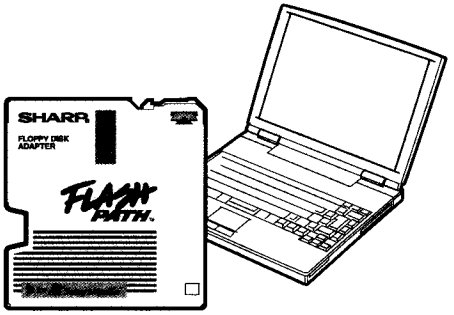
SHARP®

OPERATION MANUAL

Floppy Disk Adapter for SmartMedia™

Model

VR-1FPN



FLASH PATH™

- We greatly appreciate your purchase of the Sharp "FlashPath" floppy disk adapter.
  To ensure proper operation, be sure you read this manual carefully.
  Also be sure to keep this manual for future reference.

Please read this operation manual carefully before using the FlashPath.

Important

For assistance in reporting the theft or loss of this product, record on the line below the serial number which is located on the bottom of the unit.
Please retain this information.

Model No.: VR-1FPN

Serial No.:

WARNING—FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment.

NOTE

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:

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

A shielded I/F cable is required to insure compliance with FCC regulations for Class B computing equipment.

DECLARATION OF CONFORMITY

Sharp Floppy Disk Adapter VR-1FPN

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

RESPONSIBLE PARTY: SmartDisk Corporation 3506 Mercantile Avenue Naples, Florida 34104
941-436-2501

WARNING
TO PREVENT SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION ON LITHIUM BATTERY
If a battery is reversed (positive end where the negative end belongs and vice versa), it can overheat and rupture. This has happened when young children install batteries backwards. Warn children *not* to take out batteries or install them. *Parents should install the lithium battery in the Floppy Disk Adapter.*

CAUTION
To prevent shock, do not open the cabinet. No user serviceable parts inside. Refer servicing to a qualified dealer or service center.

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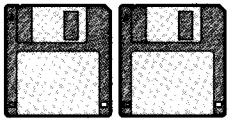
Supplied Accessories



Two setup disks
(For Windows 95/98 and Windows NT 4.0)

Two lithium batteries
Type CR2016

TRADEMARKS

- **FlashPath** is a trademark of SmartDisk Corporation of the United States.
- **SmartMedia** is a trademark of TOSHIBA Corporation.
- **PC/AT** is a registered trademark of International Business Machines of the United States.
- **Microsoft** and **Windows** are a registered trademark of Microsoft Corporation in the United States and other countries.
- Other names of corporations and products are trademarks or registered trademarks of the respective corporations.

Computer Operating Environment

Applicable models: IBM PC/AT or compatible computers, FDD with 1.44 MB support
CPU: 80486 or higher
RAM: 8 MB or more
Free hard disk space required for installation: 8 MB or more

Applicable OS: Windows 95/98, Windows NT 4.0

Note: The above are necessary conditions for writing and reading data on the SmartMedia.

Precautions

- The FlashPath is an adapter for using SmartMedia on a computer's FDD (Floppy Disk Drive). (For FDDs with 1.44 MB support only)
- The FlashPath is the same size as a 3.5-inch floppy disk. It allows SmartMedia to be read and written on the FDD.
- The FlashPath operates on IBM PC/AT or compatible computers on which a Microsoft Windows 95/98/NT4.0 operating system (OS) must be installed and operating properly. For details, refer to "Computer Operating Environment" on page 2.
- Do not subject the unit to vibrations or shocks while data is being written onto or read from the SmartMedia. Doing so may result in damage to or loss of the internal data.
- Do not remove the FlashPath or SmartMedia or turn off the power while data is being written or erased. Doing so may result in loss of the data or damage to the SmartMedia.
- Do not remove the FlashPath while the FDD is operating. Doing so may result in loss of the data or damage to the SmartMedia.
- Note that the FlashPath does not recognize write protect seals on the SmartMedia. Be careful not to erase or overwrite the data by mistake.
- The data is lost when the SmartMedia is formatted. Check that the SmartMedia contains no important data before formatting it.
- The FlashPath may not function for some makes of FDDs. It will also not function when the FDD is connected with an interface other than the normal interface. For example, the FlashPath cannot be used with external FDDs connected via a PC card, with FDDs connected using USB, or with high storage capacity FDDs (120 MB, etc.).
- To protect the FlashPath and the FDD, remove the FlashPath from the FDD after using it. When transporting the FlashPath or not using it for long periods of time, be sure to remove the SmartMedia and store the FlashPath in its case.

Installing the Driver Software

1 If the computer's power is already on and Windows is already started, proceed to the following step.

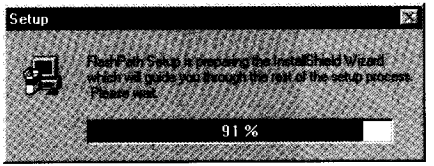
> If any other applications are running, quit them all. The driver software may not be properly installed if other applications are running.

2 Load the included FlashPath setup disk in the FDD.

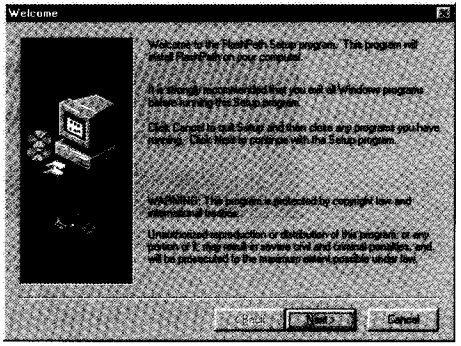
> • If the computer's OS is Windows 95/98, use the setup disk for Windows 95/98.
> • If the computer's OS is Windows NT 4.0, use the setup disk for Windows NT 4.0.

3 Click the Start button and select "Run...", input the file name "A:\Setup", then click the "OK" button.

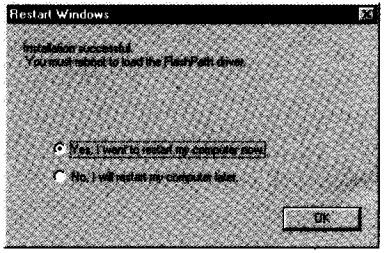
The drive name differs depending on the type of computer you are using.



4 The FlashPath setup window appears. Follow the instructions on the screen to install the driver software.



The following window appears once installation is completed:



5 To use the software, eject the floppy disk and then restart the computer.

The software is not operable until the computer is restarted.
For the latest information, refer to the "Readme.txt" file on the floppy disk.

By factory default, the setup program copies the required files to directory C:\Program Files\FlashPath. The program creates a group called "FlashPath" and puts the following three icons in this group:

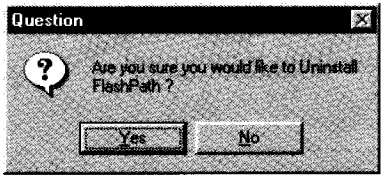
1 (FlashPath Format): Icon for formatting the SmartMedia.

2 (FlashPath Status): Utility icon for monitoring the status of the FlashPath.

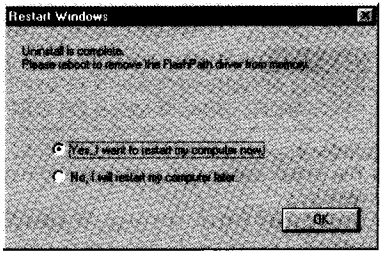
3 (FlashPath Uninstall): Icon for uninstalling the driver software.

Uninstalling the Driver Software

1 Click the Start button, then select "FlashPath" then "FlashPath Uninstall" from "Programs".
The uninstall utility window appears.



2 Click the "Yes" button.
Uninstalling starts. When it is completed, the following window appears:

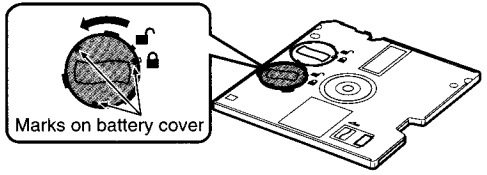


3 Click the "OK" button and restart the computer.

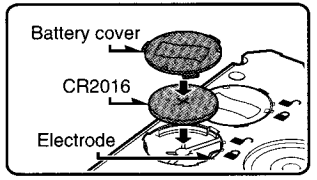
Inserting (removing) the Batteries in the FlashPath

1 Set the FlashPath on a flat surface.

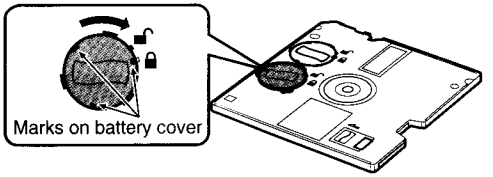
2 Hold down the battery cover and turn it counterclockwise to remove it.



3 Insert (remove) the battery.
Set the battery with the ⊕ side facing upwards and check that the side of the battery is touching the electrode in the cover. Check carefully that the electrode is not underneath the battery.



4 Set the battery cover over the battery, then hold down and turn it clockwise to fasten it in place.



REPLACE BATTERY WITH TOSHIBA OR HITACHI MAXELL TYPE CR2016 ONLY. USE OF A DIFFERENT BATTERY MAY PRESENT A RISK OF FIRE OR EXPLOSION.

WARNING KEEP THIS BATTERY AWAY FROM CHILDREN. IF SWALLOWED, CONSULT A PHYSICIAN IMMEDIATELY FOR EMERGENCY TREATMENT.

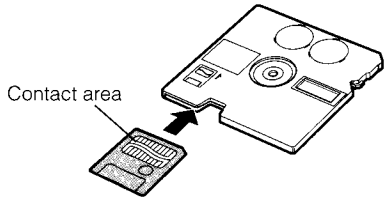
CAUTION BATTERY MAY EXPLODE IF MISUSED OR INSTALLED WITH POLARITY REVERSED. DO NOT RECHARGE, DISASSEMBLE OR DISPOSE OF IN FIRE.

Cautions:

- The lithium battery will not function if installed with the polarity reversed.
- Do not short-circuit, recharge, disassemble, or heat the battery.
- Should the battery leak, wipe the battery compartment clean, and then insert a new battery.

Loading the SmartMedia in the FlashPath

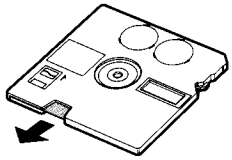
Load the SmartMedia with its contact area facing the opposite side of the FlashPath's metal surface.
Check that the SmartMedia is in the direction indicated on the diagram on the adapter, then insert it fully to the rear.



The SmartMedia will not operate if it is not completely inserted.
The SmartMedia will not operate if it is inserted upside-down.
Use a 3.3V SmartMedia.

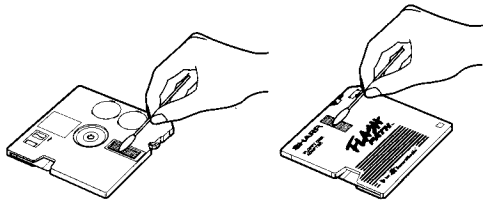
Removing the SmartMedia

Remove the SmartMedia.
Grasp the exposed section of the SmartMedia with your fingers and pull it out.



Loading the FlashPath in the Floppy Disk Drive

1 Carefully wipe any dirt or dust out of the oblong hollow at the top center of the rear side of the FlashPath by using a cotton swab or soft cloth.



2 Load the FlashPath in the FDD.
The FlashPath can now be used in the floppy disk drive.

- The computer will not recognized the FlashPath if it is loaded without the SmartMedia.
- To format the SmartMedia, refer to "Formatting the SmartMedia" on page 10.

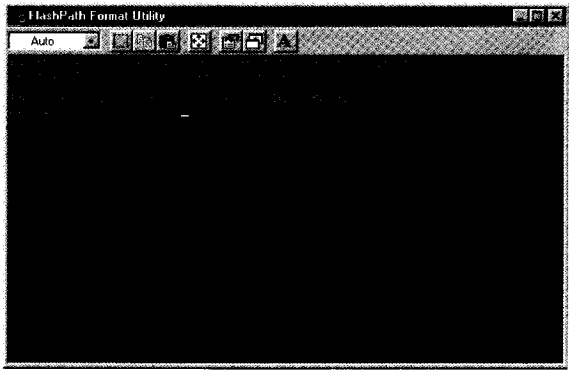
3 Remove the FlashPath.

- After removing the FlashPath from the FDD, carefully wipe any dirt or dust out of the oblong hollow at the top center of the rear side of the FlashPath.
- After cleaning the FlashPath, always remove the SmartMedia and store the FlashPath in its hard case.
- To extend the service life of the batteries, always remove the FlashPath from the FDD except when accessing it.

Formatting the SmartMedia

1 Insert the SmartMedia to be formatted into the FlashPath and load the FlashPath in the FDD.

2 Click the Start button, then select "FlashPath" then "FlashPath Format" from "Programs".
The format utility window appears.



3 Input "y" (Yes), then press the "Enter" key.
Formatting starts. Wait until formatting is completed.

Cautions:

- **Write protection**
  The FlashPath does not recognize write protect seals on the SmartMedia. Be careful not to erase or overwrite the data by mistake.
  Stick the write protect seal in the proper position. Do not reuse write protect seals that have been attached then removed. Doing so may damage the FlashPath.
- **Shutdown**
  The FlashPath is equipped with a shutdown mode to extend the service life of the batteries. The shutdown mode is set if the FlashPath is not accessed for 5 minutes while loaded in the FDD. To cancel the shutdown mode, remove the FlashPath from the FDD then reload it.

Using the FlashPath Status Monitoring Program

The FlashPath status monitoring program (hereafter referred to as monitoring program) is a function for displaying the FlashPath's status.

1 Click the Start button, then select "FlashPath" then "FlashPath Status" from "Programs".
When the monitoring program starts, its icon appears on the task bar.

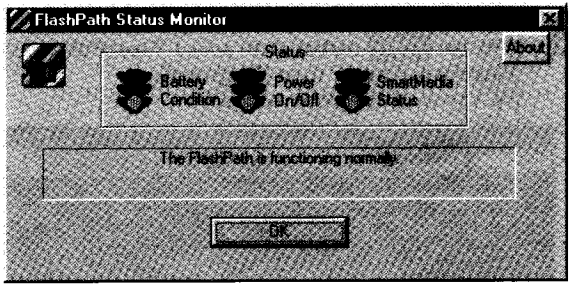
Monitoring program icon

2 Load the FlashPath in the FDD.
The floppy disk drive is accessed to use the monitoring program.

Note:

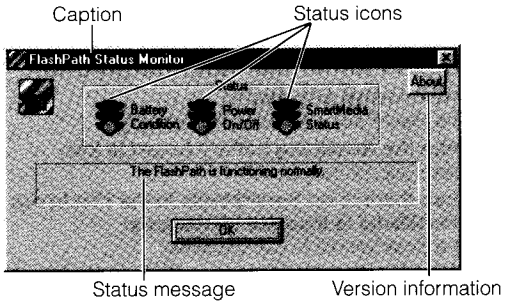
- The FlashPath's status will not be displayed correctly if the monitoring program is started after the FlashPath has been accessed while the icon was not displayed on the task bar (when the monitoring program is not started).

3 Double-click on the monitoring program icon.
The monitoring program's status monitor window appears.

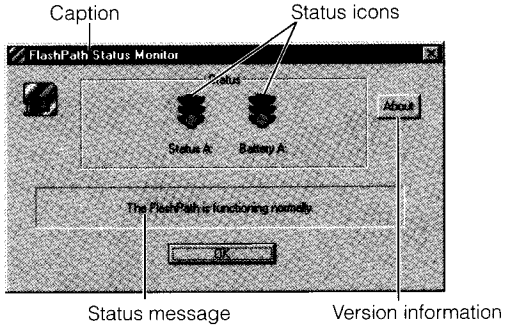


Status Monitor Window

[Windows 95/98 Operating System]



[Windows NT 4.0 Operating System]



Status icons

The status icons indicate the battery status, the FlashPath's power status and the SmartMedia's status.

Battery Condition .... This indicates the degree of remaining power of the batteries.

Green: Batteries OK
Yellow: Batteries low (only reading is possible)
Red: Batteries dead (Replace the batteries.)

Note:
- "Battery A" is displayed instead of "Battery Condition" when using a Windows NT 4.0 operating system.

Power On/Off .... This indicates whether the FlashPath is in the ready or shutdown mode.

Green: FlashPath operable
Red: Shutdown mode

Note:
- Power On/Off indicator is not displayed when using a Windows NT 4.0 operating system.

SmartMedia Status ..... This indicates the SmartMedia's loading status

Green: SmartMedia OK
Red: SmartMedia not loaded properly

Note:
- "Status A" is displayed instead of "SmartMedia Status" when using a Windows NT 4.0 operating system.

Status message display

The status messages are text messages indicating the details of the status.

Version information

This indicates the program's version information.

Caption

Different messages are displayed here, depending on the situation.
Normally: FlashPath status monitor
After a change of status is detected: The FlashPath user must be selected. On the status icons, the signal of the part for which the error is detected changes from green to red.

Description of status messages

Messages appear on the status message display under the conditions described below.

[Windows 95/98 Operating System]

When the FlashPath has not been detected even once:
"No FlashPath has been detected in any drive."

Under normal conditions:
"The FlashPath is functioning normally."

When the remaining battery power is low:
"FlashPath Battery Low."

When there is no SmartMedia in the FlashPath or the SmartMedia is inserted backwards:
"The SmartMedia is inaccessible."

When the FlashPath has switched to the shutdown mode:
"Eject and re-insert the FlashPath."

When the SmartMedia's internal format is not compatible:
"Invalid SmartMedia"

[Windows NT 4.0 Operating System]

When the FlashPath has not been detected even once:
"No FlashPath has been detected in any drive."

Under normal conditions:
"The FlashPath is functioning normally."

When the remaining battery power is low:
"Battery low condition detected."

When there is no SmartMedia in the FlashPath or the SmartMedia is inserted backwards:
"FlashPath error.
Check SmartMedia and retry"

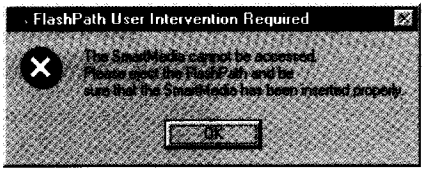
When the FlashPath has switched to the shutdown mode:
"FlashPath has powered off. Eject and re-insert to activate."

Error window

When a FlashPath error is detected, an error window appears immediately.

[Windows 95/98 Operating System]

Error window (example)



When the remaining battery power is low:
"Battery low condition detected. The SmartMedia is now read only."

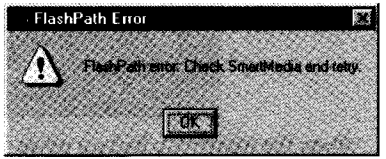
When there is no SmartMedia in the FlashPath or the SmartMedia is inserted backwards:
"The SmartMedia cannot be accessed. Please eject the FlashPath and be sure that the SmartMedia has been inserted properly."

When the FlashPath has switched to the shutdown mode:
"The FlashPath has powered off to save its batteries. Please eject the FlashPath from your floppy drive and re-insert it to turn it back on."

When the SmartMedia's internal format is not compatible:
"The logical filing system on the SmartMedia is unrecognized. This SmartMedia cannot be used with FlashPath."

[Windows NT 4.0 Operating System]

Error window (example)



When the remaining battery power is low:
"Warning: Low Battery on FlashPath has been detected! ALL writes to the SmartMedia will be disabled."

When there is no SmartMedia in the FlashPath or the SmartMedia is inserted backwards:
"FlashPath error.
Check SmartMedia and retry"

When the FlashPath has switched to the shutdown mode:
"FlashPath has powered off. Eject and re-insert to activate."

Troubleshooting

Before calling for service, please check the following troubleshooting table.

Symptom	Possible cause	Suggested solution
The computer does not recognize the FlashPath. "The disk in drive A is not formatted" may be displayed accidentally.	FlashPath is in the shutdown mode.	Eject the FlashPath from the FDD and insert it again.
	The batteries are not loaded or are depleted.	Insert the batteries or replace new ones.
	The batteries are loaded in the wrong direction.	Reinsert the batteries correctly.
	The FlashPath driver has not been installed.	Install the FlashPath driver.
The write protect status is not recognized with your PC even if a write protect seal is attached.	The FlashPath does not recognize the write protect status of the SmartMedia, even when a write protect seal is attached to it.	———
The FlashPath Status Monitor has disappeared from the Windows 95/98 or Windows NT 4.0 task bar.	If, after displaying the FlashPath Status Monitor window, the X (close) button is clicked without clicking the "OK" button, the FlashPath Status Monitor program is closed and the icon disappears from the task bar.	Under Windows 95/98 or Windows NT 4.0, select: Start → Programs → FlashPath → FlashPath Status.
The FlashPath's data writing speed is so much slower than the data reading speed.	Unlike ordinary floppy disks, the FlashPath exchanges data with the SmartMedia while communicating with the driver software and FlashPath hardware. As a result, performance is not the same for data read and write. It takes about twice as long to write data as to read it. This is not a malfunction.	———

Specifications

Product name:	Floppy disk adapter for SmartMedia
Applicable SmartMedia:	2MB, 4MB, 8MB, 16MB, 32MB (3.3 V drive voltage)
Applicable OS:	Windows 95/98 or Windows NT 4.0
Applicable computer:	IBM PC/AT or compatible
Applicable FDD:	FDD with 1.44 MB support
Operating temperature range:	10°C to 40°C (50°F to 104°F)
Storage temperature range:	–20°C to 60°C (–4°F to 140°F)
***Operating humidity range:**	20 to 80%
Power source:	CR2016 lithium battery × 2
Dimensions:	$3^{17}/_{32}$″ (W) × $3^{23}/_{32}$″ (D) × $^{1}/_{8}$″ (H)[90 mm (W) × 94 mm (D) × 3.3 mm (H)]
Weight:	0.08 lb (35 g) (without batteries and SmartMedia)

* Even within above ranges, do not subject the unit to abrupt changes in temperature which may result in condensation.

For improvement purposes, the FlashPath's design and specifications are subject to change without notice.

SERVICE INFORMATION (For the U.S.)

For the location of the nearest Sharp Authorized Service, or to obtain product literature, accessories, supplies or customer assistance, please call 1-800-BE SHARP (1-800-237-4277) or visit SHARP's web site (http://www.sharp-usa.com).

Operational Support
If you have read the operation manual but are still having difficulty using your unit, you can call a SHARP Representative at: 630-378-3590

SHARP®

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