



Ethernet network attached storage enclosure

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## EE3-UNAS-1 Ethernet network attached storage enclosure





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# EE3-UNAS-1 User manual

## Introduction

Thank you for buying our 10/100 Mbit/s Ethernet network attached storage (NAS) enclosure with USB 2.0 interface! This network-attached storage to homes and in the NAS enclosure adds the convenience of small businesses, providing you a central storage location for your data and letting you share data across your network. This manual will help you install it properly.



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## Features

- Supports any 3.5" IDE drives, including LBA48 bit addressed
- Allows sharing the hard drive over the local network: LAN server is built-in!
- Easy to control via Internet browser, password protection supported
- Additional USB 2.0 interface to access the hard drive via USB port
- Real speed via USB - up to 30 MB/s, limited only by the USB 2.0 interface and your drive capability, real speed over the LAN - up to 3MB/s, depending on the network and your CPU load



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## **Specification**

- Supports USB 2.0 and USB 1.1 interfaces
- Supports parallel ATA (IDE) 3.5" hard drives, PIO and UDMA modes
- Supports one 10/100Mb/s Ethernet port, RJ45 connector
- Supports FTP, DHCP, Samba servers on LAN
- Supports USB mass storage device driver of the operating system
- AC-DC adapter: 100-240VAC 47-63Hz input, 12VDC/2A and 5VDC/2A output
- Material: polished aluminium
- Product net weight: 0.47kg
- Product dimensions: 215(L)x122(W)x41(H)mm



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### **System requirements**

- Windows 98SE/ME/2000/XP or above and Internet Explorer browser v.5.x or above; Mac OS 10.3.x or above and Apple Safari internet browser; Linux and Mozilla or Netscape internet browser
- 3.5" IDE UDMA hard drive FAT32 formatted
- RJ45 LAN port or USB 2.0 port (USB 1.1 supported, with lower speed)

### **Package contents**

- NAS USB enclosure with plastic desktop stand
- AC-DC power adapter with power cord
- USB2.0 AM-BM cable, 1m
- CAT5e LAN cable, 1.5m
- Screwdriver and fixing screws
- Driver CD for Windows 98SE
- User manual



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## **Connecting to your Computer**

The NAS is a multifunctional hard drive enclosure. In addition to being a network storage device, you can also use it as a standalone external hard drive via the USB interface.

### **Max OS X**

Driver installation is not required for systems using Mac OS 10.1.2 or above. Simply cable and access the data by clicking the connect the NAS using the included USB "Untitled" HDD icon located on your Desktop

### **Windows XP & Windows ME**

Driver installation is not required for Windows XP and Windows Me. Simply connect the NAS using the included USB cable and access the data via "My Computer".

### **Windows 98SE (Download Drivers)**

To utilize the USB connectivity, please visit the following URL for to download the driver: <http://www.gembird.nl>



Please ensure that you install the device driver before connecting the USB port. When you complete the driver installation, reboot your computer, connect the NAS to your computer and access the data via "My Computer".

You can also access data in the NAS connecting it directly using the Ethernet cable with your computer. The NAS will have a default IP of 169.254.0.1 when connected directly.

### **Connecting to your Network**

Connect the power adapter to the back panel of the NAS and plug the other end to a wall outlet or power strip. Connect the network cable to the LAN port on the back of the NAS and the other end of the network cable to a port on your hub, switch or router.

The Ethernet port on the NAS is Auto-MDI/MDIX, which means you can connect it using either a crossover or a direct network cable.





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## Configuring the NAS

The NAS features a web-based control interface to manage your settings. If you are using an operating system other than Windows, please refer to next section labeled "Other Operating Systems".

Open your web browser and enter `http://Storage` or `http://Storage-XXXX` in the URL address field. You can also enter the IP address of the NAS.



Enter the default login information:

Username: admin

Password: admin



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For security purposes, your login information can be changed via the web control interface.

When two new NASs are simultaneously connected to your network, you need to distinguish between the two by typing "http://Storage-XXXX" with their unique MAC address. Please refer to the sticker on the rear panel for the address and replace XXXX with the last four digits of the MAC address.

For example if your NAS's MAC Address is 00-14-3F-AA-01-68, you will need to enter "http://Storage-0168" in the URL address bar.



## Configuring the NAS (Other Operating Systems)

When you are planning to perform administrative tasks from a different operating system, you will need to input IP address of the NAS in the browser URL address bar.

If you do not know the IP address of the NAS, you will have to do this additional procedure. You will need to connect the NAS directly to your computer, input the default IP address 169.254.0.1 in the browser URL address bar to access the web control panel.

Upon a successful login, you will see the following screen.

The screenshot shows the LAN-DRIVE web control panel. The top navigation bar includes 'LAN-DRIVE' and 'Web Control Panel'. A sidebar on the left contains links for 'Status', 'IP Config', 'Maintenance', 'SMB Server', 'FTP Server', and 'Disk Utility'. The main content area is titled 'System Information' and contains the following data:

| System Information |  |
|--------------------|--|
| Host Name          | STORAGE <a href="#">Change</a>                   |
| Group Name         | WORK GROUP <a href="#">Change</a>                |
| Administrator      | ADMIN <a href="#">Change</a>                     |
| Date/Time          | 2005/05/22 17:28:31 GMT+9 <a href="#">Change</a> |
| Language           | English <a href="#">Submit</a>                   |
| Platform Vendor    | NAS-BASICES                                      |

| Network Information |   |
|---------------------|---|
| IP Address          | 192.168.0.109   |
| SMTP Server         | OFF <input type="checkbox"/> ENABLE <input type="checkbox"/> DISABLE <input type="checkbox"/> <a href="#">Reset</a> |

| Disk Information |                                 |
|------------------|---------------------------------|
| Disk ID          | [Master] HDG72012VLT80 V330AEMA |
| Free Size        | 115000 MB Free                  |
| Total Size       | 117000 MB                       |



An overview description of the functions on the left menu bar:

- **Status** - shows the data related to your NAS such as networking status and hard drive information. You may also edit administration and file language settings here
- **IP Config** - allows you to manually configure the IP address of the NAS Maintenance Perform firmware upgrade, reboot or reset the NAS
- **SMB Server** - configure the Samba feature of NAS for the home/office network file sharing capabilities. You can also create/remove folders and their share permissions
- **FTP Server** - configure the FTP features of the NAS. You may add/remove users and their permissions
- **Disk Utility** - perform hard drive maintenance routines such as Scandisk and Format
- **Status** - System Information



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| System Information |  |
|--------------------|--|
| Host Name          | STORAGE <input type="button" value="Change"/>                  |
| Group Name         | WORKGROUP <input type="button" value="Change"/>                |
| Administrator      | admin <input type="button" value="Change"/>                    |
| Date/Time          | 2005/06/29 17:38:31 GMT8 <input type="button" value="Change"/> |
| Language           | English <input type="button" value="Submit"/>                  |
| Firmware Version   | NAS-BASIC25  |

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| Network Information |  |
|---------------------|--|
| IP Address          | 192.168.0.103  |
| DHCP Server         | OFF <input type="radio"/> ENABLE <input checked="" type="radio"/> DISABLE <input type="button" value="Apply"/> |

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| Disk Information |                                   |
|------------------|-----------------------------------|
| Disk ID          | [master] HD5722512VLA780 V330A6MA |
| Free Size        | 115808 MB free                    |
| Total Size       | 117800 MB                         |

The welcome screen displays the IP address, firmware version and the hard drive information such as the hard drive type and storage space available.

The administrator may change the web control panel login information in here.

You may also change the default hostname of your NAS here. Keep in mind that after you change the hostname, you will need



to use it to access your NAS. For example, if you changed your hostname to "FileServer", please type "http://FileServer" to access the Web Control Panel after you submitted your changes.

The Language setting is used to recognize files with characters other than English. If you have trouble reading your files on the NAS, please select the appropriate language.

When you reset the NAS, either by the hardware switch or through the web control panel, all the settings will return to the default setting including the hostname. The default hostname will remain as Storage-XXXX (where XXXX is the last four digits of the MAC address).

## **IP Configuration**

The administrator may use this option to manually define the IP address of the NAS. If the hub/router/switch in your network has a DHCP server, then the NAS will automatically be assigned an IP address.



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IP Configuration

Automatic IP

Static IP as below

|               |               |
|---------------|---------------|
| IP            | 192.168.0.103 |
| SubnetMask    | 255.255.255.0 |
| Gateway       | 192.168.0.1   |
| Primary DNS   | 169.95.1.1    |
| Secondary DNS | 0.0.0.0       |

Apply

The NAS can also act as a DHCP server when one is not present in your network. The default IP of the NAS in DHCP server mode is "169.254.0.1" and any device that is linked to the network containing will be assigned an IP of "169.254.0.x" automatically



## Maintenance

The administrator can perform maintenance tasks on the NAS here.

Update the firmware only if you are experiencing problems with your NAS. New firmware files *may be* available to download (if designed) from website <http://www.gembird.nl>, please, ask using "Support" page.

A screenshot of a web browser interface showing a "Maintenance" page. The page has a light gray background and a white content area. At the top, the word "Maintenance" is displayed in a dark font. Below it, there are three main sections, each with a dark gray header bar. The first section is "Firmware Upload", which contains the text "Select new firmware to upload." followed by a text input field, a "Browse..." button, and an "Upload" button. The second section is "System Reboot", which contains the text "Click Reboot to have the device perform a software restart. The SYS LED blinks as the device restarts and then steady on if the restarts is successful. Wait a minute before logging into the device again." followed by a "Reboot" button. The third section is "Factory Defaults", which contains the text "Click Reset to clear all configuration and restore to default settings. Please click 'Reboot' after reset." followed by a "Reset" button.

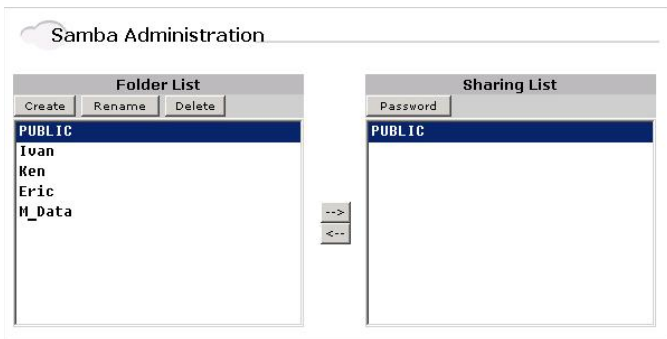
After updating the firmware or resetting to factory defaults, please make sure that you restart the NAS and refresh your browser.





## Samba Administration

Samba enables the core function of the NAS which is network file sharing.



This option allows the administrator to determine the folders/directories to be shared. In here, you can create, rename and delete folders/directories in your NAS. All the folders/directories in the root directory that were previously in



your hard drive before it was installed in the NAS will also be shown in the "Folder List".

The arrow keys in the middle are used to determine if the selected folder/directory is to be shared. Password protection for each shared folder can also be implemented.

*Creating folders/directories through the web control panel, please use only English alphabets.*

## **FTP Configuration**

Abbreviated from File Transfer Protocol, FTP enables file exchange between computers on the Internet. The NAS can work as a stand-alone FTP server when it is assigned a static IP.

Anonymous FTP is disabled by default.

The administrator can determine if the users have read or write permission and the "Home Directory" will be the folder/directory the anonymous user can access upon logging in.

The Account List displays the current FTP user accounts, the



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administrator can add new users, modify their permissions, temporary disable users and delete users.

FTP Configuration

|                  |   |            |       |
|------------------|---|------------|-------|
| FTP Status       | Enable  | Port: 8080 | Apply |
|                  | <input type="radio"/> Enable <input checked="" type="radio"/> Disable         |            |       |
| Allow anonymous? | <input type="radio"/> Read only <input checked="" type="radio"/> Read / Write |            | Apply |
|                  | Home Directory: PUBLIC  |            |       |

| Account List | Add        | Modify   | En/Disable   | Delete |
|--------------|------------|----------|--------------|--------|
| [User]       | [Password] | [Access] | [En/Disable] |        |
| 123          | *****      | RO       | ENABLE       |        |



## Disk Utility

If you have installed a new hard drive in the NAS that is not formatted, this will be the place to format it to the FAT32 format.

Since the NAS supports power management, you can also determine the time the hard drive have to be inactive in order for the NAS to enter sleep mode.

The Scan Disk function can be used to detect potential problems with the hard drive. Click on the refresh button to display the scandisk result.

A screenshot of a web-based "Disk Utility" interface. The title "Disk Utility" is at the top left. Below it are three rows of controls: "Format Disk" with a "Format" button, "Sleep Time" with a dropdown menu showing "15" and a "Set (min)" button, and "Scan Disk" with a "Start" button. A large empty rectangular area occupies the center. At the bottom are two buttons: "Delete Error Msg" and "Refresh".

|               |           |
|---------------|-----------|
| Format Disk   | Format    |
| Sleep Time 15 | Set (min) |
| Scan Disk     | Start     |

Delete Error Msg Refresh

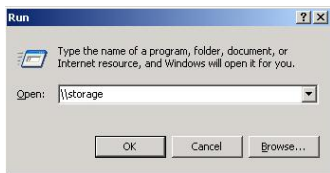


## Access Files from the NAS - Windows

In Windows, the data can be accessed by searching for the NAS in the "Network Neighborhood" (as a computer with the name "Storage"). Or you can access the data in the NAS with the following instructions.

The follow screenshots are taken from a PC running Windows XP SP2 and may vary slightly from your computer screen.

Click on the Windows Start button, select "Run" from the menu and a dialogue box as shown will appear.



Type "\\storage" in the field and click "OK".

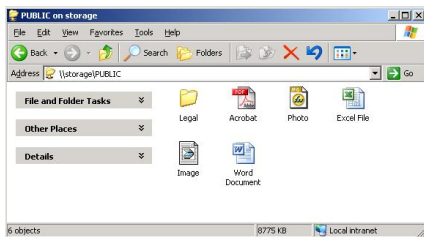
If you change the NAS hostname, you will need to replace the word "storage" with it. For example, if you changed your



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hostname to "FileServer", please type "\\FileServer" instead.



The Windows Explorer will appear and you should be able to see all the folders that were previously selected to be shared under "SMB Server" in the control panel. Clicking on the corresponding folder will reveal the files in that folder.

### **Access Files from the NAS - Mac OS**

If the client computer is an Apple Macintosh running Mac OS, they will have to follow the procedure below to mount each shared folder as an SMB share to access the data.

The follow screenshots are taken from a iMac running OS 10.3.x and may vary slightly



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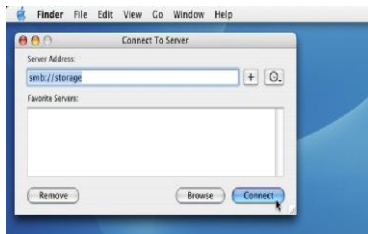
---

from your computer screen.

Under Finder, select Go >> Connect to Server or use the hotkey <Command +K>



The dialogue box "Connect to Server" will appear. Type "smb://storage" and click the Connect button.





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If you change the NAS hostname, you will need to replace the word "storage" with it. For example, if you changed your hostname to "FileServer", please type "smb://FileServer" instead.

The next dialogue screen will prompt you for the folder that you will like to access. Select it and click the OK button.



You might be prompted to enter a password, unless a password was previously assigned in the control panel, you can leave it blank. After a successful mount, a network folder icon will be created based on the folder you selected as shown.





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## **Frequently Asked Questions**

**Q:** Does the NAS support power management?

**A:** Yes, when there isn't any hard drive activity within fifteen minutes, the NAS will power down to reduce power consumption. The sleep time can be configured via the web control panel.

**Q:** How does the NAS achieve its data sharing capabilities?

**A:** Utilizing the SMB (Server Message Block) protocol, the NAS allows any computer client that supports TCP/IP, NetBuei or IPX/ SPX to share files. The built-in FTP server also allows any clients with internet connectivity to access the NAS.

**Q:** What is the size limitation for the NAS?

**A:** The NAS support LBA (48-bit Logical Block Addressing) which in theory includes all hard drives from 32 gigabytes to 2 terabytes.

**Q:** Why the NAS only support FAT32 format?



A: As a cross platform file server, FAT32 format is compatible with all major operating systems (Windows/Mac OS/Linux). The only drawback of a FAT32 format is the single file size limitation of 4 gigabytes.

Q: How does the NAS DHCP service work?

A: The NAS functions as a DHCP (Dynamic Host Configuration Protocol) server when it does not detect the presence of other DHCP servers in its network. DHCP is an Internet protocol for automating the configuration of computers that use TCP/IP by automatically assigning IP addresses.

Q: What are the naming limitations of the files located in the NAS?

A: The maximum length of a folder/directory/file name is 12 characters. Invalid characters such as "\*" \ : " < > . ? /" may not be used.

Q: What kind of hard drive is compatible with the NAS?

A: The NAS supports 3.5" Ultra DMA/ATA hard drives which



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are mostly manufactured after 1998. Below is a list of manufacturer websites you can refer to for more information on the hard drive you own.

Western Digital <http://www.westerndigital.com>

<http://www.hitachigst.com>

Samsung <http://www.samsung.com>

Seagate <http://www.seagate.com>

Maxtor <http://www.maxtor.com>



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## EC Declaration of Conformity

The following  
Applicant : GEMBIRD ELECTRONICS LTD  
1709 News Building,  
#2 Shen Nan Zhong Lu, Shenzhen, P.R. China  
Equipment : Computer accessories  
Model Nos. : EE3-UNAS-1  
Product description : Ethernet network attached storage enclosure

We declare under our sole responsibility that the products listed above are in conformity with the Low Voltage Directive 73/23/EEC in order to comply with the requirements in the Council Directive 73/23/EEC relating to electrical equipment designed for use within certain voltage limits and the Amendment Directive 93/68/EEC.

The following standards were applied:

IEC 60 950-1991+A1-1992+A2-1993+A3-1995+A4-1996  
EN 60 950-1992+A1-1993+A21993+A3-1995+A4-1997+A11-1997

The following manufacturer within Europe is responsible for this declaration:

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Marathon 11, 1213PG Hilversum, The Netherlands  
Tel: +31-35-6038110. Fax: +31-35-6029045

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Director



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Authorized signature

Hilversum/Jan. 15, 2007  
Place and Date