause: SmartMedia is write-protected.

Solution Take off the Write Protect label from the SmartMedia.

6. Setup (Macintosh)

- 1. Insert the SMA01U CD-ROM into the CD-ROM drive.
- 2. Open the mounted CD-ROM icon. You will see the screen below.



3. Double click on the **SMA01 Driver Installer** icon.

4. When the following window appears, click on the **Install** button.



5. When the following window appears, click on the **Restart** button.



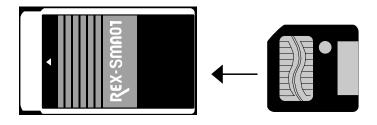
 After restarting, verify that there are REX-SMA01 Driver, REX-SMA01 Extension and REX-SMA01 Enabler icons in the Extensions folder.

If they are in the **Extensions** folder, installation is complete.

7. Using the SMA01U

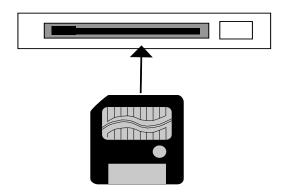
7-1. Inserting SmartMedia

Turn the SMA01U label on the SMA01U and the contact area on the SmartMedia upwards and insert the SmartMedia into the SMA01U fully. e.g. Inserting 3.3V SmartMedia into the SMA01U



You may insert SmartMedia into the SMA01U after the SMA01U is inserted into the PC Card slot.

e.g. Inserting 5V SmartMedia into the SMA01U



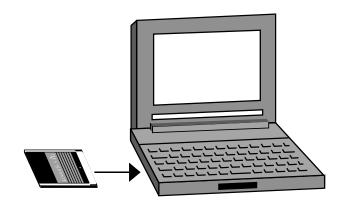
NOTE

 SmartMedia inserted incorrectly will not be recognized by the PC. Take extra care to insert it in the correct direction. Note that 5V SmartMedia has a notch on the upper left and 3.3V SmartMedia has one on the upper right.

7-2. Inserting the SMA01U

- 1. Verify that the Macintosh driver setup is complete.
- Grasp the SMA01U by the edges with the label facing upward to the insert slot. Insert the SMA01U into the slot and push it in until it is firmly seated.

You may insert SmartMedia into the SMA01U before inserting the SMA01U into the PowerBook.



7-3. Using the SmartMedia

If the SmartMedia has been initialized, a disk icon, similar to the illustration below will appear on the desktop when the SmartMedia is inserted. If a SmartMedia has already been inserted into the SMA01U before inserting the SMA01U into the PowerBook, the disk icon will appear when the SMA01U is inserted into the PowerBook.



NOTE

 You can edit digital images on the SmartMedia with image editing application. Using image organizing applications which show thumbnails of digital images or image viewers allows you to handle digital images on the SmartMedia easily.

7-3-1. Initializing a SmartMedia

- When the SmartMedia which has not been initialized is inserted, a message will appear.
- 2. Follow the screen messages to initialize the SmartMedia.
- 3. When initialization is complete, a disk icon will appear on the desktop.

NOTE

 The SmartMedia initialized with Macintosh might not be able to used with some digital cameras. Before initializing the SmartMedia, read the digital camera manual carefully.

7-3-2. Erasing a SmartMedia

- 1. Click the disk icon.
- 2. Choose **Erase Disk** from the **Special** menu.
- 3. Follow messages to erase the data on the SmartMedia.

NOTE

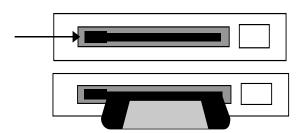
When you erase a SmartMedia, you lose any data that was on it.

7-4. Removing a SmartMedia from the SMA01U

1. Drag the disk icon to the **Trash** icon.



2. Press the eject button on the SMA01U. Then pull the SmartMedia straight out from the SMA01U.



NOTE

 Do not remove a SmartMedia from the SMA01U without dragging the icon to the trash icon.

7-5. Removing the SMA01U from the Macintosh

1. If a SmartMedia is in theSMA01U, drag the icon to the **Trash** icon.



Press the eject button for the PC Card slot. Then pull the SMA01U straight out from the PC Card slot.



8. Registration and Tech-Support

8-1. How to Register

We highly recommend to register yourself as our customer through our on-line registration.

- On the Internet, access our site (http://www.ratocsystems.com/english/)
- 2. Follow window menu guide to register.
- **3**. Fill out and submit the registration form.

8-2. Driver Update and Support

Driver Update

The latest driver is subject to change for improvement or bug fix.

You can download the latest version from our web site.

(http://www.ratocsystems.com/english/)

Technical Support

You can get a Tech support from RATOC at the following

(Open Monday - Friday,9:30A.M. to 5:00P.M(PST))

RATOC Systems International, Inc. Tech support

Address: 1933 O'Toole Avenue Suite A109

SanJose, CA 95131, U.S.A.

Phone : (408)955-9400 Fax: (408)955-9402

E-mail: int-support@rexpccard.co.jp

Web: http://www.ratocsystems.com/english/

NOTE:

Please include the following information to help us to assist you in the event of a problem:

- •Our product name, serial number, and product description
- ·Host Computer Name, OS version

8-3. Requirements

SMA01U requires your system as follows.

- 1. Interface:PC Card slot (PCMCIA 2.0 / JEIDA 4.1 or later)
- OS:Windows 95/98/98 Second Edition/NT 4.0/2000
 MacOS7.6 or later

8-4. SmartMedia compatibility

Supports both 3.3V and 5V SmartMedia (up to 128Mb)

•5V :2MB, 4MB

•3.3V :2MB, 4MB,8MB,16MB,32MB,64MB,128MB

NOTE:

As for 128MB, the SMA01U is made on the specifications of 128MB, although 128MB is not on the market as of July/2000.

9. Specifications

Product name: SMA01U

Interface: PC Card Standard

Size: 54mm(W) x 85.6mm(D) x 5mm(H)

Weight: 32g

Power Requirement: +5V(Supplied from PC Card slot)

Operating temperature: $0^{\circ}\text{C-}55^{\circ}\text{C}$

Relative humidity: 20-80% (non-condensing)

Appendix

FCC Statement

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

- (1)Reorient or relocate the receiving antenna.
- (2)Increase the separation between the equipment and receiver.
- (3)Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- (4)Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance may result in this unit not complying with FCC Rules Part 15.

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