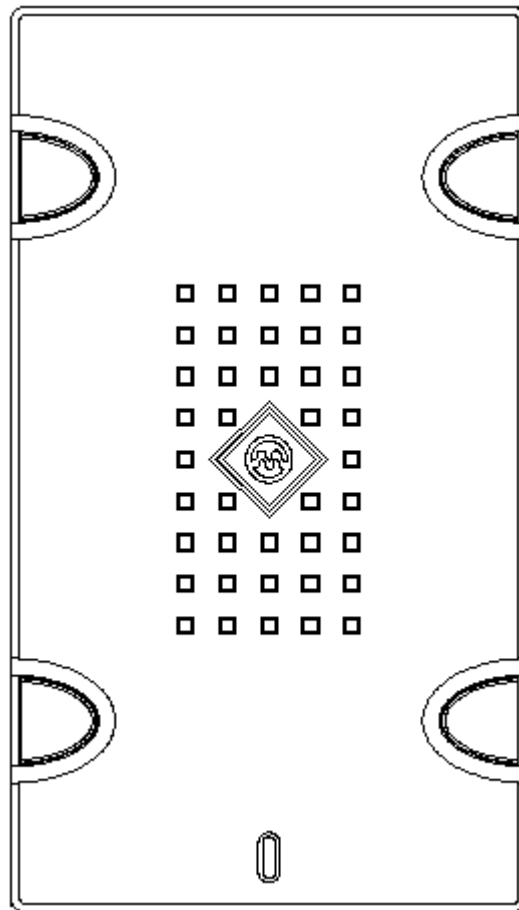


NasDisk

User Manual



Before start...

WARNING

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.

Thank you for purchasing our product. This manual contains how-to of installing and using NasDisk. It explains the pre-requirement and product specification to know before installing NasDisk. Please, be sure to read before installing.

If you have any question, please refer to this user manual. Or if you are not sure of something after reading this manual, please contact us.

Maverick System, Technical Support Team

Room 511 Seocho World Officetel 1355-3 Seocho-dong Seocho-gu Seoul, South Korea

Tel : 02-6283-7425 Fax : 02-6283-7421 E-mail : admin@mavericksys.co.kr

This manual is subject to modification for correcting spelling or for improvement of our products.

Copyright 2003 Maverick System Co., LTD, All right reserved.

No part of this publication may be reproduced, stored, in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of Maverck Co., LTD.

[Jan. 2003]

Warranty

Important : Read carefully

This Maverick System Co., LTD End User License Agreement ("EULA") is a legal agreement between you (either an individual or a single entity) and Maverick System Co., LTD for the Maverick hardware & software product identified above, which includes computer software and associated media and printed materials, and may include "online" or electronic documentation ("HARDWARE PRODUCT" or "SOFTWARE"). By installing, copying, or otherwise using NasDisk™, you agree to be bound by the terms of this EULA.

NasDisk™ is protected by copyright laws and international copyright treaties, as well as other intellectual property laws and treaties. The SOFTWARE PRODUCT is licensed, not sold.

1. GRANT OF PRODUCT LICENSE.

The NasDisk™ PRODUCT is granted for use as follows.

- Installation and Use

In consideration of the obligations entered into by You under this Agreement, Maverick System Co., LTD hereby grants You a non-exclusive, non-transferable license ("License") to use this hardware product and related written materials in either printed text or machine readable form ("Documentation") in accordance with the terms and conditions this Agreement.

2. DESCRIPTION OF OTHER RIGHTS AND LIMITATIONS

- License manifestation and preservation of it

Do not ever take off logo, trade mark or license manifestation from the NasDisk product

- Limitations on Reverse Engineering, De-compilation, and Disassembly.

The LICENSEE may not reverse engineer, de-compile, or disassemble the SOFTWARE PRODUCT except for the case that a relevant laws and regulations demand LICENSEE.

- Assignment

The LICENSEE may not assign, sub-license or re-sell all or any of the rights granted under this EULA, except as specified by extra agreement with Maverick System Co.,LTD.

- Transfer

The LICENSEE may transfer all of any of the rights granted under this EULA permanently on condition that a transferee agree to all the details in this document.

- Applicable Law

You, who purchase and use the product, must observe the applicable law of hardware and software applicable in relation to Nasdisk product use.

- Exemption from Liability : User

Your duty as specified on this agreement may be nullified by getting rid of the product and documents enclosed with the product. In case that you do not observe the agreement, the action is equal in meaning to the fact that you agree to the destruction of the product and any relevant document.

- Exemption from Liability : Maverick System Co.,LTD.

Maverick System Co.,LTD is not responsible for any liability or engagement claimed to be imposed upon Maverick System Co., LTD by any disinterested third party or person other than Maverick System Co.,LTD in written or spoken form.

Maverick System Co.,LTD is not responsible for the result from operating the product and for the damage resultant from not making use of the product.

- Acknowledgement

You acknowledge that you understand and agree to all the conditions specified on the agreement by installing and using the product. This agreement precedes any other engagement or stipulation made between you and Maverick System Co.,LTD.

- Other

If you are not sure or want to get in touch with us concerning this EULA, please contact Maverick System Co., LTD (02-6283-7425)

Caution

Be sure to observe following cautions since they are related with the way you may be safe from any possible damage or danger caused during the use of the product.

If any of the following cautions is neglected, user's data may be lost or equipment damaged.

And since you may possibly go through accident, you should be aware of the fact that using the product may do harm to you. So, you need to be aware of basic knowledge.

Warning : When violated, it is possible that you may be injured or die of electrical shock

Caution : When violated, it is possible that you may be lightly hurt or the product may break.

Warning

1. Do not ever use multiple devices on single plug for there is possibility of electric shock or fire
2. Do not ever use broken electric cord or plug for there is possibility of fire
3. Do not ever touch with wet hand for there is possibility of electrical shock, or fire
4. Do not wear accessories such as necklace or watch. Once they graze the power or an earth you may be electrically shocked or part may be burnt.
5. Please use only normal and standardized cable when connecting the product for defected cable may do harm to internal circuit or may be the cause of electrical shock or fire.
6. Do not open, mend, or modify the body for yourself for there is possibility of electrical shock.
7. Do not leave the product where direct ray of light glows or heater is on, for there is possibility of fire.
8. Do not place the product in wet, windy or humid space. Such condition is the cause of electrical shock, fire, or malfunction of the product.
9. Keep the product off children. If a child pulls the product, it may fall and hit his or her body, with the product crashed.
10. Do not put the vessel containing water, juice or coffee on the product. If they ooze into the machine, there is possibility of fire or electrical shock.
11. When the product does not need to operate for long time, please, keep the plug pulled out. The product may overheat or covering of power line may be melt down, causing fire.
12. In case of smoke or dust, please pull out the plug and contact our customer support team. If you continue to use it, it may cause fire or electrical shock.

Caution

1. The edge of product wrapping material is sharp, so be careful in dealing with it. It may cut your finger.
2. Please keep the wrapping material off children so that they may not swallow or be hurt.
3. When installing the product, keep it ventilated well. Secure certain space (more than 10cm) around the product. Internal space of the product may easily heat up.
4. Pull out the power plug before cleaning the product. And never pour water on or polish the product with thinner or alcohol because it often becomes the cause for malfunction or electric shock.
5. When moving the product, you need to turn off the power first. If it falls down, you may be hurt or the product may malfunction.
6. Place the product on the even space and never put the product on the trembling or slanting place such as shelf. If it falls down, you may be hurt or the product may malfunction.
7. Do not let the ventilating hole covered because it will heat up the internal temperature of the machine, possibly causing fire.
8. When installing HDD, please turn off the power line and be fully aware of the procedure in advance. And make sure that the HDD to be installed is proper to NasDisk. If this caution is neglected, it will cause the product to be malfunctioning or damaged.
9. To prevent static electricity caused when disassembling the product, earth the product by handling on the static-electricity-proof belt or metallic area. Static electricity may do harm to the product.
10. Make sure that the power for the product is stable. Unstable supply of power is to shorten the lifespan of the product or damage the internal circuit.
11. When pulling out the power plug, please hold it on the body of power plug, not the power line, because the power line may be cut and cause fire.

Chapter 1

Introducing NasDisk

Things to be aware before making use of NasDisk .

Introducing basic function, specification and make-up of the product

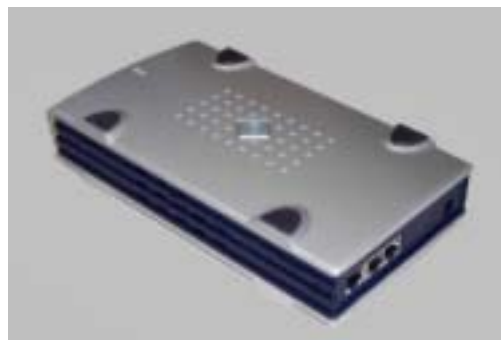
1. Introducing NasDisk

NasDisk is the product characterized as NAS(Network Attach Storage) that is affordable and easy-to-use for enterprise.

NasDisk can easily be connected to the Internet through **broadband connection function** such as ADSL or Cable Modem without getting assisted by network engineer and such easy-to-use features may be popular with small-scale office or home that is not networked. The service has built-in **File Server** and **Internet (Web) Storage** function inclusive of **IP sharing** and **Mail Server** through which NasDisk, a personal multi-purposes storage product, may be conveniently used anywhere and anytime you want to be connected.

File Server + Internet (Web) Storage + IP Share Router + Mail Server + External HDD

= NasDisk



Exterior of NasDisk

- No more expensive and massive storage.
- Personal storage with affordable price and optimized performance
- Create your own internet world with NasDisk

1. Introducing NasDisk

1) Feature of NasDisk

A. File Server

File server may easily be set up through the NetBEUI communication functionality built in NasDisk.. NasDisk provides you with the simple way of setting up the network equal in capacity and environment to existing File Server, which does not include the burdening labor of complicated server configuration or using extra software.

B. Mail Server

You can run your personal mail server through the built-in Mail Server function in NasDisk. Even under the environment without network, personal user may easily configure the mail server based on ADSL or CABLE connection.

And all the features such as Dynamic DNS-related functionalities necessary for dynamic IP-based environment are provided for nothing.

(Visit www.nasdisk.com and register for a member to enable “user ID.nasdisk.com” to work as your mail server.

C . Internet Storage

You can move, save and copy even large chunks of files freely through FTP Server and Web File Manager built in NasDisk

You can generate users and groups, including the capability of authentication on them and share those files designated by you.(Web File Manager)

Free Dynamic DNS function can enable you to have your own storage anywhere if you are connected to the Internet even in dynamic IP environment.

D. IP Sharing

Using two PC at the same time with Internet connection is possible through the built-in IP sharing technology of NasDisk and in case that extra hub is used, as many as 253 personal computers may be connected to the internet.

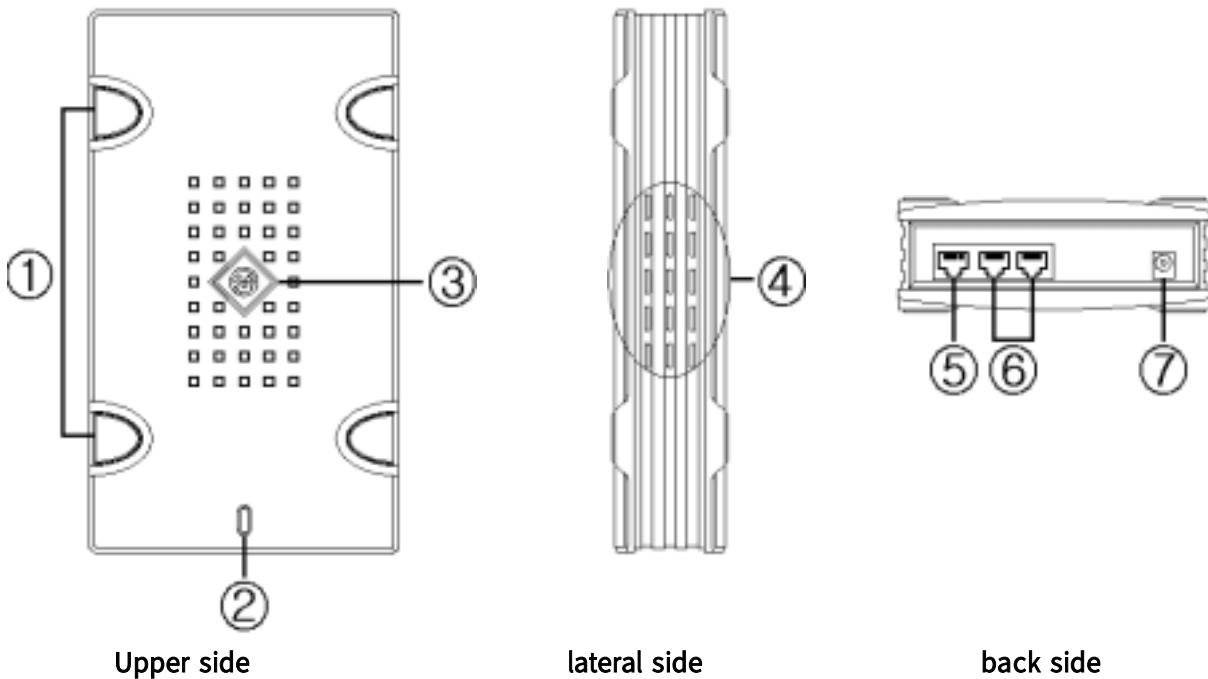
With IP sharing applied, maximum 15Mbps Internet connection speed is guaranteed and VDSL including Metro-based high-speed connection is compatible with BasDisk.

And even under the IP sharing environment, MSN Messenger file transmission is enabled and existing problem known as “Identical room connection in Battlenet” has been solved.

(And any possible problem in the future will be patched the instance it is reported)

1. Introducing NasDisk

2) The term of NasDisk's each part



- ① Slide-proof rubber pad
- ② NasDisk behavior LED

LED	Behavior	Explanation
Green	Operating (normal working)	Signifying that NasDisk Booting is complete and working
Red	Booting (preparation in progress)	Signifying that NasDisk is in booting procedure before normal operating mode
Green + Red	In use (Storage device working)	Signifying that a user is connected to NasDisk and it is in use

- ③ Emblem of NasDisk manufacturer
- ④ Ventilating opening for getting heat discharged out of internal HDD (prescribed space should be secured when setting the device)
- ⑤ 10/100Mbps Ethernet WAN port(RJ-45) for the Internet connection
- ⑥ 10/100Mbps Ethernet Switching LAN port (RJ-45) for internal networking

LED	Behavior	Explanation
Yellow	In transition / In removal / Conflicting	Connected while in transition (on) / Connected while in removal(off) / Conflicting(flickering)
Green	Connecting / Operating / Speed	Connected (on) / operating (flickering) / Operating in 10M (120ms), Operating in 100M (43ms)

- ⑦ Direct current port for connecting electrical adaptor

1. Introducing NasDisk

3) NasDisk specification

CPU	32bit RISC Type Processor (CPU Clock 100MHz, Bus Clock 50MHz)
FLASH	4MB Flash
MEMORY	16MB SDRAM
HARD DISK	40 ~ 120GB(7200RPM) EIDE Type Hard Disk Drive
INTERFACE	10/100Base-TX Ethernet 3 Ports (WAN : 1Port, LAN : 2Ports)
PROTOCOL	NetBEUI,TCP/IP,DHCP,NAT, WEB(HTTP),FTP,TELNET,SMTP,POP3
SUPPOTED CLIENT	Windows 9X, Windows NT, Windows 2000, etc
POWER	INPUT : 110 ~ 220VAC 50/60Hz, OUTPUT : 12VDC,3.5A
DIMENSION	218mm(L) X 124mm(W) X 46mm(H)
WEIGHT	1Kg (HDD included)

1.Introducing NasDisk

4) NasDisk software specification

Network Transport Protocol	TCP/IP, NetBEUI, SMTP, POP3
Network File Protocol	Microsoft Networks (CIFS/SMB) File Transport Protocol (FTP) Internet (HTTP)
Network Connection	xDSL(PPPoE), Cable(HFC),Dynamic/Static IP (xDSL, Cable : External Modem Only)
NAT Based Internet Sharing	DHCP Server, Port Forwarding, DMZ Host Special Application (MSN Messenger, Stacraft Battlenet, etc) and DDNS Support
Security/Permission	User/Share/File Level Security/Permission, Change Password
Access Control	URL/IP Based Filtering (For Incoming/Outgoing Data)
Mail Server	E - mail Server Feature Included (SMTP/POP3)
File Server	SMB, FTP Server Feature Included
Web Storage Server	Web Based User/Group/File Management
Device Configuration	Web Based Configuration, Installer Software
Device Management	User/Configuration/Disk Space Quota Monitoring Event Log, E - mail Notification, Web Based Administration
Client Support	Windows 9x/NT/2000/XP, Mac, Linux, Unix (HTTP, FTP, NetBEUI)

1. Introducing NasDisk

5) NasDisk make-up

NasDisk contains the following items

1. NasDisk body
2. Power adaptor
3. Adaptor
4. CAT.5 UTP CABLE (2M, 568B Type)
5. INSTALL CD ROM
6. User manual

In case the included items inside the product are different from the detail above, please get in contact with vendor or our company.

(주) Maverick System 511 Seocho World Officetel 1355-3 Seochodong Seochogu Seoul, South Korea

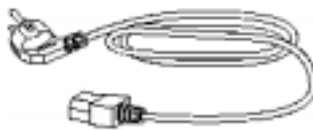
Tel : 02-6283-7425 Fax : 02-6283-7421 E-mail : admin@mavericksys.co.kr



NasDisk body



UTP Cable



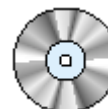
Power cable



adaptor



User manual



INSTALL CD ROM

Chapter 2

Installing NasDisk

This chapter explains how to connect
NasDisk to the network and
to install each element.
And basic method of operating
the product will be explained

You can easily set up the product if you follow the user manual.
If you find yourself challenged to the network setup, please
Read the FAQ section of network configuration first and
Go on with the installation.

2. Installing NasDisk

1) Things to know before installation

Please confirm the following particulars before installing NasDisk

Confirm the Internet connection method you have

- ① ADSL connection
- ② Cable connection
- ③ Static IP with Local Area Network connection
- ④ Dynamic IP with Local Area Network connection(DHCP).

① If you are connected through ADSL, you should be using external ADSL modem for installing NasDisk.(Internal or USB modem is not compatible with NasDisk. You should replace the internal modem with external one)

② If you are connected using CABLE modem, please confirm the Mac Address value in your NIC(Network Interface Card). And some Internet service providers tend to limit the Mac Address.

③ If your network environment is LAN that uses static IP assignment, please memorize the network configuration value and refer to the FAQ section on the backside of this manual for setting the IP-related values automatically assigned.

④ If your LAN environment is based on DHCP(Dynamic Host Configuration Protocol), there are no extra preparation for you.

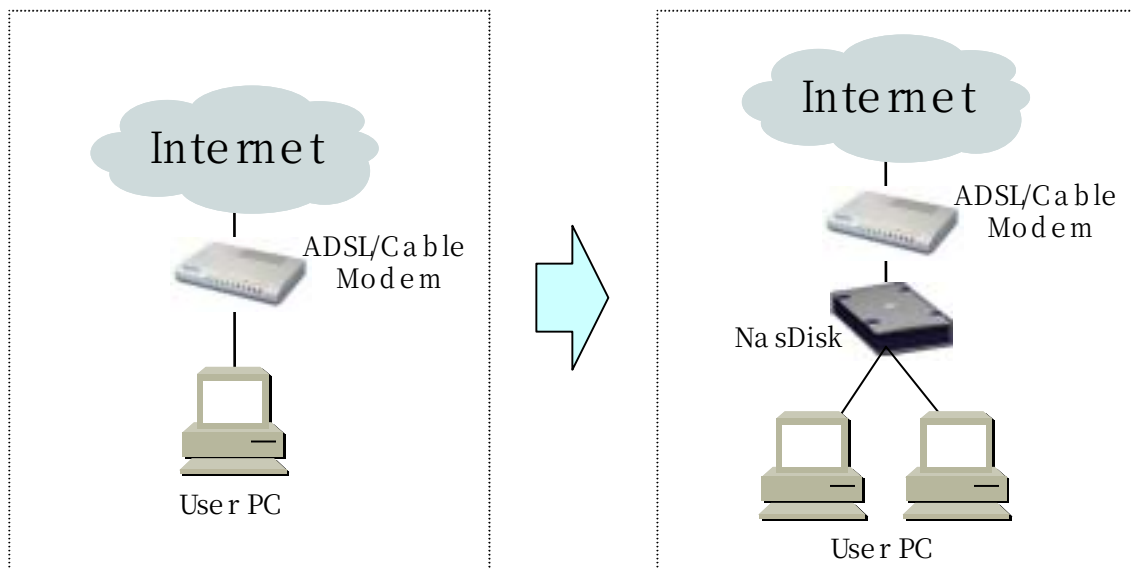
And in case that you are not sure what sort of Internet connection you have or that you have different Internet connection service from what is explained above, please consult the service provider to confirm the detail.

2. Installing NasDisk

2) NasDisk configuration

a) NasDisk configuration for ADSL or CABLE

You should confirm the kind of installation procedure you need to follow according to the way you are connected to the Internet.



NasDisk installation diagram for ADSL and CABLE modem user

The illustration is the example of installing NasDisk when you're using ADSL or CABLE modem. Before installing NasDisk, you can see that ADSL or CABLE modem is directly connected to the PC, but if you want to install NasDisk, it must lie between PC and ADSL or CABLE modem.

This connection method is identical to that of IP router through ADSL and CABLE modem. In case that a user is using IP router for sharing the Internet connection, you can connect the UTP cable to the LAN slot in IP router and configure the router software for setting Virtual Server or Port Forward.

(Set 80 for Web File Manager console, 21 for FTP Server function and 25 for Mail Server)

Although you are connected to the Internet through ADSL or CABLE modem, internal modem cannot be used together with NasDisk. That is, those xDSL modems in the form of PCI card or USB and Serial-based modem cannot be connected to NasDisk

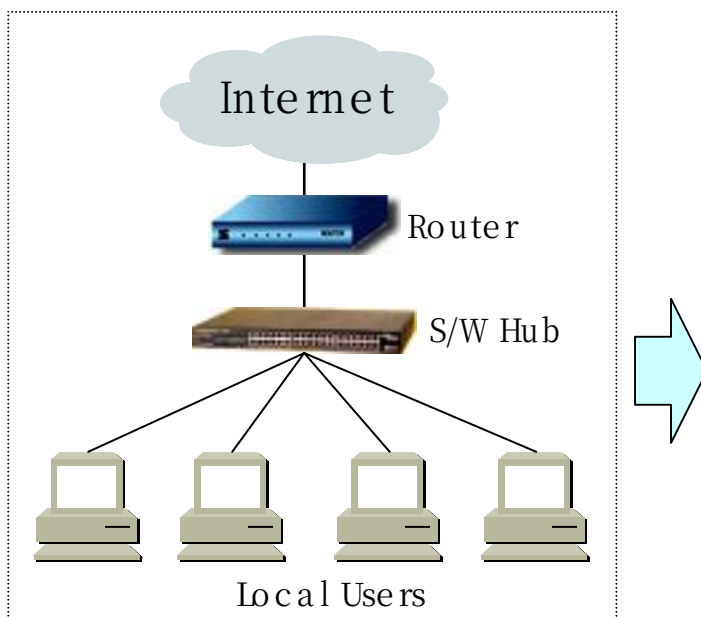
In this case, you should consult your service provider to change the internal modem with external one for installing NasDisk.

2.Installing NasDisk

2) NasDisk configuration

b) Configuration of NasDisk on existing network environment

Installing how-to for the environment where LAN is already set up for the Internet instead of ADSL or CABLE modem.



NasDisk connection on existing LAN configuration.

The figure above illustrates an example of connecting NasDisk to existing network in enterprise or governmental office in which if any extra IP is currently available, you don't have to use sharing router for connecting NasDisk. Instead, you can simply install Nasdisk onto the extra IP. If there is no more IP available, your PC should be connected through NasDisk.

That is all the installation procedure of NasDisk for the case where there exists LAN configuration.

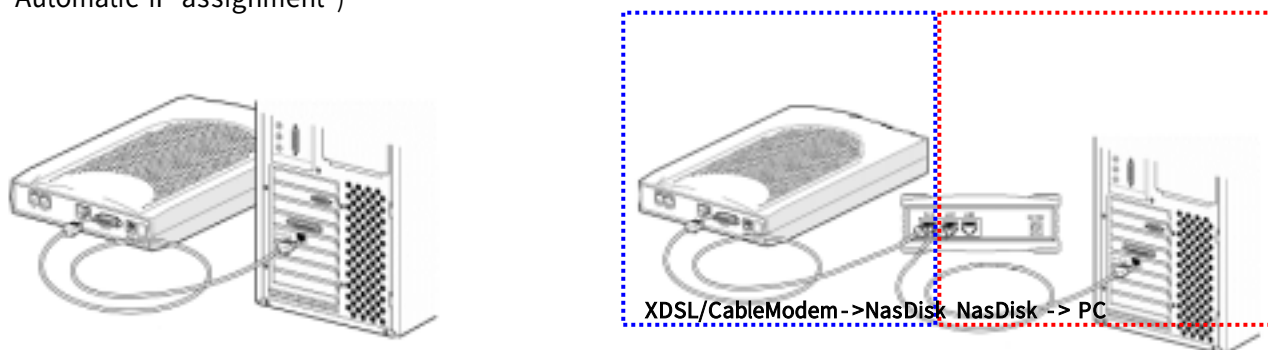
If you already has made sure what kind of network configuration and you use, please refer to the 3) Installing NasDisk for installing NasDisk

2. Installing NasDisk

3) Installing NasDisk

ADSL

Connect the LAN Port in PC to LAN1 or LAN2 of NasDisk using the enclosed UTP cable in the product and connect the UTP cable that had been connected ADSL or CABLE modem, to WAN of NasDisk.
(Connect ADSL or CABLE modem to WAN Port in NasDisk, and user's PC to LAN Port of NasDisk)
And reboot the system after making sure that the connection is rightly done and that the network configuration of PC is "automatic IP assignment" in TCP/IP panel in Windows (Refer to the FAQ for "Automatic IP assignment")



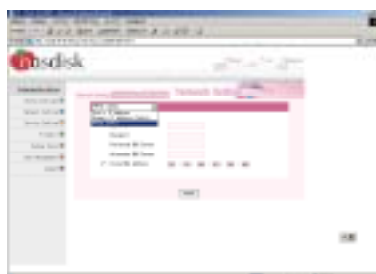
Connection between PC and xDSL/Cable

Connection when installing NasDisk

Launch your web browser after your PC is normally booted (Microsoft Explorer only)

After inserting [Http://192.168.1.1](http://192.168.1.1) in the address box, log into the page as follows.

(Initial value of the first log-in ID : root, Password : pass)



NasDisk Internet setting



NasDisk LAN setting

In the main page, if you click on the **network setup** of left menu, you can see Internet Setting, LAN setting and DNS tab.

Configure the setting as following direction to connect NasDisk to network

- ① Choose **Network setup** on the main page.
- ② Click on the **combo button** ▼ and connection method will pop up.
- ③ Choose **PPPoE (xDSL.)**
- ④ Insert your ID and Password for ADSL connection and fill in value for the DNS Server setting
(You may not have to change Clone MAC item except for necessary case)
- ⑤ Press "apply" button then your system will need to reboot. Press "yes" and restart your

system.

- ⑥ Connect to <http://192.168.1.1> when LED changes from red to green.
(In case of connection failure, please refer to FAQ and confirm that your PC is automatically assigned with IP)
- ⑦ Select “**log and status view**” in the main page after login.
- ⑧ Confirm the IP Address item in **WAN CONNECTION** by selecting ‘**VIEW NETWORK STATUS**’ on the right side.(In case of 0.0.0.0, press the refresh button)
- ⑨ Make sure that NasDisk is working properly by confirming the IP on Internet connection information
(Insert the IP Address right after “http://”)



VIEW NETWORK STATUS'

That is all for setting up NasDisk.

For detail, please refer to the “**NasDisk special function manual**” enclosed inside the CD

Warning: For security sake, make sure you changed the initial value of password. If you neglect this warning, important data or set-up value will possibly be lost, and our company will not be responsible for any loss inflicted.

2. Installing NasDisk

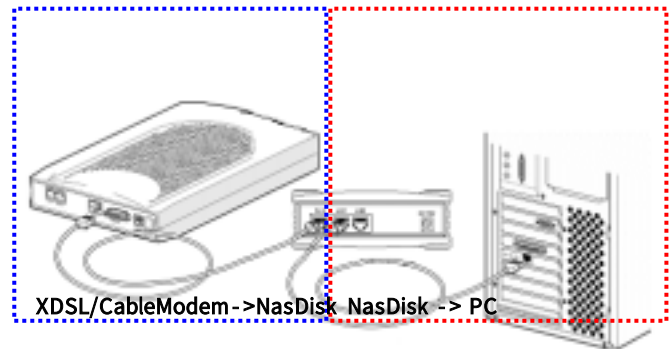
3) Installing NasDisk

b) Cable(dynamic IP)

Connect the LAN Port in PC to LAN1 or LAN2 of NasDisk using the enclosed UTP cable in the product and connect the UTP cable that had been connected ADSL or CABLE modem, to WAN of NasDisk.
(Connect ADSL or CABLE modem to WAN Port in NasDisk, and user's PC to LAN Port of NasDisk)
And reboot the system after making sure that the connection is rightly done and that the network configuration of PC is "automatic IP assignment" in TCP/IP panel in Windows (Refer to the FAQ for "Automatic IP assignment")

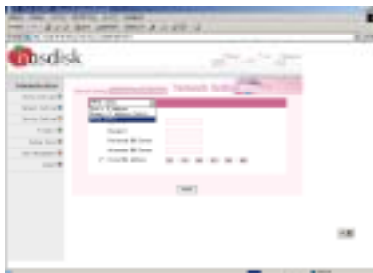


Connection between PC and xDSL/Cable



Connection when installing NasDisk

Launch your web browser after your PC is normally booted (Microsoft Explorer only)
After inserting [Http://192.168.1.1](http://192.168.1.1) in the address box, log into the page as follows.
(Initial value of the first log-in ID : root, Password : pass)



NasDisk Internet setting



NasDisk LAN setting

In the main page, if you click on the **network setup** of left menu, you can see Internet Setting, LAN setting and DNS tab.

Configure the setting as following direction to connect NasDisk to network

- ① Choose **Network setup** on the main page.
- ② Click on the **combo button**  and connection method will pop up.
- ③ Choose **Dynamic IP Address (Cable)**.
- ④ Insert **MAC Address** into **Clone MAC Address**
(Use MAC Address only when the Internet is not working through NasDisk)
- ⑤ Press "apply" button then your system will need to reboot. Press "yes" and restart your system.

- ⑥ Connect to <http://192.168.1.1> when LED changes from red to green.
(In case of connection failure, please refer to FAQ and confirm that your PC is automatically assigned with IP)
- ⑦ Select “**log and status view**” in the main page after login.
- ⑧ Confirm the IP Address item in **WAN CONNECTION** by selecting ‘**VIEW NETWORK STATUS**’ on the right side.(In case of 0.0.0.0, press the refresh button)
- ⑨ Make sure that NasDisk is working properly by confirming the IP on Internet connection information (Insert the IP Address right after “http://”)



VIEW NETWORK STATUS'

That is all for setting up NasDisk.

For detail, please refer to the “**NasDisk special function manual**” enclosed inside the CD

Warning: For security sake, make sure you changed the initial value of password.
If you neglect this warning, important data or set-up value will possibly be lost, and our company will not be responsible for any loss inflicted.

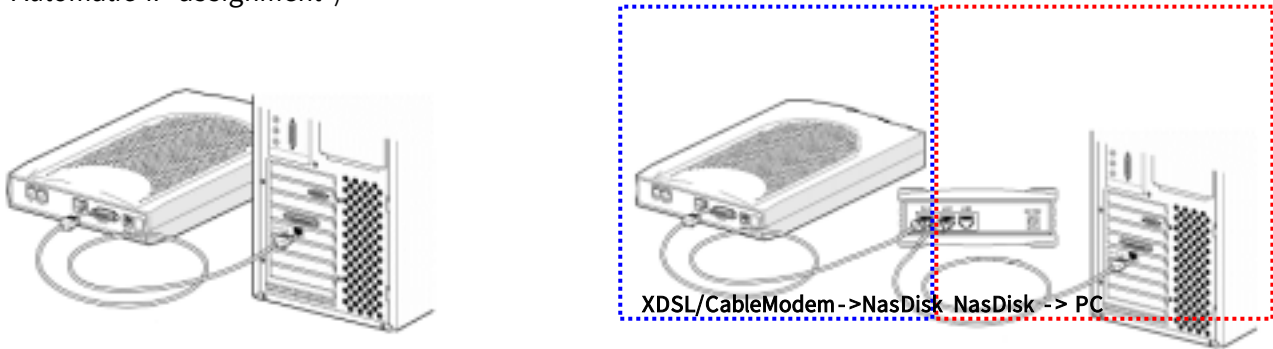
2. Installing NasDisk

3) Installing NasDisk

c) Installing xDSL and Cable(static IP)

Connect the LAN Port in PC to LAN1 or LAN2 of NasDisk using the enclosed UTP cable in the product and connect the UTP cable that had been connected ADSL or CABLE modem, to WAN of NasDisk.
(Connect ADSL or CABLE modem to WAN Port in NasDisk, and user's PC to LAN Port of NasDisk)

And reboot the system after making sure that the connection is rightly done and that the network configuration of PC is “automatic IP assignment” in TCP/IP panel in Windows (Refer to the FAQ for “Automatic IP assignment”)



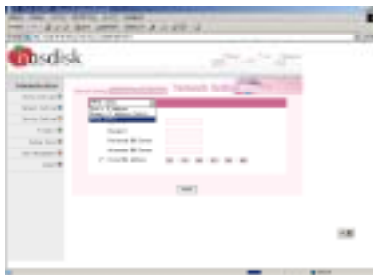
Connection between PC and xDSL/Cable

Connection when installing NasDisk

Launch your web browser after your PC is normally booted (Microsoft Explorer only)

After inserting [Http://192.168.1.1](http://192.168.1.1) in the address box, log into the page as follows.

(Initial value of the first log-in ID : root, Password : pass)



NasDisk Internet setting



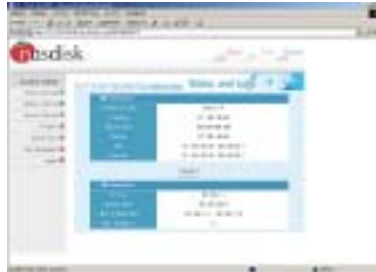
NasDisk LAN setting

In the main page, if you click on the **network setup** of left menu, you can see Internet Setting, LAN setting and DNS tab.

Configure the setting as following direction to connect NasDisk to network

- ① Choose **Network setup** on the main page.
- ② Click on the **combo button**  and connection method will pop up.
- ③ Choose **Static IP Address**
- ④ Insert IP address, subnet mask, gateway and DNS address
- ⑤ Press “apply” button then your system will need to reboot. Press “yes” and restart your system..
- ⑥ Connect to <http://192.168.1.1> when LED changes from red to green.
(In case of connection failure, please refer to FAQ and confirm that your PC is automatically assigned with IP)
- ⑦ Select “**log and status view**” in the main page after login.

- ⑧ Confirm the IP Address item in **WAN CONNECTION** by selecting '**VIEW NETWORK STATUS**' on the right side
- ⑩ Make sure that NasDisk is working properly by confirming the IP on Internet connection information
(Insert the IP Address right after "http://")



네트워크 상태보기 화면

That is all for setting up NasDisk.

For detail, please refer to the "**NasDisk special function manual**" enclosed inside the CD

Warning: For security sake, make sure you changed the initial value of password. If you neglect this warning, important data or set-up value will possibly be lost, and our company will not be responsible for any loss inflicted.

2. Installing NasDisk

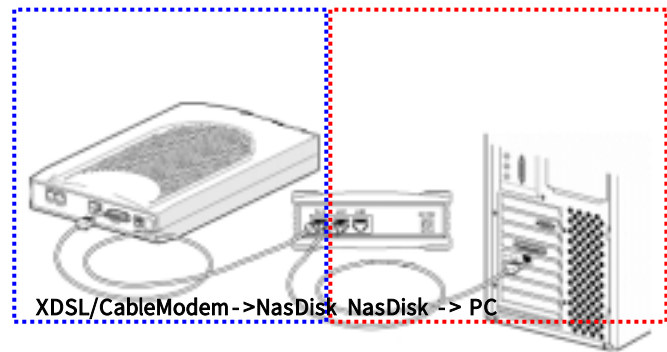
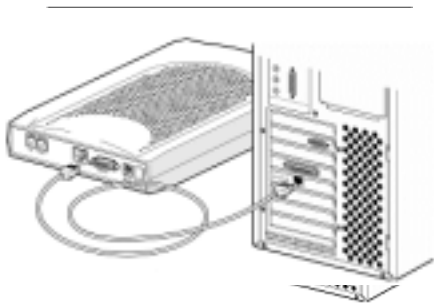
3) Installing NasDisk

d) LAN with static IP

(1) In case that there is no extra IP

Connect the LAN Port in PC to LAN1 or LAN2 of NasDisk using the enclosed UTP cable in the product and connect the UTP cable that had been connected ADSL or CABLE modem, to WAN of NasDisk.
(Connect ADSL or CABLE modem to WAN Port in NasDisk, and user's PC to LAN Port of NasDisk)

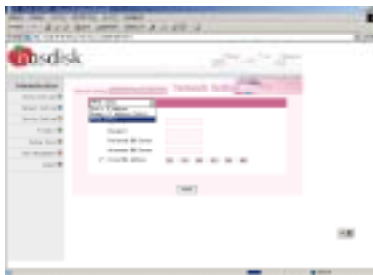
And reboot the system after making sure that the connection is rightly done and that the network configuration of PC is “automatic IP assignment” in TCP/IP panel in Windows (Refer to the FAQ for “Automatic IP assignment”)



Connection between PC and internal network

Connection when installing NasDisk

Launch your web browser after your PC is normally booted (Microsoft Explorer only)
After inserting [Http://192.168.1.1](http://192.168.1.1) in the address box, log into the page as follows.
(Initial value of the first log-in ID : root, Password : pass)



NasDisk Internet setting



NasDisk LAN setting

In the main page, if you click on the **network setup** of left menu, you can see Internet Setting, LAN setting and DNS tab.

Configure the setting as following direction to connect NasDisk to network

- ① Choose **Network setup** on the main page.
- ② Click on the **combo button** and connection method will pop up.
- ③ Choose **Static IP Address**.
- ④ Insert IP address, subnet mask, gateway, and DNS address.
- ⑤ Press “apply” button then your system will need to reboot. Press “yes” and restart your system.
- ⑥ Connect to <http://192.168.1.1> when LED changes from red to green. (In case of connection failure, please refer to FAQ and confirm that your PC is automatically assigned with IP)

- ⑦ Select “**log and status view**” in the main page after login.
- ⑧ Confirm the IP Address item in **WAN CONNECTION** by selecting ‘**VIEW NETWORK STATUS**’ on the right side.
- ⑪ Make sure that NasDisk is working properly by confirming the IP on Internet connection information

(Insert the IP Address right after “http://”)



VIEW NETWORK STATUS'

That is all for setting up NasDisk.

For detail, please refer to the “**NasDisk special function manual**” enclosed inside the CD

Warning: For security sake, make sure you changed the initial value of password. If you neglect this warning, important data or set-up value will possibly be lost and our company will not be responsible for any loss inflicted.

2. Installing NasDisk

3) Installing NasDisk

d) LAN with static IP

(2) In case that there is extra IP

Connect the internal network cable with WAN of NasDisk

.If you have difficulty with getting extra cable and with additional installation of cable, please follow the

procedure for (1) No more extra IP.

When connection begins, copy **NasDisk Installer** into your PC. In this moment, your PC and NasDisk should be in the same Hub or Collision Domain.

Connecting PC to internal network

Internal Network Connection when installing NasDisk

NasDisk Installer is in the CD contained in the product.

NasDisk Installer is supposed to provide user with two functionalities.

- ① Searching NasDisk and setting network configuration without modifying user's PC
- ② Installing NasDisk internal application when replacing HDD of NasDisk.

Installing NasDisk using the method ① is explained here.

For detail, please refer to the “**NasDisk special function manual**” enclosed inside the CD

Installation procedure is as follows.

- ① Insert the NasDisk CD.
- ② Setup program will automatically run. If the installer doesn't start automatically, click on the 'Setup.exe'
- ③ Installation Wizard will guide you through the steps.
- ④ When the installation is complete, NasDisk group will be created on the 'Start menu. Then you will see 'NasDisk Installer.exe' and 'Uninstall NasDisk Installer'
- ⑤ Run NasDisk INSTALLER.EXE.



⑥ **NasDisk INSTALLER**



Password panel



Properties - TCP/IP

- ⑦ Select the NasDisk information as illustrated above and click on the left button of mouse will let the password panel appear. Insert a correct password and execute "properties"(You should insert the initial password).

- ⑧ Click on the TCP/IP tab and insert IP address, subnet mask, gateway and DNS address.
- ⑨ Press "Yes" and your system will reboot.
- ⑩ When LED lights up green, type http:// and the chosen IP.

NasDisk login page



- ⑪ If you see the page above, configuration is complete.

NasDisk installation is complete.

For detail, please refer to the “NasDisk special function manual” enclosed inside the CD

Warning: For security sake, make sure you changed the initial value of password. If you neglect this warning, important data or set-up value will possibly be lost, and our company will not be responsible for any loss inflicted.

2. Installing NasDisk

4) NasDisk User Set-up

a) Creating user

When NasDisk network configuration is complete, user account must be created. NasDisk has two kinds of accounts.

- ① NasDisk administrator account for network and service set-up
- ② NasDisk user account for using NasDisk

NasDisk administrator account enables you to set overall value for network configuration, service and users, but you cannot user general service from NasDisk with this administor account to which there

can be no addition of new account. And you may change the default password for this account.

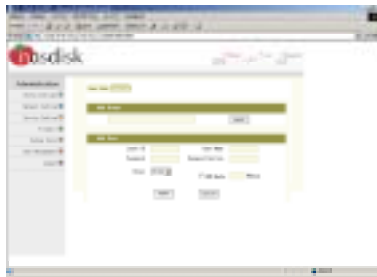
NasDisk user account is only related with the use of NasDisk service, not with administration functionality.

Administrator may freely delete, modify and set the files in NasDisk, and in case of creating sharing folder, administrator can change the permission on users and groups.

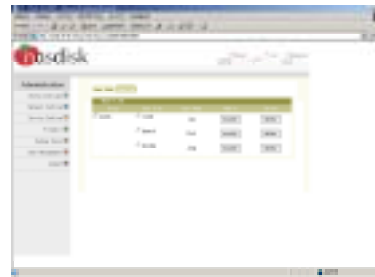
(Setting sharing folder is only enabled in user account, and sharing folder cannot be used when connecting to FTP.)

Please register to NasDisk, following the steps below.

- ① Open your web browser and connect to NasDisk
- ② Choose user setting menu in main page.



Registration page



Users list page

- ③ When user setting page loads, **user registration** tab and **user list** tab will show.
Choose user registration tab and user registration page will load. For creating user, a group should exist.
- ④ Type the group name. You can use both Korean and English for group name.
(\ / : * ? " < > | must not be used)
- ⑤ After typing the group name, press registration button, then a group will be added to the list.
- ⑥ After creating group, type in the user registration form the ID, password and quota for the group
- ⑦ User ID does not support Korean, so you should type only in English.
(\ / : * ? " < > | must not be used.)
- ⑧ ID and password must be set with different character so as not to be used by stealth.
(There is no limitation in symbol to be typed in password.)
- ⑨ You can choose group using combo button ▼.
- ⑩ 'Quota assignment' is used for determining the capacity of storage per user. Choose the quota assignment check-box '☐' and type in the capacity in MByte unit.
(Quota assignment function may work only when the 'quota assignment' is set.)
- ⑪ If you have filled in every required form, press the registration button, then, 'complete' message panel will pop up. Press 'confirm' and close the panel.
- ⑫ For deleting or modifying the registered user or user group, click on the user list tab.

That's all about 'user registration procedure'.

For detail, please refer to the “**NasDisk special function manual**” enclosed inside the CD

NasDisk

4) NasDisk User Configuration

a) Using user account.

This section will explain how to use NasDisk with user account. Only simple feature will be explained, so, if you need more detailed features, please refer to the “**NasDisk special function manual**” enclosed inside the CD

(1) Using Web - storage



Web - storage page



Sharing folder setting

- ① Log in NasDisk with the ID and Password created in user registration page..
- ②  Folder creator. Choose this icon for creating folder.
(Folder name must not contain following symbols \ / : * ? “ < > |)
- ③  Folder sharing icon. Choose this icon for endowing read/write permission to user and group through the setting page.
- ④  File save icon. Choose this icon for storing files into NasDisk on the Internet
- ⑤  File delete icon. Choose this icon for deleting file or folder.
- ⑥  File rename icon. Choose this icon for renaming file or folder.
(\ / : * ? “ < > | must not be used)
- ⑦  Permission change icon. Choose this icon for changing permission for file or folder
(Although file sharing is on, limiting read/write permission using this function is possible. That

is, permission precedes folder sharing)

- ⑧  Copy icon. Choose this icon for copying files or folders.
Multiple copy of files or folder is enabled and 'paste' is also used. Copying the files into the original position is not permitted)
- ⑨  Cut icon. Choose this icon for cutting files or folders
Just as copy function, cutting behavior cannot be done on the same area where the original file exists.
-  Paste icon. Choose this icon for pasting files or folders.
It is used together with copy and cut. And you can see the presence of files or folder through the selection information on the path (example; selectio information - two items chosen).

Since the user interface of Web Storage feature is similar to that of Windows, it is easy to use. And you can exchange files with other through the sharing folder under the user folder tree on the left side. (Sharing folder service is only applied to Web Storage and File Server, not to FTP service)

2. Installing NasDisk

4) NasDisk user configuration

a) Creating user account

(2) Using Mail Server

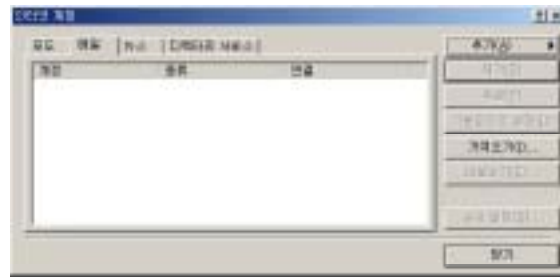
In order to use Mail Server service of NasDisk, Mail Server checkbox on the Service Set-up must be turned on.

Since the default value is activated, you can set up the Mail Server through the following steps.

- ① Open Mail Client such as Outlook Express.
- (Only the Outlook Express configuration will be explained)



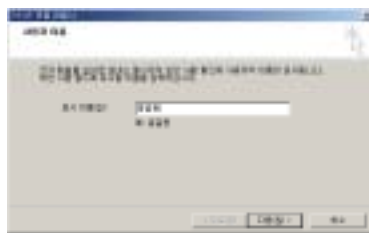
Outlook Express UI



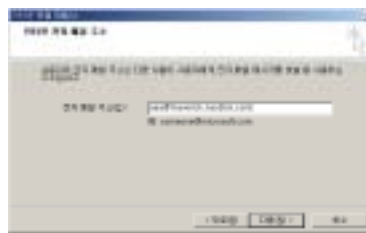
Account Menu Panel

- ② Choose 'Tool' menu and select 'Accounts' on the pull-down menu of 'Tool'
- ③ Select 'Accounts' and 'Accounts' menu panel will appear.
- ④ After selecting 'Mail' on the tab and click on 'Add' button.

Mail User Setting



Mail Address Setting



Mail Server Setting

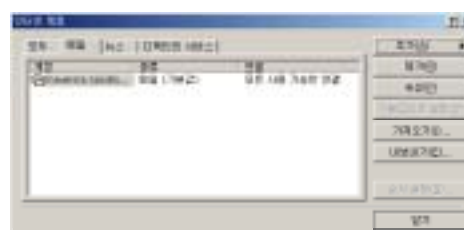


- ⑤ Internet Connection Wizard will launch and require you to type user's name, e-mail address, and mail server address.

Type the following alphabetically.

(Example : User name > Jack, e-mail address > jack@maverick.nasdisk.com, Incoming Mail server type > POP3, mail server > maverick.nasdisk.com, Outgoing mail server > maverick.nasdisk.com, Account ID > NasDisk ID, Password > NasDisk Password)

- ⑥ Type the Nasdisk ID and Password and press the next button to complete procedure (Save 'password', then it will never ask you password whenever you launch you mail client.
- ⑦ Configuration is complete when mail Account is added to the list.



Mail Account is generated

Now, you can try sending e-mail through Outlook Express. And you are advised to check your incoming e-mail you sent to your own e-mail account just created to make sure the configuration is working properly.

(You may try this through the web-based free mail such as using Hotmail). If your mail client is not working, go back to the first step and try again.

2. Installing NasDisk

4) NasDisk User configuration

b) Using user account

(3) Using File Server

This section explains File Server service, one of basic functionality in NasDisk.

This service is available only when NetBEUI is activated in NasDisk Service Setup

Since the default value is on like Mail Server, if you have not changed the setting, you may use File Server service.

Be aware of the following particulars before running system.

- NasDisk File Server service is dependent on the NetBEUI protocol provided by Microsoft Networking. It means that sharing participants should be working inside Microsoft Networking environment
- Windows series include single-user OS Window9X and multiple-user OS Window NT. So there is difference in sharing setting according to the OS.
- While NT user may have access to account with user ID and password that has been registered in NasDisk, 9x user must have the same ID with the computer name.
- File server service is compatible only with Windows series. On the different platform such as Macintosh or Linux, third party FTP client should be used.

Direction for use is as follows.

- ① Double-click on 'Network environment' in your PC

- ② Double-click on Network neighborhood.
- ③ Find Nasdisk group.
- ④ Double-click on NasDisk in NasDisk group
- ⑤ When login panel shows up, insert password (Windows 9x) or ID and password (Windows NT)
After login, you will have folder titled 'home, home_dir, public'. Home contains all the users and is not accessible. And 'Home_dir' is the user account to be clicked for login panel
- ⑥ Login procedure is necessary only for the first time of logging if cookie is on in your browser (If you have changed your password, you have to insert the modified password for login.)
- ⑦ Now, it is just like the fixed drive attached to your system.
- ⑧ You can also use Windows Explorer for network drive connection service.
(Put IP or 'NasDisk' right after '\\ \\ ' and add '\\ home_dir' example: [\\192.168.1.1\home_dir](http://192.168.1.1/home_dir),
[\\nasdisk\home_dir](http://nasdisk/home_dir))

That's all about File Server service in NasDisk.

File Server service works only for Windows OS. If you are on the other OSs such as Mac or Linux, NetBEUI protocol should be embedded in the system for using File Server service.

File Server service only supports local network.

File Server service does not recognize other network.

File Server service can be connected just like network folder using FTP in Windows ME, 2000 and XP.

- ① Double-click on 'Network' on your desktop.
- ② Double-click on 'Add Network' for executing Network Wizard.
- ③ Insert ftp://NasDisk IP or domain name.
- ④ Press "Next" and type user ID. (if anonymous account is activated, no user ID is required)
- ⑤ Type the name for the network connection and new connection icon will be created.
- ⑥ Insert the path of NasDisk in Windows Explorer address for completing Network folder setup

That is all about File Server service.

For detail, please refer to the “**NasDisk special function manual**” enclosed inside the CD

Chapter 3

Registering NasDisk

This chapter is about the product registration procedure on customer site after installing NasDisk
DDNS Server setting and NasDisk DDNS service will also be explained

Those customers who registered to the customer site become a member at DDNS service
automatically

Though you may have not registered, A/S or product guarantee is provided but the basis for A/S or
product guarantee is to be the day of purchase if not registered

3. Registering NasDisk

1) NasDisk Customer Registration

After installing NasDisk, you need to register NasDisk through the Internet.

Registration is recommended to enable DDNS service and other customer services

Registration procedure is as follows.

- ① Launch your web browser.
- ② Connect to www.nasdisk.com.
- ③ Select Customer Registration menu on the left bar.



NasDisk registration page

- ④ Read the "Service Agreement" and select "Agree" or "Do not agree".
- ⑤ "Do not agree" stops registering procedure and you are not entitled to DDNS service. For details, please contact customer support team.
- ⑥ Selecting "Agree" will move you to the NasDisk User Registration page.
- ⑦ Fill in the blank and press registration button, then "Registration complete" panel will show up.
- ⑧ In case of "Registration failure" panel, press the refresh button and repeat filling in the blank.
- ⑨ When registration is complete, type the ID and Password to log in.
- ⑩ "'User Name' now logging in" message will appear.

That's all about 'Customer Registration'.

You must be careful in filling in your correct personal information to get full support such as DDNS service.

Registration completion message will be sent to your e-mail address and all the details you typed in will also be enclosed to the e-mail

All the personal information will be used only for customer support and service and will not be known to anybody or other companies except Maverick System.

For details, please refer to the **service agreement** that is provided when registering the product on-line.

3. NasDisk registration

2) DDNS Server setting

Customers who registered at www.nasdisk.com are only required to do DDNS Server setting. If you have not registered, this procedure of DDNS server setting will not apply.

To get the DDNS service from www.nasdisk.com, you have to configure following two items.

- ① Host name to be used by NasDisk (Registering multiple host names is enabled.)
(ex : If Host name is Maverick, Domain name of NasDisk is maverick.nasdisk.com.)
- ② Domain name to be used by NasDisk (nasdisk.com and nasdisk.net are provided)

These two items precede all the DDNS service configuration procedure.

DDNS means Dynamic Domain Name Service.

The functional features and working principle of DDNS are as follow.

- DHCP-based Internet connection has not been able use HTTP or FTP server because IP address of DHCP is subject to change everytime PC is connected to the Internet.
- DDNS is the new method for DHCP-based PC DDNS to set up HTTP, FTP or MAIL server just as if its IP is static.
- To use DDNS service, you must register to the DDNS service and have DDNS-supportive equipment and softwares.
- Connect the DDNS server to DDNS-supportive equipment by inserting the ID and Password of the equipment.
- Then, user should connect to the DDNS-supportive equipment with the domain name registered to DDNS server.
- DNS server having domain name is supposed to make query into the domain name
DDNS server that received the query from the other DNS, is to transmit the IP address for the domain name..
- At this moment, DDNS server sends the unchanged IP because varied IP numeric value is applied to DDNS server through the communication between DDNS server and DDNS-supportive equipment.
- Then, user can connect to the DDNS-supportive equipment on the Internet through the IP address transmitted to DNS server
-
- .

In order to use DDNS service contained in NasDisk, connect to www.nasdisk.com and start configuration as follows.

- ① Launch your web-browser and connect to www.nasdisk.com.
- ② Type your ID and Password in the box named ID and Pass each and click on login button.
- ③ After login, select DDNS configuration on the left.



DDNS configuration page

- ④ Insert Host name of NasDisk after DDNS configuration page is generated. At this point, Host name does not need to be identical with that of NasDisk.
- ⑤ Previous IP list shows the list of IP registered in DDNS server and newly modified IP address is automatically retrieved from the connected equipment of user.
- ⑥ To insert the content of configuration press the "registration" button below.
- ⑦ If error occurs, click on the "refresh" button to repeat the registration procedure.
- ⑧ When list is created, DDNS server configuration is complete.
- ⑨ In case that modification or deletion of generated list is required, proceed by pressing "modify" or "delete" button after selecting the leftmost check-box.

That's all about DDNS server configuration.

In order to connect the DDNS server to NasDisk, you have to configure also the setting of NasDisk DDNS.

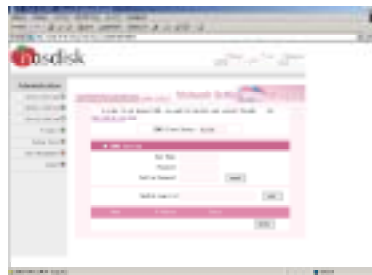
3. Installing NasDisk

3) Configuring the function of DDNS.

Configure the function of connecting DDNS server to NasDisk.

Only after registration at www.nasdisk.com and completing the DDNS server setting, you can go on with this procedure.

Product registration should be preceded before this step.



DDNS configuration page

Follow the next direction for DDNS configuration of NasDisk

- ① Launch your web browser and log into NasDisk administration account.
- ② Select 'Network Set-up' item on the main page.
- ③ Select DDNS configuration tab when 'Network set-up' menu page loads.
- ④ When DDNS configuration page loads, type the ID and Password for www.nasdisk.com.
- ⑤ Insert the domain name to be used in the DDNS server into NasDisk domain. (If registered name is 'maverick.nasdisk.com', type 'maverick.nasdisk.com')
- ⑥ Confirm the inserted configuration and press the 'apply' button. Then, NasDisk will begin to communicate with DDNS server of www.nasdisk.com.
- ⑦ If connection starts normally, the message "**Working**" will show up on the status of DDNS Client. (If it shows "**Not working**", please repeat the procedure again.)

That's all about DDNS configuration in NasDisk.

While multiple host names registration is enabled in DDNS server of www.nasdisk.com, DDNS setting registration in Nasdisk must have only single host name.

In order to use Mail Server or Web Storage service out of internal network, you have to use general domain name.

Concerning Mail Server, the mail address for user whose ID is 'Jack in NasDisk' is ' Jack@maverick.nasdisk.com.

Concerning Web Storage, you can use the following general domain name.

<http://maverick.nasdisk.com>

<ftp://maverick.nasdisk.com>

The three addresses above is applied to the case that the host name registered to www.nasdisk.com is 'maverick'.

The services provided from NasDisk using DDNS is only **Web Storage** and **Mail Server** service. Since Internet Sharing and File Server service is enabled only inside internal network, user cannot have access to those services out of the internal network in spite of the fact that DDNS service is configured.

For details, please refer to "Using NasDisk" in enclosed CD.

Chapter 4

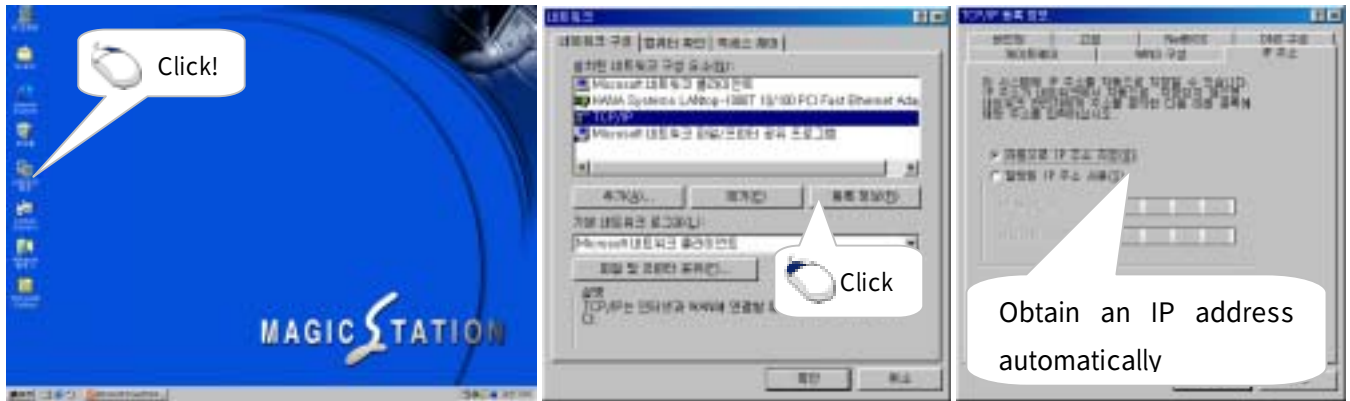
FAQ

This chapter includes frequently-asked questions for operating NasDisk. with explanation on how to configure user's PC network and to manage when NasDisk does not work properly.

4. FAQ

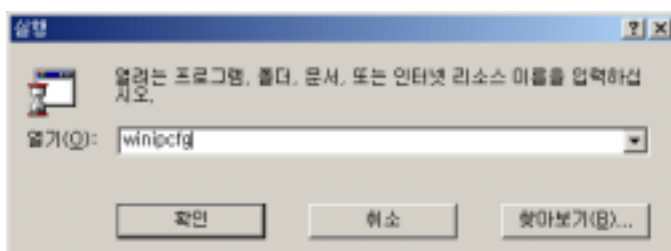
1) Configuring PC Network

a) Setting Dynamic IP for Windows 9x (Windows 98/98SE/ME)



Setting Dynamic IP for using NasDisk - Windows 9x

- ① Select '**Properties**' after clicking on "**Network**" on desktop.
- ② When Network panel opens, select **TCP/IP** from **Network components** box and click on "**Properties**"
- ③ On the TCP/IP properties panel, click on "**IP Address**" tab and choose "**Obtain an IP address automatically**"
- ④ Click "**OK**" , and PC will reboot.



Type "winipcfg"



winipcfg execution panel - apply concretely

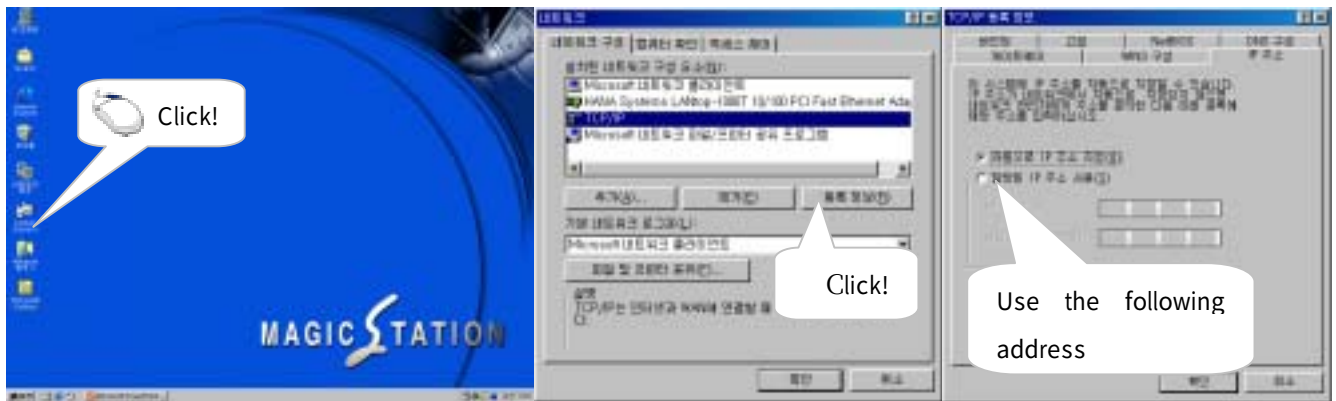
For confirming that IP is rightly assigned, type "winipcfg" on the 'Run' panel.

- ① **Start -> Run -> winipcfg -> Yes**
- ② When **IP Configuration** panel loads, press "More Info." to make IP is properly assigned.
(Gateway address '192.168.1.1' is normal when DHCP Server works in NasDisk)

4. FAQ

1) Configuring PC Network

나) Setting Static IP for Windows 9x (Windows 98/98SE/ME)



Setting Static IP for using NasDisk - 1 Windows 9x

- ① Select '**Properties**' after clicking on "**Network**" on desktop.
- ② When Network panel opens, select **TCP/IP** from **Network components** box and click on "**Properties**"
- ③ On the TCP/IP properties panel, click on "**IP Address**" tab and choose "Use the following address"



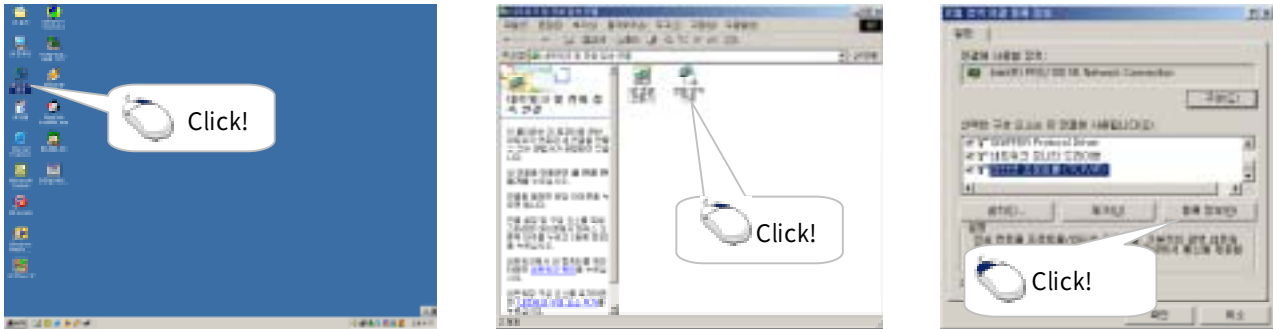
Setting Static IP for using NasDisk - 2 Windows 9x

- ④ Insert 192.168.1.2 (numeric value 2-254 except 1) in IP Address, and 255.255.255.0 in subnet mask. And move on to Gateway.
- ⑤ Add 192.168.1.1 in 'New gateway' box, then press Add button.
- ⑥ Go to DNS configuration, and select 'Enable DNS'. Then, insert host name(user name) and Domain name(optional).
- ⑦ Insert DNS IP in DNS Server Search Order and press 'Add'.
- ⑧ Press 'OK'확인 and restart your system.

4. FAQ

1) Configuring PC Network

c) Setting Dynamic IP for Windows (Windows NT 4.0/2000/XP)



Setting Dynamic IP for using NasDisk - 1 Windows NT

- ① Select '**Properties**' after clicking on "**Network**" on desktop.
- ② When '**Network and Dial-up Connection**' window loads, right-click on '**Local Area Connection**' and choose '**Properties**'.
- ③ When '**Properties**' window loads, choose TCP/IP in "**Components checked are used by this connection**" then press "**Properties**" button



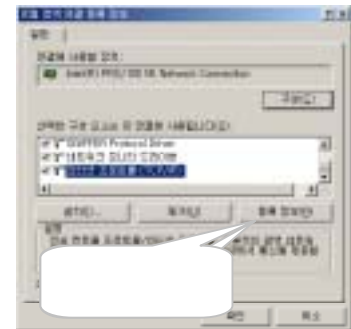
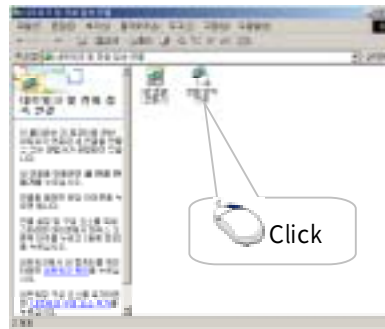
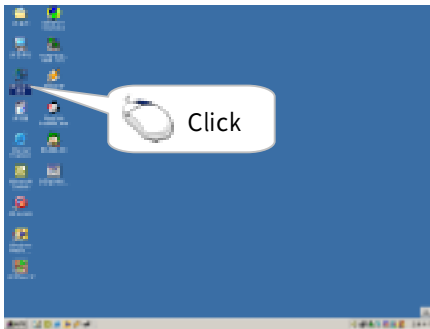
Setting Dynamic IP for using NasDisk - 2 Windows NT

- ④ When TCP/IP address properties panel loads, choose "Obtain an IP address automatically"
- ⑤ When configuration is complete, choose **Start -> Run -> cmd**, then a command prompt window will show up.
`ipconfig /all` -> show all the information related with IP.
`ipconfig /release` -> release all the information related with IP.
`ipconfig /renew` -> loads all the information related with IP from DHCP.
- ⑥ If 'cmd' command works properly, configuration is complete. (In case that IP come from NasDisk, Gateway is set to 192.168.1.1)

4. FAQ

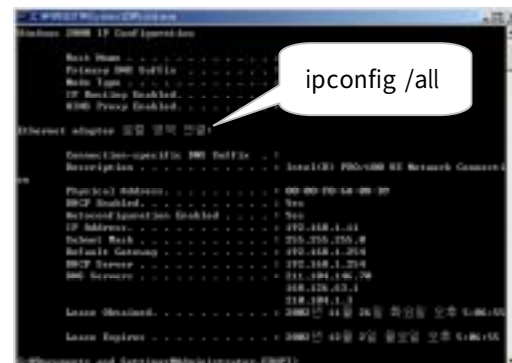
1) Configuring PC Network

d) Setting static IP for Windows (Windows NT 4.0/2000/XP)



Setting Static IP for using NasDisk - 1 Windows NT

- ① Select '**Properties**' after clicking on "**Network**" on desktop.
- ② When '**Properties**' window loads, choose TCP/IP in "**Components checked are used by this connection**" then press "**Properties**" button



Setting Static IP for using NasDisk - 2 Windows NT

- ③ When TCP/IP address properties panel loads, choose "Use the following address"
- ④ When configuration is complete, choose **Start -> Run -> cmd**, then a command prompt window will show up.

ipconfig /all -> show all the information related with IP.

If the result is identical to the set-up, the configuration procedure is complete.

2) FAQ

a) Network connection does not work.

- ① Confirm that power is properly working in both NasDisk and equipment connected to NasDisk.
- ② Confirm the connection port Link LED of NasDisk and the equipment connected to NasDisk.
- ③ If you find the problem due to the initial configuration, go back to the first configuration procedure and read the manual carefully.
- ④ If network failure occurred in the middle of operation, please read the procedure above carefully.

b) Clattering sound from equipment with high frequency.

NasDisk is manufactured to minimize power consumption so that it can be changed into Suspend mode when there is no operation for specific period of time.

So, the clattering sound with high frequency occurs when Suspend mode is changed into Normal mode. You don't have to be worried about the noise.

c) Is it possible to replace internal HDD in NasDisk by another?

Yes, It is possible.

NasDisk was originally designed to be assembled by user and hard drive had to be installed for yourself. So, replacing internal HDD by another product is possible.

You can use NasDisk Installer Software for replacing HDD.

For details, please refer to "NasDisk Special function" of the CD enclosed in the product box.

d) Is it possible to operate a server under the NasDisk when IP sharing is dependent on NasDisk?

Yes, it is possible.

NasDisk has NAT-related functions such as DMZ Host or Port Forwarding .

For details, please refer to "NasDisk Special Function" of the CD enclosed in the product box.

e) Is it possible to use MSN Messenger File transmission or Starcraft Battle?

Yes, it is possible.

We provide customers with various solutions when problems occur to NasDisk NAT.

Especially, concerning the program that users frequently use, we have customer support system called 'Special Application'.

For details, please refer to "NasDisk Special Function" of the CD enclosed in the product box.

(We will create patches for any possible error in our software.)

Chapter 5

Appendix

This chapter contains helpful features for using NasDisk.

UTP Calbe connection, DNS Server address and some others.

1) NasDisk cable connection

To use NasDisk, you need CAT.5 level UTP cable for making RJ-45 modular plug.



EIA/TIA 568A

Color order: light green, green, light orange, blue, light blue, orange, light brown, brown:



EIA/TIA 568B

Color order: light orange, orange, light green blue, light blue, green, light brown, brown

The illustration above is EIA/TIA 568A and EIA/TIA 568B.

(EIA/TIA 568 : This is indoor wiring standard established by EIA(Electronic Industries Alliance) and TIA(Telecommunication and Industry Association) in 1993. There are four kinds of EIA/TIA 568 standard - STP, UTP, Coaxial Cable and Optical Fiber.

So-called 1:1 or Direct cable is designed on **EIA/TIA 568B** type in its both end. And Cross-cable is designed with one end in **EIA/TIA 568B** type and other end in **EIA/TIA 568A** type.

Proper cable connection to NasDisk should follow the next step.

1. Cross cable to be used between WAN (Uplink) Port and PC (Connection to ADSL and Vable modem is compatible with existing cable).
2. Direct cable to be used between LAN 1/LAN 2 Port and PC.

Note : Use cross cable for connecting equipments except the connection with 'hub' in network.

NasDisk supports Auto MDI/MDIX to keep user from making mistake.

(Therefore, when connecting your equipment with NadDisk, you may use either Direct Cable or Cross Cable)

2) ISP DNS Server address list

DNS Server address for each Internet Connection Provider

KT (Korea Telecom) : kornet.net

168.126.63.1
168.126.63.2
211.216.50.150
211.216.50.160

Chollian/DACOM : chollian.net

211.106.67.221
164.124.101.2 (Bora homenet)

HANARO : hananet.net

210.220.163.82
210.94.6.67
210.180.98.69

thrunet : thrunet.com

210.117.65.1
210.117.65.2

Shinbito Shark : shinbiro.com

202.30.143.11
203.240.193.11

3) Glossary

ADSL (Asymmetric Digital Subscriber Line)

Asymmetric Digital Subscriber Line allows for transfer speeds of 1.5Mbps(or 6Mbps) into the computer and up to 16kbps back up the telephone lines. ADSL uses standard telephone lines, enabling ISDN basic speed interface (2B+D) to coexist with existing telephone line.

CGI (Common Gateway Interface)

CGI is the interface working between WWW server and back-end program (Gateway), and is used for creating interactive web page like web browser (client) making query into database via web server.

CLIENT

Any intelligent device linked in a network to a server. A client can undertake its own computing using data provided by the server.

DDNS (Dynamic DNS)

DDNS system enables dynamic IP to simulate static IP.

DHCP (Dynamic Host Configuration Protocol)

Dynamic Host Configuration Protocol automatically allocates the information necessary for TCP/IP-based communication, and is standardized in RFC 1541. It provides uniform administrative service of IP address in TCP/IP environment.

DMZ (Demilitarized Zone)

Firewall zone to protect server from illegal access from external network. DMZ is an analogic expression of firewall with demilitarized zone and is an intervening layer which filters out suspicious data between internal network and external network.

DNS (Domain Name Service)

Domain Name Service provides the system that converts domain name into numerical IP address, which means that you do not have to memorize all the numerical value of IP address to connect to certain host of a network. While IP address is based on the address pointed off by 4-byte numerical value, domain name is easily memorizable because it is readable as 'www.nasdisk.co.kr'.

EIA (Electronic Industry Association)

Electronic Industry Association in U.S.

ETHERNET

A LAN Transmission standard developed by DEC, Intel, and Xerox. It is featured by its capability of transmitting data up to the data station 2.5km away at 10Mbps and 1,024 data stations can be internetworked by the technology, one of the model originated from IEEE 802.3. The cable most adopted by this standard includes 10BASE 5, 10 BASE 2 및 10 BASE-T out of which 10Base-T model is most frequently used. Recently, Fast Ethernet with 100Mbps bandwidth has been put into market.

FTP (File Transfer Protocol)

This Internet protocol is used to copy files between computers - usually a client and an archive site. It's old-fashioned, it's a bit on the slow side, it doesn't support compression, and it uses cryptic Unix command parameters.

HFC (Hybrid Fiber Coax)

HFC networks combine both optic-fiber and coaxial cable lines. Optical fiber runs from the cable head end to neighborhoods of 500 to 2,000 subscribers. Coaxial cable runs from the optical-fiber feeders to each subscriber. Hybrid networks provide many of fiber's reliability and bandwidth benefits at a lower cost than a pure fiber network.

HTTP (Hypertext Transfer Protocol)

The protocol used to transmit and receive all data over the World Wide Web. When you type a URL into your browser, you're actually sending an HTTP request to a Web server for a page of information.

IEEE (Institute of Electrical and Electronics Engineers)

Institute of Electrical and Electronics Engineers in U. S.

IP ADDRESS

This address is a unique string of numbers that identifies a computer on the Internet. These numbers are usually shown in groups separated by periods, like this: 130.69.240.4, which is 32-bit arrangement each of 8bit(1 byte) pointed off by comma. All resources on the Internet must have an IP address. IP address is administered by InterNIC in U.S., and KRNIC allocates the IP address for domestic use.

JAVA

Sun Microsystems' Java, announced in May 1995, is a programming language for adding animation and other action to Web sites. The small applications (called applets) that Java creates can play back on any graphical system that's Web-ready, but your Web browser has to be java-capable for you to see it. According to Sun's description, Java is a simple, object-oriented, distributed, interpreted, robust, secure, architecture-neutral, portable, high-performance, multithreaded, dynamic, buzzword-compliant, general-purpose programming language.

LAN (Local Area Network)

A local area network is a short-distance network used to link a group of computers together within a

building. 10BaseT Ethernet is the most commonly used form of LAN. A piece of hardware called a hub serves as the common wiring point, enabling data to be sent from one machine to another over the network. LANs are typically limited to distances of less than 500 meters and provide low-cost, high-bandwidth networking capabilities within a small geographical area.

MODEM (Modulator-Demodulator)

A modem is an external box or internal circuitry that converts computer data into sound that can be transmitted over phone lines. First used to send telegrams, early modems alternated between two different tones. This is called *modulation*, and the process of modulating (and demodulating at the receiving end) gave the modem its name.

NAT (Network Address Translation)

Network address translation is a scheme that allows two connected networks to use different and incompatible IP addressing schemes. Address translation allows hosts on a private internal network to transparently communicate with destinations on an external network or vice versa. NAT also refers to the name of a device that performs these functions. It enables certain TCP/IP application to be used by converting the communication protocol of the applicative layer or transport layer.

NetBEUI (NetBIOS Extended User Interface)

NetBEUI is an extended version of NetBIOS that connects clients in a LAN environment. IBM developed this standard protocol, which is a set of rules that an operating system uses to control how computers on a network to talk to each other. The protocol is also used by Microsoft and Novell on many network operating systems including LAN Server, LAN Manager, Windows NT, and Windows 95.

NetBIOS (Network Basic input/output System)

Application Program Interface used in PC-LAN provided by IBM and Microsoft and it also works as a protocol for local area network. 'NetBEUI(NetBIOS extended user interface)' is the extended version of initial release. It is a basic format for Windows network environment in which NetBIOS name is added to personal computer to be networked.

POP3 (Post Office Protocol Ver.3)

The current champ in Internet email mailbox access standards, but its limitations-basically, you connect to a server and download *all* your messages, which are then deleted from the server-discourage flexibility. Of course, some clients let you leave all messages on the server, and/or refuse to download messages above a certain size. The current version of POP is POP3

RFC (Request For Comments)

Public documents series announced by IAB for Internet-based inspection, suggestion, technologies, and opinion. It is used as principle means for announcing the information on the Internet such as procedure or format necessary when actualizing network protocol or service.

SDSL (Symmetric Digital Subscriber Line)

SDSL stands for Symmetric Digital Subscriber Line, a relatively new technology that allows high data transfer rates to be sent over existing copper telephone lines. SDSL is called symmetric because it supports the same high data transfer rates for upstream and downstream traffic. SDSL works by sending digital pulses in the high-frequency area of telephone lines that are not used by voice communications. While double or triple pairs of copper-lines are used in HDSL, SDSL uses a pair of copper-line, and is applicable to existing POTS or T1/E1 with maximum serviceable distance being about 2.7km.

SERVER

The business end of a client/server setup, a server is usually a computer that provides the information, files, Web pages, and other services to the client that logs on to it. (The word *server* is also used to describe the software and operating system designed to run server hardware.) The client/server setup is analogous to a restaurant with waiters and customers. Some Internet servers take this analogy to extremes and become inattentive, or even refuse to serve you.

SMB (Server Message Block)

SMB, which stands for Server Message Block, is a protocol for sharing files, printers, serial ports, and communications abstractions such as named pipes and mail slots between computers. TCP/IP or NetBEUI (Net BIOS extended user interface) can be 'communication network adaptor' for file/printer sharing protocol used in Windows operating system.

SMTP (Simple Mail Transfer Protocol)

Protocol that regulates what goes on between the mail servers.

STORAGE

Technical term for digital device used to store data. Also called 'storage cell'. It is divided into internal memory unit and external memory unit.

SUBNET MASK

IPs are 32 bit binary numbers usually written as a decimal dotted quad, e.g. 209.139.205.2. There is some additional structure in the number, called the net, subnet and hostnumber. Usually an ISP would manage an entire net. There is a variable number of bits for each field. Depending on how big a fish your ISP is, he would have a class A, B or C license. Class A would let him support 16,777,214 hosts, B 65,534 hosts and C 254 hosts online at one time. The subnet mask is a binary number expressed as a dotted quad to help determine how the IP number is composed.

TCP (Transmission Control Protocol)

Protocol coming under OSI 4-layer. And it is an element of TCP/IP. In TCP, arrangement or

modification of packet is done in the order of packet arrival, which increases the reliability of data transmission between two computers.

TCP/IP (Transmission Control Protocol/Internet Protocol) These two protocols were developed by the U.S. military to allow computers to talk to each other over long distance networks. IP is responsible for moving packets of data between nodes. TCP is responsible for verifying delivery from client to server. TCP/IP forms the basis of the Internet, and is built into every common modern operating system (including all flavors of Unix, the Mac OS, and the latest versions of Windows). .

TELNET

Telnet, developed as a service for ARPANET, is an application that lets you log on to a Unix computer. Provided you have an account on that Telnet server, you can then use its resources. A drawback of Telnet is that it's character-based, so you need to speak Unix to the other computer. It is in wide use for TCP/IP-based Internet.

TIA (Telecommunications Industry Association)

Telecommunications Industry Association in U. S.

UDP (User Datagram Protocol)

Protocol basing TCP/IP, standard Internet protocol. In TCP/IP model, data transmission is done through the combination of IP, network layer protocol(OSI third layer), TCP, transmission control protocol or UDP. While communication begins after session is set up, UDP does not include session set-up procedure, which means faster transmission. But, there is no function such as error packet correction or re-transmission as TCP does. UDP is adopted by multimedia application that requires high speed rather than reliability.

URL (Uniform Resource Locator)

URLs are the Internet equivalent of standardized logical addresses. It is made up of protocol, host name, address, and directory location. For example, <http://www.nasdisk.com/index.html>, or <ftp://ftp.nasdisk.com/pub/public.zip>.

VDSL (Very high - Data rate digital Subscriber Line)

VDSL (Very high data rate Digital Subscriber Line) is a type of broadband transport technology for twisted-pair access operating at data rates from 12.9 to 52.8 Mbps with corresponding maximum reach ranging from 4500 feet to 1000 feet of 24 gauge twisted pair. VDSL is the most promising technology capable of delivering full service today is for service providers. VDSL is both symmetric and asymmetric and provides up to 52 Mbps of bandwidth, over voice, on a single twisted pair copper loop. VDSL technology provides the service provider with the ability to create the type of business that is critical for success in the new millennium. Those service providers that can deliver full narrowband and broadband services consisting of voice, data, and video - including interactive TV - will be the

dominating forces in the industry today, and in the near-term future, until fully fiber-optic solutions are deployed.

WAN (Wide Area Network)

A WAN spans a large geographic area, such as a state, province or country. WANs often connect multiple smaller networks, such as LANs or MANs. The most popular WAN in the world today is the Internet. Many smaller portions of the Internet, such as extranets, are also WANs. WANs generally utilize different and much more expensive networking equipment than do LANs. Technologies sometimes found in WANs include SONET, frame relay, and ATM.

WWW / WEB (World Wide Web)

Also known as the WWW, the W3, or most often simply as the Web, it originally developed by CERN labs in Geneva, Switzerland. Continuing development of the Web is overseen by the World Wide Web Consortium. The Web can be described (dryly) as a client/server hypertext system for retrieving information across the Internet. On the Web, everything is represented as hypertext (in HTML format) and is linked to other documents by their URLs. The Web encompasses its native http protocol, as well as ftp, Gopher, and Telnet.

XDSL (x Digital Subscriber Line)

Various digital subscriber line.

4) Assembling HDD

Warranty by Maverick System

Please, install the product following the set-up procedure specified in the user manual provided by Maverick System Co., LTD.

1. Warranty period

Warranty period for the product is 12 months from the day of purchase and we guarantee that the product will function well during the warranty period.

2. Warranty Details

- (1) In case of the product default during the warranty period, you will be entitled to the repair or recall in accordance with the regulation of consumer compensation.
- (2) In any case, Maverick System Co., LTD will not be liable for more compensating fee than the amount paid for the resultant damage done directly, indirectly, specially or accidentally by the software or manual provided by Maverick System Co., LTD.
- (3) In the section (1), the warranty is provided for nothing except for the following cases.
 - 1) Damage of the product caused by force d' major such as disaster or accident
 - 2) Damage caused by carelessness or misuse of user.
 - 3) Damage resultant from dealing with or moving the product with unacceptable way.
 - 4) Damage resultant from using the module, power line or other options that are not included in warranty specification.
 - 5) Damage from modifying or adding to the product by the person or third parties other than the representative staffs from Maverick system.
- (3) The part used when replacing the product with defect is normal and standardized one and the replaced part will belong to Maverick System.
- (4) The warranty provided herein is valid only in South Korea.

3. Providing warranty service and procedure.

Warranty service specified in this document is provided from Maverick System during only the warranty

period.

4. Exclusion of warranty

Warranty specified in this document provides all the warranty details including explicit or implicit liability on the product of Maverick System. In case of defect, all means for customer to claim damage are comply with the regulation for consumer guarantee or product repair service in Maverick system.

5. Customer Information

Fill in the blank your personal information on the following (necessary when getting A/S)

Customer name : _____ Zip code: _____

Contact : _____ FAX : _____

Day of purchase : _____ Location of purchase : _____

Product name : _____ Serial number : _____

Warranty period : 12 months

6. Contact

Technical Support Department, Customer support team,.

Address : 5th floor Seocho World Officetel 1355-3 Seocho-dong Seocho-gu Seoul, South Korea

Phone : 82-2-6283-7425

Fax : 82-2-6283-7421

7. Service hour

Monday ~ Friday, save holiday. a.m 9 ~ p.m 6