

# NAS-34 4 Bay Gigabit SATA NAS

User's Guide

# **FCC Certifications**



This Equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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.

# **CE Mark Warning**



This equipment complies with the requirements relating to electromagnetic compatibility, EN 55022 Class A for ITE, the essential protection requirement of Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

Company has an on-going policy of upgrading its products and it may be possible that information in this document is not up-to-date. Please check with your local distributors for the latest information. No part of this document can be copied or reproduced in any form without written consent from the company.

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# **Overview**

Thank you for purchasing the product. Read this chapter to know about your 4-Bay Desktop Gigabit SATA NAS.

## **Unpacking information**

Before getting started, please verify that your package includes the following items:

- 1. One 4-Bay Desktop Gigabit SATA NAS (Hard Disk not Included)
- 2. One Power adapter and one AC power cable
- 3. One Quick Installation Guide
- 4. One Utility/ Manual CD

5. HD fastening screw x 16

6. One HD fastening key

## Introduction to the 4-Bay Desktop Gigabit SATA NAS

**Easily back-up your data and share them.** This NAS allows 4 connected hard disks, which boosts the capacity for your data sharing and backup needs. It uses the high-speed SATA interface, providing users excellent data storage and sharing capability. The device also supports RAID 0, RAID 1, RAID 5 and Linear modes for various HDD backup configurations.

**The NAS embeds FTP server, Web Server and printer server.** The FTP server allows users to backup and share files with FTP client software. The Web server provides an easy way to share files by web site. The NAS supports DDNS, which allows you to designate a easy-memorized domain name to this device. The embedded printer server also brings you terrific convenience on sharing your printer.

**User-friendly and high compatibility,** The NAS equips 2 USB 2.0 ports for your USB storage devices and USB printer. You may also back-up files from your USB storage devices conveniently by pressing the "Backup" button.

**Hot swappable SATA tray module design,** The NAS provides 2 HDD drawers, which give you an extra hot-swappable function for immediate drive replacement and simplify maintenance.

### **Key Features**

Hard Disk

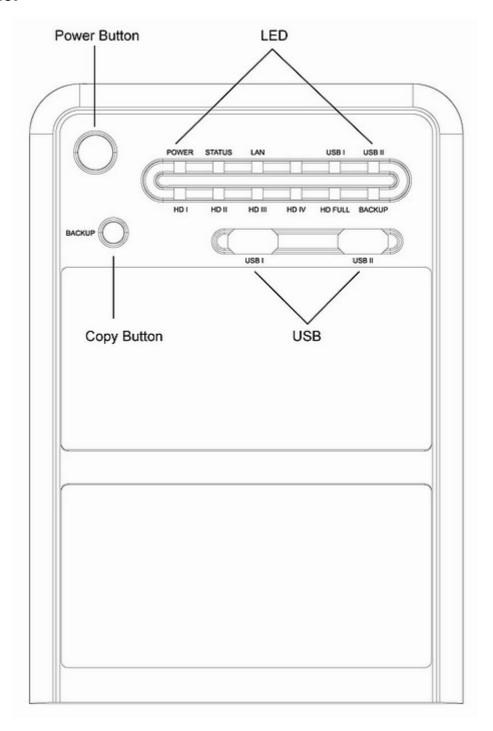
Supports CIFS/SMB for Windows, MAC, Linux, Supports 50 sets of user name and password which allows remote users to retrieve files easily using "My Neighborhood" WEB-based User Interface (UI) for easy Up to 100 folders can be created via the web configuration configuration Supports 4 removable 3.5" SATA HDD up to Provides EZ View Utility for user-friendly setup 2TB Embeds FTP server for FTP clients to transfer Supports fixed IP & DHCP client network files conveniently environment setting Supports USB memory stick (pen drive), USB Embeds BT (Bit Torrent) compatible P2P

software

- Embeds Web server for Web site construction
- Supports firmware update over the Graphic User Interface (GUI)
- Supports DDNS function
- Supports 32 concurrently connected users
- · Built-in Samba server
- Built-in auto power recovery capability

- Supports UPnP AV, iTunes server
- Compatible with Windows 95 /98 /98SE /ME /XP /2000 /NT4.0/Linux/ MAC OS /Vista
- Supports access management for 50 groups.
- Provides Password security for management & HD Access
- Supports hot-plug hard disk (RAID 1, 5)
- Complies with FCC, CE Class A certification

### **Front Panel**



### **Power Button**

To activate the device, press this Power button for two seconds after connecting the device to an appropriate power outlet with the provided power cord.

To power off, press and hold the button for five seconds.

### **Backup Button**

Press this button to copy files from USB port to the internal HD. A new folder will be created automatically in the **share** directory. This new folder is named according to the time you press this button.

**Note:** The Backup LED illuminates while data copying. Do not remove this device from USB port before the **Backup** LED turns off.

### **LEDs Definition**

LED	Status	
Power	Steady Blue	Power on
·	Off	Power off
Status	Amber	Device works normally
	Red	Device encounters an error
LAN	Steady Green	Valid Connection at 1000 Mbps
	Blinking Green	Data transmitting at 1000 Mbps
	Steady Amber	Valid Connection at 10/100 Mbps
	Blinking Amber	Data transmitting at 10/100 Mbps
USB I	Steady Green	Valid connection on USB I port
	Off	Invalid connection on USBI port
USB II	Steady Green	Valid connection on USB II port
	Off	Invalid connection on USBII port
HD I – HD IV	Steady Green	Valid connection on HD
	Blinking Green	HD working busily
	Off	Valid connection on HD
HD FULL	Steady Red	HD has run out of space
	Off	Space available on HDD
Backup	Steady Green	Data copying from USB to internal HD
	Off	Data copying finished

### **USB Port**

Connect this port with your USB Storage or printer devices.

### **Rear Panel**

### Reset to Default Button

Press and hold the Reset Default Button for four seconds to reset all configurations to factory default settings.

### Note:

- All configurations that are done by users will be removed from the device.
- The device also supports restoring factory default settings by software. To get instruction restoring factory default parameters, see <u>System > Config > Reset to Factory Default</u> on page 37.

### **LAN Port**

Connect the port with RJ-45 cable to your switch or IP sharing router.

**Note:** To get instruction connecting the device to your LAN, refer to <u>Making Connection with the Device</u> on page 12.

### **Power Adapter Socket**

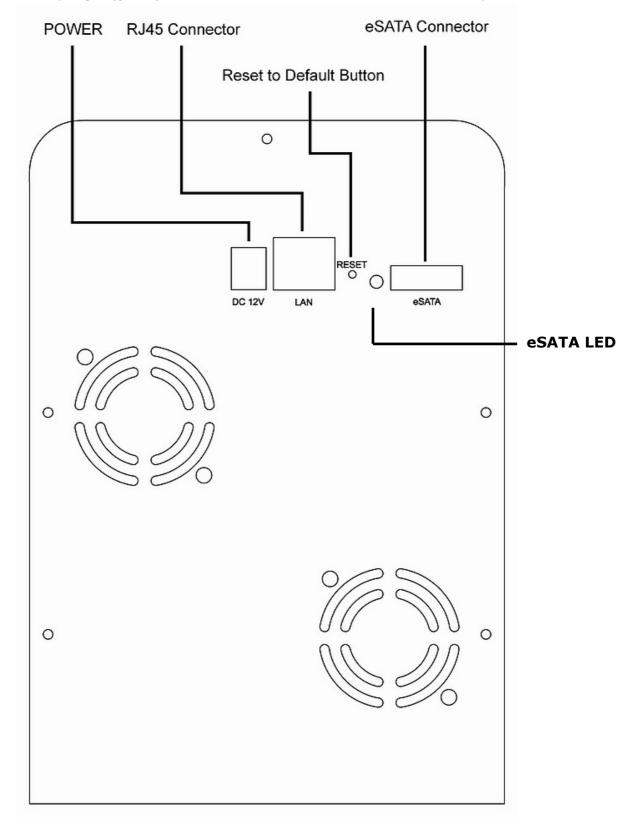
Connect the power supply cable to a power source.

### **eSATA Connector**

Connect this port with your eSATA device.

### eSATA LED

The LED stays light (green)/off means a valid/invalid connection on eSATA port.

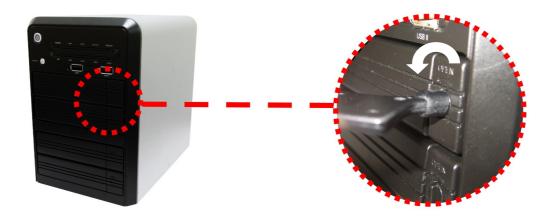


# Installation Guide

# **Hardware Installation**

### Install a hard disk drive for the device

1. Use the key in the package to open the slot button.



2. Draw out the hard disk drawer from the device.



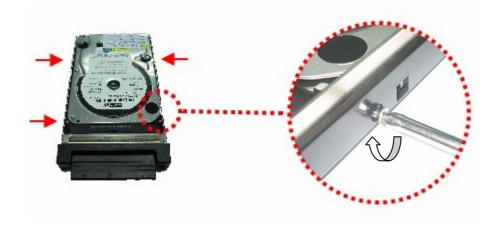
3. Take off the fixture from the drawer and prepare a SATA hard disk to install it on.



4. Place the SATA Hard Disk drive evenly on the hard disk drawer. The direction of the disk should be like the one in the following pictures.



5. Screw your SATA hard disk on the drawer with the included screws in the package.



6. Slide the Hard Drive to connect to the device.



7. Close the cover and use the key to turn the button clockwise to fasten it.



### Connect this device to your Local Area Network (LAN)

- 1. Connect one end of an RJ-45 cable to the LAN port on the device.
- 2. Connect the other end of the cable to your IP sharing router or switch.



### Connect your USB to this device

The device equips two USB ports that allow users to connect the device to a USB storage device.

1. Insert the USB Type A end of the cable to the device, the other end to your USB storage.



### Note:

- The Type A end of the USB cable is usually the end that connects to your computer.
- If you are connecting an external HD to the USB ports on the device, we recommend users to connect the power adapter of the external HD to supply efficient power for your external HD.
- 2. Insert the other end to your USB storage device.

### Connect this NAS with eSATA device

This NAS equips one eSATA port that allows users to connect your NAS with eSATA device. Please find the cable that came with your eSATA device. Insert one end of the cable to this NAS, the other end to the eSATA device.



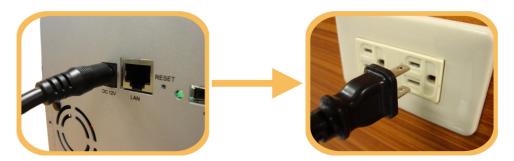
**Note:** You have to power on your eSATA device before powering on this NAS, or this NAS cannot detect your eSATA device.

### Power on the device

1. Connect the included power cord with the power adapter.



2. Connect the connector end to the device and the plug to an outlet.



3. Push the power button to power on.

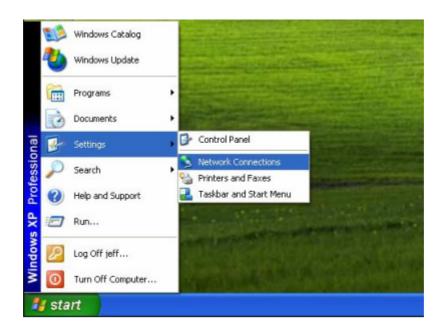


# **Making Connection with the Device**

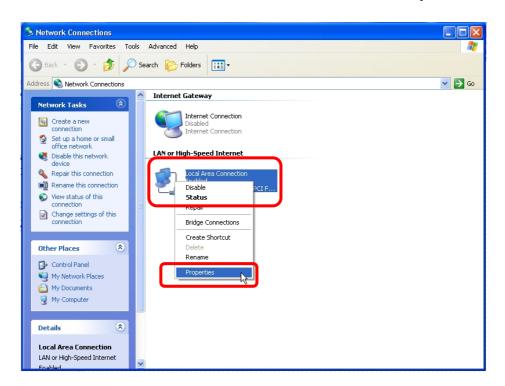
In order to communicate with this NAS, you have to configure the IP address of your computer to make it connectable with the device. Please do perform the following steps.

**Note:** The following TCP/IP configuration guide uses windows XP as the presumed operation system.

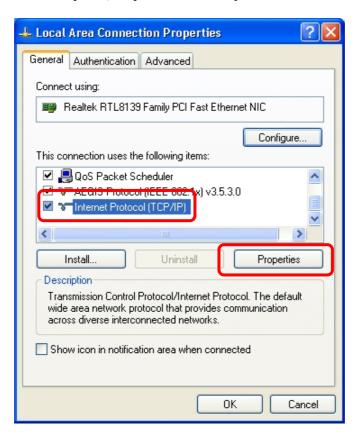
If you are in Classic Start menu view, click Start > Settings > Control Panel > Network
 Connections. If you are in Start menu view, click Start > Control Panel > Network
 Connections.



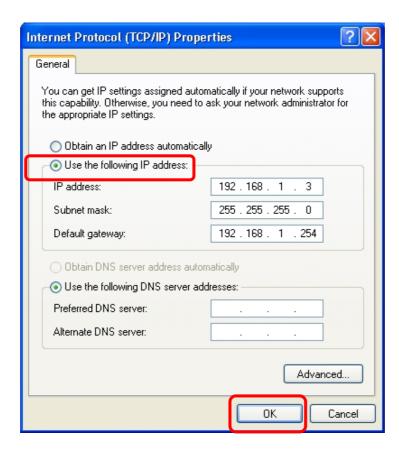
2. Right-click on Local Area Connection item and double-click on Properties.



3. Choose Internet Protocol (TCP/IP) and click Properties.



4. Choose **Use the following IP address** to specify IP addresses manually. Please click the **OK** button after your configuration.



#### Note:

1. The default network setting of the device:

**IP address:** 192.168.1.2 **Subnet Mask:** 255.255.255.0

**DHCP Client:** disable

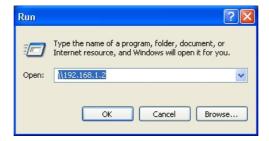
2. Please **DO NOT** choose "192.168.1.2" as the IP address. The IP address "192.168.1.2" has been set as the default IP for this device.

### To access the folders in the device

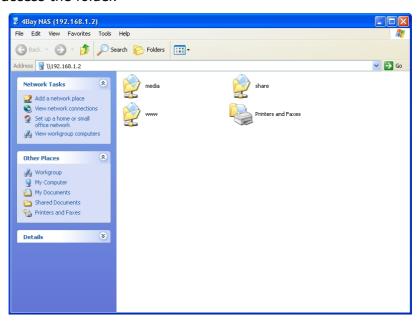
To open the folders connecting to the device:

1. Click **Start** > **Run** on your PC.

2. In the **Run** window, fill in \\4Bay-NAS or \\192.168.1.2



3. Click **OK** to access the folder.



### Note:

- 1. We provide one default username/ password as **admin/admin**.
- 2. As default, the **Share** folder is created automatically and it can be read/write by all users.
- 3. You can change the permission of users for access to each folder. To change their permission, please see <u>To Configure a Folder</u> on page 75.
- 4. To add or configure an account, please see <u>To Configure a User</u> on page 69.
- 5. Users would like to use another set of username/ password after getting accessed to any folder, please log off your operating system and log on again.

### **Software Installation**

### Installing the EZIP Backup

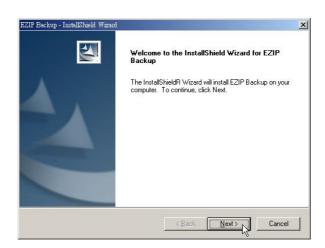
This EZIP Backup helps users to backup files on your computer to NAS. Please follow the instructions below to install the software.

1. Insert the CD-Rom that came with this product to your CD-Rom drive. The main menu pops up automatically. Click **EZ Backup** to start installation.



**Note:** If the auto-run program is not activated, please click on **My Computer** > **your CD-Rom Drive** then click the **autorun** icon to start the main menu. Or, you can enter the **EZIP Backup**folder and double click the icon to start installation.

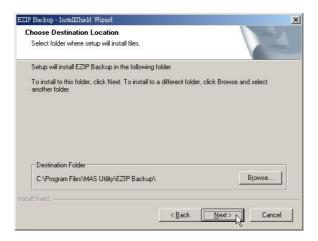
2. The welcome window pops up. Click **Next**.



Fill your User Name and Company name in their respective blanks.
 Select if you want this software to be used by anyone who uses this computer or yourself only.
 Click Next to proceed.



4. Choose the destination folder for this software and click **Next** to start installation. You may click **Browse** to change the location.



5. Click **Finish** to complete the software installation.



6. After successful installation, the shortcut shows on your windows desktop.

**Note:** For instructions using the software, please refer to <u>Appendix > Using EZIP Backup to backup your files</u> on page 84.

# **EZ View Utility**

Read this chapter to understand the EZ View utility of the device and how to use it.

# Introduction

For users to launch the device more easily, we provided the convenient EZ View software. It is user-friendly, easy to view and getting started. The following paragraphs are divided into two parts: the first part introduces the EZ View utility, which gives you a general idea of EZ View framework; the second part teaches you how to connect this device with EZ View to make a basic configuration.

### **Getting Started**

1. Insert the CD-Rom that came with this product to your CD-Rom drive. The main menu pops up automatically. Click **EZView** to run EZ View utility.



**Note:** If the auto-run program is not activated, please click on **My Computer** > **your CD-Rom Drive** then click the **autorun** icon to start the main menu. Or, you can enter the **EZ View** folder

and double click the icon to run EZ View utility.

◆Main page - In main page, you can select Multimedia to scan <u>networks PVR</u> on your LAN, select Network to scan <u>router or switch</u>, select NAS to scan <u>network storage device</u>, or select All to scan all of the <u>network PVR</u>, <u>router or switch and NAS</u> on your LAN. You can also click on the icon to exit the program.

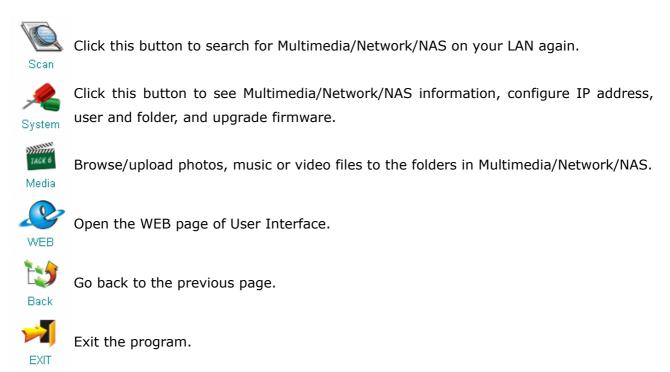


- ◆ Device list page After scanning, the page shows the connection status of the Multimedia /Network/NAS on your LAN. You should notice that:
  - Without a connected PVR / Router or AP / NAS, you cannot use **Media** and **WEB** buttons on the EZ View.
  - Even with a connected PVR / Router or AP / NAS, you cannot use **Media** button if the Multimedia/Network/NAS has no hard disk in it.

You can also see the accessible information in **System** to know whether you can connect to the device or not.

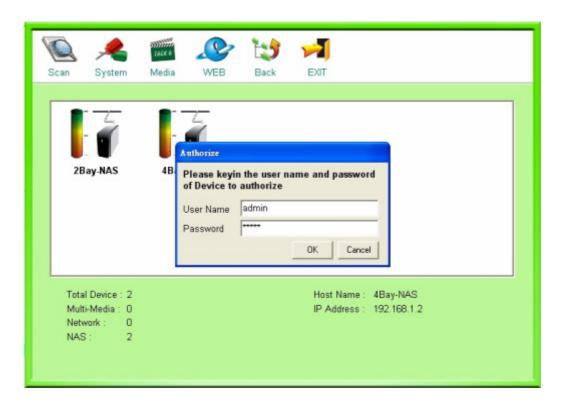


### **Buttons on EZ View device list page**



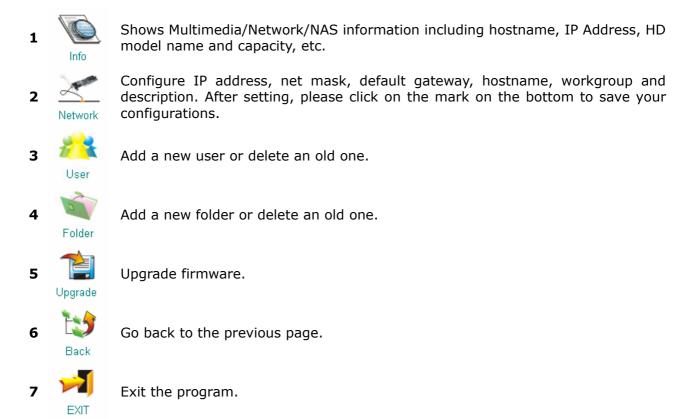


◆ System **System page** – After clicking on System button, an authentication window pops up. Fill in the user name and password to enter the Info page.



You may click on each button on this page to do different configurations.

### **Buttons on EZ View system page**



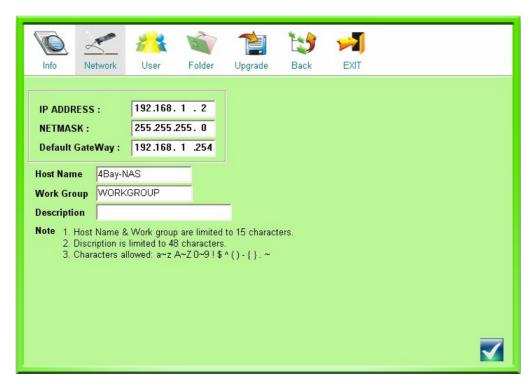


1. Info page – This page shows Multimedia/Network/NAS information including hostname, IP Address, HD model name and capacity, etc.





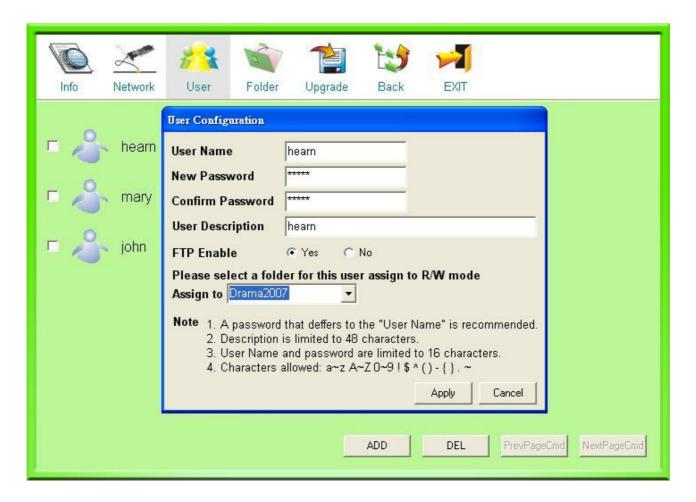
2. **Network Page** – You can configure IP address, net mask, default gateway, hostname, workgroup and description in this page. After setting, please click on the check mark on the bottom to save your configurations.





3. User page – You can add a new user or delete an old one on this page. After clicking on the ADD button, the User Configuration window pops up. Fill in the blanks and click on Apply to add a new user. To delete a user, click on the checkbox and then click on DEL button.

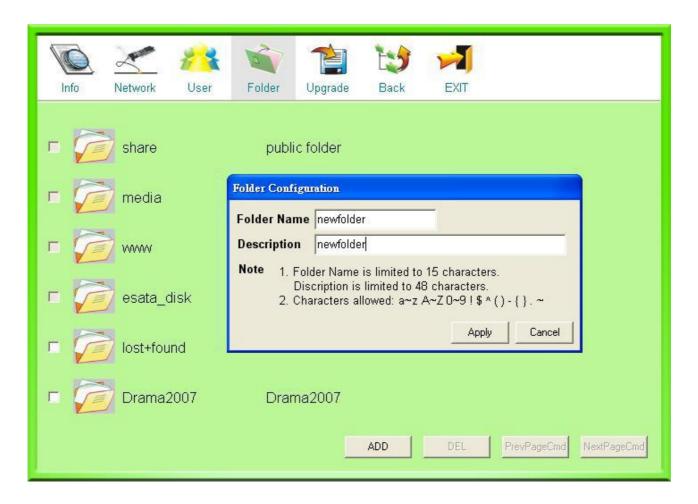
**Note:** You can also add or delete users from the graphic user interface. For more information, please refer to <u>Management Guide > Account > User configuration</u> on page 67.





4. Folder **Folder page** –You can add a new folder or delete an old one on this page. After clicking on the **ADD** button, the **Folder Configuration** window pops up. Fill in the blanks and click on **Apply** to add a new folder. To delete a folder, click on the checkbox and then click on **DEL** button.

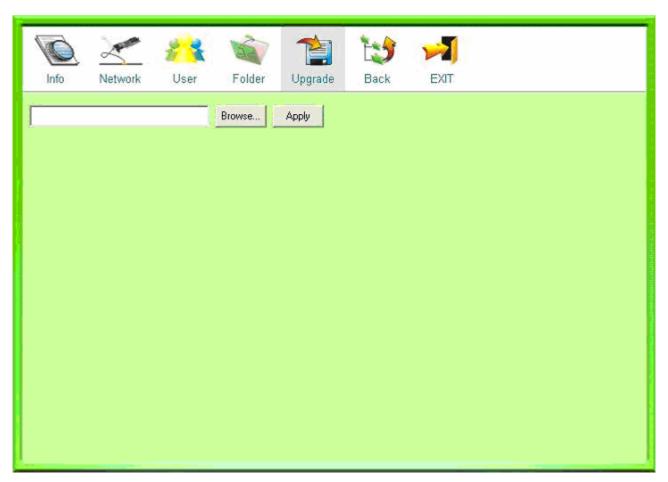
**Note:** You can also add or delete folders from the graphic user interface. For more information, please refer to <u>Management Guide > Account > Folder configuration</u> on page 73.





- 5. Upgrade **upgrade page** You can upgrade the firmware for your device on this page. Please follow the instructions below.
  - a. Insert the included CD and click the Browse button. (**Note:** The main menu may auto run. Click **EXIT** to close it.)
  - b. Select your CD-Rom drive. Double click on the **fwextension** folder.
  - c. Select the **ntx\_fwext.tgz** file and click **Open** to browse the file.
  - d. Click **Apply** to perform installation. It takes a few seconds to perform installing, please wait upon installation.

**Note:** You can also upgrade the firmware from the WEB page of this device. For more information, please refer to <a href="Management Guide">Management Guide</a> <a href="System">System</a> <a href="Firmware upgrade">Firmware upgrade</a> on page 38.





6. Back **Back button** – Click on this button to go back to the main page.



7. **EXIT Exit button** – Click on this button to exit the program.



### ♦ Media page –

EZ View Utility supports most popular video, image, and audio formats:

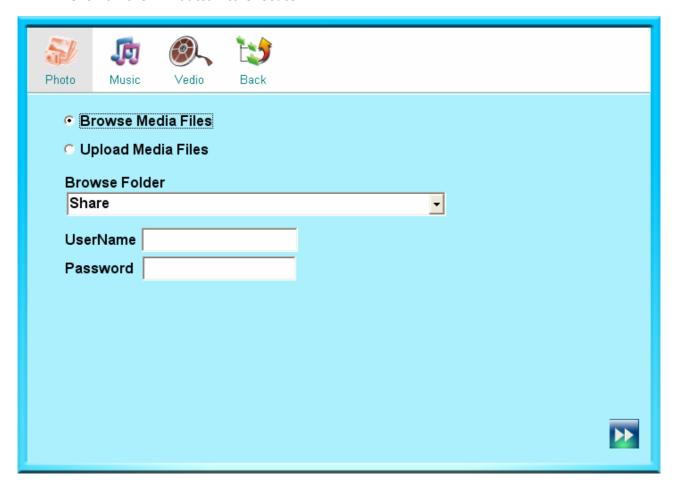
Video: AVI, MPG, VOB, DAT, DIVX, MPEG

Image: JPG, JPEG, BMP Audio: MP3, WMA, ASF

In this page, you may browse and upload multimedia files in the folders of Multimedia/Network/NAS. Please refer to the following descriptions for more information.

#### **Browse Files:**

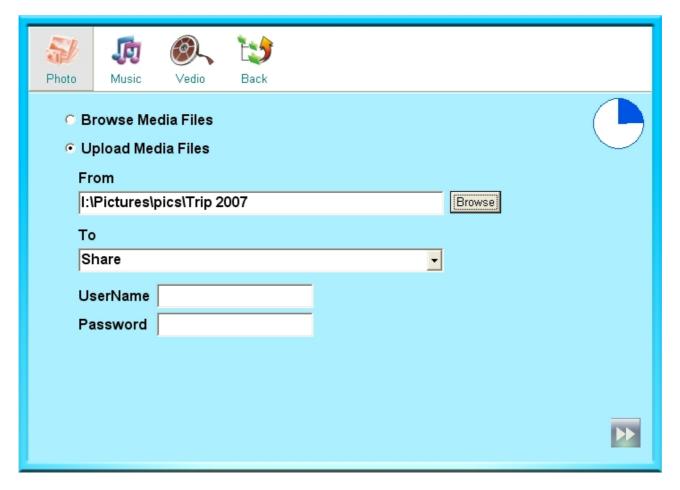
- 1. Select and click on Photo, Music, or Video buttons of your demand.
- 2. Select the folder you wish to browse from the **Browse Folder** drop-down list.
- 3. Enter the username and password to enter the folder with login authentication.
- 4. Click on the button to execute.



### **Upload Files:**

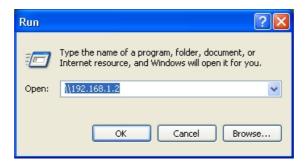
### A. Upload multimedia files by EZ View utility

- 1. Select and click on Photo, Music, or Video buttons.
- 2. Click **Browse** button to browse the files or folders you wish to upload to the device.
- 3. Select the folder you wish to upload from the drop-down list.
- 4. Enter the username and password to login to the folder with authentication.
- 5. Click on the button to execute.

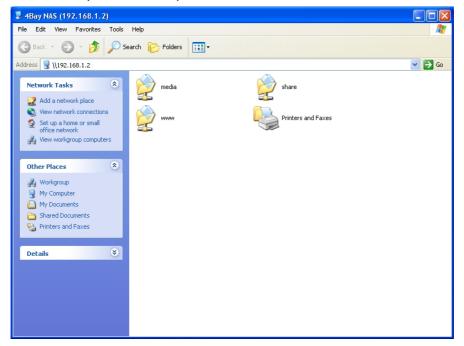


### B. Upload multimedia files to folders directly

- 1. Click **Start** > **Run** on your PC.
- 2. Fill in the IP address of the Multimedia/Network/NAS and then click **OK** to access the folder.



3. Select the folder you wish to upload.



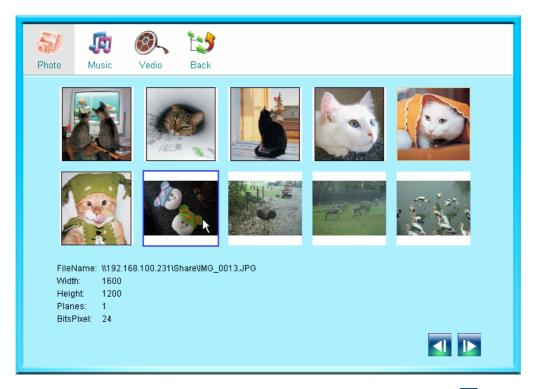
4. Enter the username and password to login to the folder with authentication.



5. Drag the files or folders to the folder directly. Please wait patiently when it is generating thumbnails for images during uploading.



◆ Photo page – This page shows the thumbnails of the <u>available</u> image files. Click on each thumbnail to get detailed information including file name, width, height, planes, and bits pixel of the photo, which shows on the bottom. Use ■ and ▶ buttons to browse pages backwards and forwards.

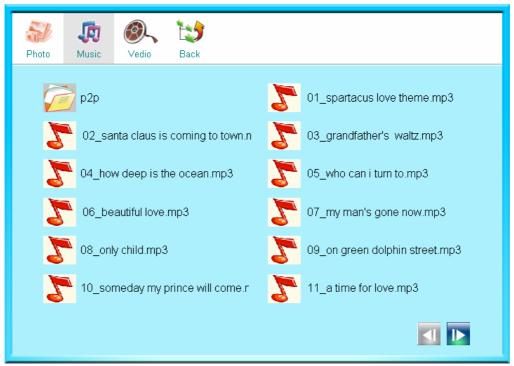


Double click on the thumbnail to see a larger version of the photo. Use and buttons to browse the previous file or the next one. Click on to start auto play and to stop. The button brings you back to the thumbnail page.



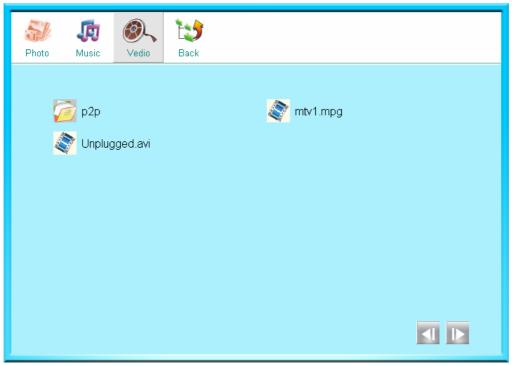


♦ Music page - This page shows the list of the <u>available</u> audio files. Use and buttons to browse pages backwards and forwards. Double click on the list to play music. It uses the default music-playing software of your PC to play the audio files.





♦ Vedio Video page - This page shows the list of the <u>available</u> video files. Use and buttons to browse pages backwards and forwards. Double click on the list to play video. It uses the default video-playing software of your PC to play the video files.



### Connecting the device with EZ View

1. Insert the CD-Rom that came with this product to your CD-Rom drive. On the auto-run main menu, click on **EZView**. Or, in the EZ View folder, double click the pops up.



2. Select **NAS** on EZ View and it starts to scan NAS on your LAN.



 After scanning, the menu shows the NAS on your LAN. You may click the scan button to search for NAS on your LAN again.

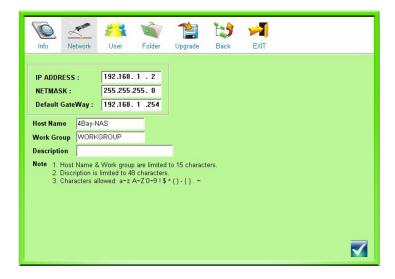
**Note:** EZ View cannot detect the hard drive of this NAS if your hard drive is not formatted as EXT3 format. It shows no capacity on this window.



4. In device list page, click on **System** button, an authentication window pops up. Fill in the user name and password to enter the Info page. The default user name and password is admin/admin.



5. Click on **Network** button and fill in IP address for the NAS you wish to configure. Enter the hostname, workgroup and description. On the bottom, click the check mark to execute your setting.



- 6. After successful IP address setting, you may
  - ullet Click the  $oldsymbol{\mathsf{Media}}$  button to access the folders in the NAS or
  - Click the **WEB** button to open the GUI interface. In authentication window, fill in the username and password.



**Note:** To get instructions using the GUI, please see <u>Using the Graphic User Interface (GUI)</u> in the following chapter.

# **Management Guide**

Read this chapter to understand the management interface of the device and how to manage the device.

## Starting the Graphic User Interface (GUI)

The Graphic User Interface (GUI) is the management interface of this device. Most parameters and settings are configured over the GUI. There are two ways to access the GUI in the device: from your web browser, or, from EZ View utility:

**To access GUI from your web browser:** Open your web browser and fill in \\\4Bay-NAS or \\\192.168.1.2 in the address bar and press ENTER.

### To access GUI from EZ View utility:

Click on **EZView** on the auto-run main menu, or, double click the icon in CD to start the EZ View. The EZ View window pops up. Select your NAS and click the **WEB** button.

Fill in the username and password. Click **OK** to open the GUI interface.



#### Note:

- The default IP address of the device is 192.168.1.2.
- The default user name and password is admin/ admin. To change the password, please refer to <a href="System-Login Configuration">System-Login Configuration</a> on page 36.
- The password is case sensitive and alphanumeric.

# **Using the Graphic User Interface (GUI)**

This section provides an introduction to the GUI.

### **Understanding the GUI**

The GUI is consisted of the following components,

- 1. Configuration categories: Located on the left side of each page. Lists the configuration categories on this device. To get access to each category, click on the button that you are going to configure.
- **2. Configuration items:** Located on the right side of each page. Shows the items that can be configured. You can click on the tabs that listed above to access to each sub-categories.

**Note:** For detail information about configuring each item, please refer to the management instruction for each configuration category.



# **Management items list**

The following table lists the information and items that you can configure with the GUI. For detail instruction, please refer to the corresponding chapters.

Category	Sub-category	Information
Status	Status	Shows the status information of this device including Host name, IP address, system up time, firmware version, HD used percentage, RAID mode, current Samba users and FTP users, and firmware extension loaded status.
System	Login Config Reboot Shutdown Firmware Upgrade HD Sleep Time	To change password. To backup, reload or default configuration status. To restart the system. To turn off the system. To upgrade firmware and firmware extension. To set up the HD sleep mode with time regulation from 10 minutes to 4 hours. To set up the system time zone, synchronize time and assign a timeserver for the device.
Network	Hostname	To change the host name, work group name, and description of the device.
	IP address  Alert  DDNS (Dynamic Domain Name Service)	To configure the network settings for the device including IP address, Subnet Mask, Gateway, DNS server, DHCP client enable/ disable and Jumbo mode selecting.  To configure sender and receiver addresses to receive alert information from this device via MSN.  To enable/ disable DDNS configuration.
Services	FTP server (Files Transfer Protocol) UPnP AV (Universal Plug and Play) iTunes P2P (Peer-to-Peer)  Printer MySQL (Structured Query Language) Photo gallery	Change FTP Port number, and enable/disable FTP configuration and anonymous access. To enable/disable UPnP AV configuration.  To enable/disable iTunes configuration. Change P2P properties including upload/download limitation and enable/disable P2P configuration. To enable/disable printer configuration. To enable/disable MySQL database configuration. To manage photo gallery.
Account	User Group	To add a new user, delete a user, setup user permission and change user properties.  To make users in groups. Add users to groups or delete
	Folder	users from groups.  To add a new folder, delete a folder, change folder-access authentication and set up folder properties.
RAID	RAID setup	To setup the HD RAID properties of Linear and RAID 0,1,5 modes.
USB/eSAT	<b>A</b> USB / eSATA setup	To remove or format the USB / eSATA devices that connected to the device and shows the USB / eSATA information.

### **Status**

The Status page shows the following information of the device. To open the Status page, click the **Status** on the configuration categories list.



Items	Information
Host name	The identification of this device.
IP address	The IP address of the device.
Up time	The estimate time that you power the device on.
Version	The firmware version of the device.
H.D. used (%)	The usage percentage of HD (Total amount of HD).
RAID mode	The RAID mode of HD.
Samba Users	The number of members who is currently connected to the Samba server.
FTP Users	The number of members who is currently connected to the FTP client.
Firmware	Check if the extension firmware is installed.
extensions loaded	

**Note:** This page shows the device information only. To do more configurations for each item, please refer to the instruction respectively in the corresponding chapters.

# **System**



The System page allows users to:

- 1. Configure passwords.
- 2. Backup, reload and default configuration status.
- 3. Reboot and shutdown the device.
- 4. Upgrade firmware and load firmware extension.
- 5. Set up HD sleeping mode.
- 6. Synchronize system time.

To open the System page, click **System** on the configuration categories list.

# Login

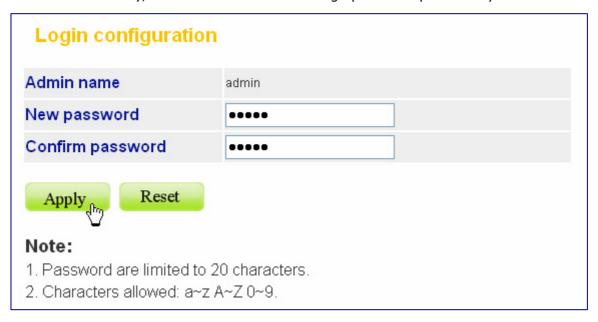
This page provides password configuration, which is used for getting access to the Graphic User Interface.

To set up password:

- 1. Define a new password (limited to 20 characters) in the **New password** box.
- 2. Fill in the newly defined password (limited to 20 characters) in the **Confirm password** box.
- 3. Click **Apply** to execute.

#### Note:

- The default Administrator Name and password are admin/ admin.
- The password is case-sensitive and alphanumeric.
- To enforce the security, it is recommended to change password periodically.



# Config

The Config page allows users to backup and download the configuration status of the device or restore the factory default configuration.

## • Backup the device configuration status:

- 1. Click the **Download** button.
- 2. The File Download dialogue window pops up, click **Save**.
- 3. Specify a folder to place the downloaded data and click **Save**.
- 4. Click **Close** to complete.

## Restore the device configuration status:

1. Please store the file that you backup to /share/ folder.

**Note:** To know how to backup the configuration status, see <u>Backup the Device Configuration Status</u> above.

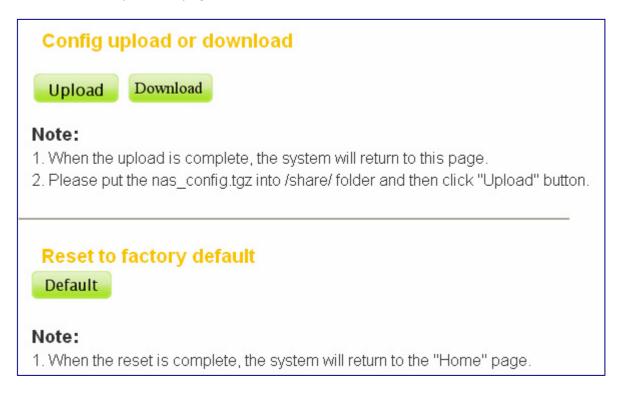
- 2. Click **Upload** to execute.
- 3. The system restarts automatically to restore your later configuration.

## Reset to factory default:

To restore the factory default configuration for the device, click the **Default** button to execute.

#### Note:

- All the user-defined configurations will be erased and replaced by factory default settings.
- We recommend users to backup the configuration status before restoring factory default. To get more information for backup your configuration, see <a href="Backup the Device Configuration">Backup the Device Configuration</a> <a href="Status">Status</a> on the top of this page.



#### Reboot

The Reboot page allows users to reboot the system. To perform system rebooting, click **Reboot**.

**Note:** While rebooting the system, it may take several minutes. Please wait and ensure a safe operating environment.



#### **Shutdown**

The Shutdown page allows users to shutdown the device. To turn off the device, click Shutdown and wait the device to turn off automatically.

**Note:** Before turning off the device, please close all client applications that are running.



# Firmware upgrade

The Firmware upgrade page allows users to upgrade the firmware and load the firmware extension.

## Firmware upgrade:

To upgrade the firmware, click **Upgrade** to perform firmware upgrade.

#### Note:

- To get new firmware of the device, please contact your distributor.
- Please put the firmware updated file into /share/fwupdate folder.

#### **Firmware extension loaded:**

To enable the FTP, UPnP, iTunes, P2P, MySQL and Photo gallery functions for the device, you have to install the **ntx\_fwext.tgz** file to the device before any configuration.

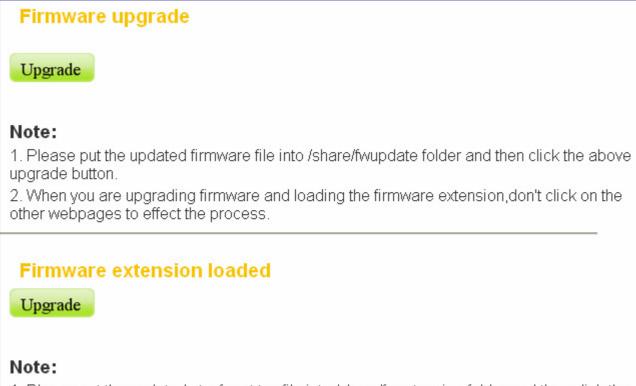
To install the file,

1. Insert the included CD and click the **Browse** button.

Note: The main menu may auto run. Click **EXIT** to close it.

- 2. Select your CD-Rom drive. Double click on the **fwextension** folder. Select the **ntx\_fwext.tgz** file and click **Open** to browse the file.
- 3. Click **Apply** to perform installation. It takes a few seconds to perform installing, please wait upon installation.

**Note:** Please put the ntx\_fwext.tgz into /share/fwextension folder.



- 1. Please put the updated ntx\_fwext.tgz file into /share/fwextension folder and then click the above upgrade button.
- 2. When you are upgrading firmware and loading the firmware extension, don't click on the other webpages to effect the process.

# **HD Sleep**

The HD Sleep page provides function of HD sleep mode with time regulation from 10 minutes to 4 hours, which stops the device temporarily while there is no operating on the device for a certain period of time. To enable HD Sleep, click on the drop list to specify a time and click **Apply** to execute.

**Note:** The hard drive will shut down automatically if there are no clients connected.



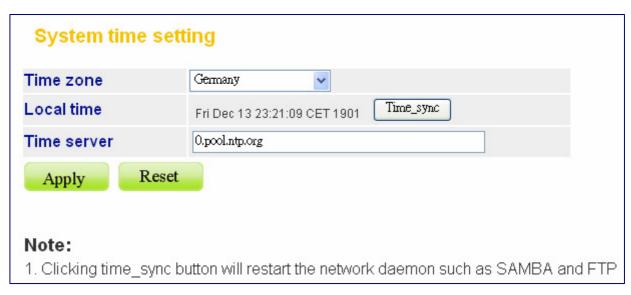
### **Time**

The Time page provides time synchronizing function. You can synchronize the system time by applying the time on your computer to the device or by connecting to a timeserver on the Internet.

To configure the device time,

- 1. Select the time zone that corresponds to your region from the **Time Zone** drop list.
- 2. To apply the time on your computer to the device, click on **Time Sync** button.
- 3. To synchronize the time from a timeserver, fill in a timeserver DNS address in the **Time**Server box and click **Apply** to execute.

**Note:** the synchronized time will be applied by next reboot. To reboot the device, please see **Reboot**.



# **Network**

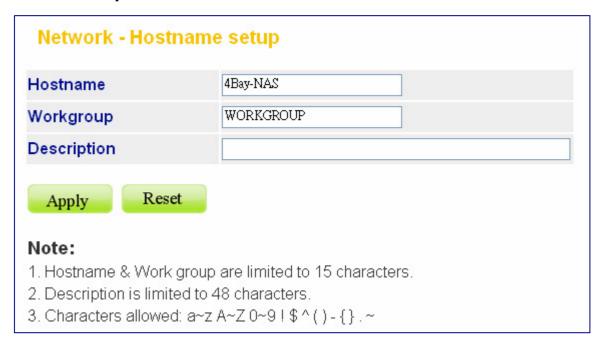


The Network page allows users to:

- 1. Configure general device information,
- 2. Configure the network setting for the device,
- 3. Configure MSN alert information.

To open the Network page, click **Network** on the configuration categories list.

# Hostname setup

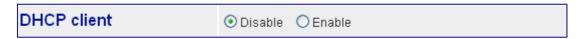


Items	Information
,	Defines the user-defined device name.
<b>Workgroup</b> (limited to 15 characters)	Defines the workgroup name for the device,
	which is going to be shown on "Network
	Neighborhood".
<b>Description</b> (limited to 48 characters)	Defines a note for the device.

# IP address setup

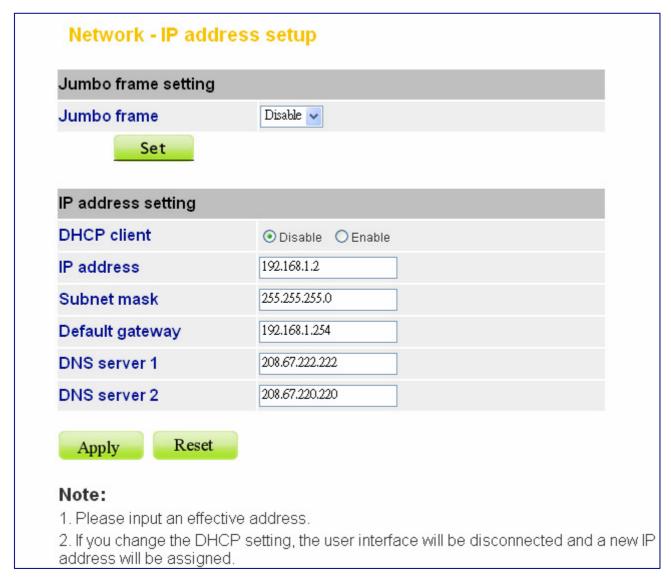
#### To enable DHCP client

Select **Enable** to enact this device as a DHCP client or select **Disable** to disqualify.



## To configure the IP address for the device

The IP Address Setting contains parameters of the device network setting. To modify, fill in each blank and click **Apply** to execute.



Items	Information
Jumbo frame	To enable/disable jumbo frame.
DHCP client	To enable/disable DHCP client.
IP address	Specifies the device IP.
Subnet mask	Defines the Subnet Mask.
Default gateway	Defines the default gateway.
DNS server 1/2	Defines the DNS server.

#### Jumbo mode

The device supports Jumbo frame for obtaining a more efficient network. You may choose 4000, 7000 or 9000 as the size of a packet.

To enable Jumbo mode, choose a frame size from the drop-down list and click **Set** to execute.



#### **Alert**

The MSN (Messenger) Alert page allows you to have the device automatically send an instant alert message if any of the following conditions or situations occurs:

- Drive Inserted
- Building RAID mode start
- Building RAID mode fail
- Insufficient RAID capacity

- Drive Unplugged
- Building RAID mode complete
- RAID mode change

To enable function of MSN Alert of this device, you have to:

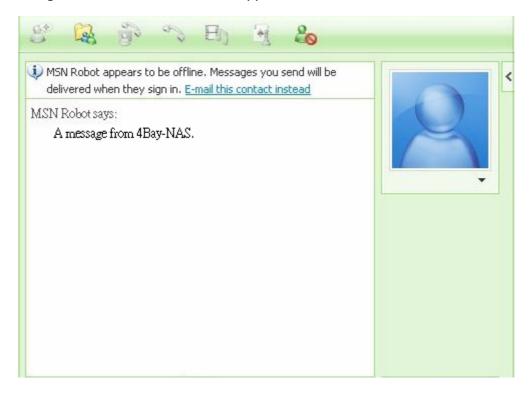
- 1. Install MSN messenger on your PC. (To download MSN messenger and apply MSN IDs and passwords, please go to <a href="http://www.msn.com/">http://www.msn.com/</a>).
- 2. Apply an MSN ID and password for the device.
- 3. Apply another MSN ID and password for yourself (If you already have one, please skip this step).
- 4. Add contacts of each other on the MSN contact list.

To set up MSN Alert,

- 1. Fill in the MSN ID and password you get for this device in the relevant blanks. Fill in another MSN ID for the receiver.
- 2. Click **Apply** to execute MSN Alert function.



3. Click **Test** to check whether you can receive a test message sent by the device via MSN. The alert message received from the device appears similar to the illustration shown below:

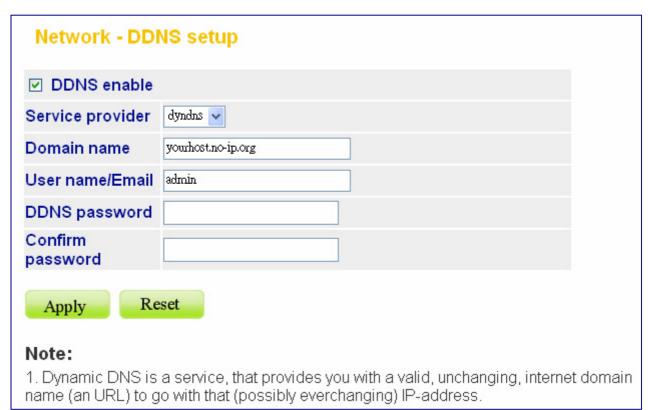


#### Note:

- If you cannot receive any test message after clicking the **Test** button, you might have typed in the wrong address or password, please retype them in the relevant boxes and test again. Please ensure both of sender and receiver have been added on the MSN contact list of each other and you are on the MSN line.
- The actual appearance of this message will vary depending on the type of MSN client software that you are using on your computer system.

#### **DDNS**

To set up a server on the Internet and enable users to access it easily, a fixed and easy-to-remember hostname is often required. DDNS (Dynamic Domain Name Server) service allows an Internet domain name to be assigned to devices with a varying (dynamic) IP addresses. When the user tries to connect this device via the hostname, DDNS will transfer the recorded IP address to the NAS. To setup the DDNS service properties, please refer to the following definitions and click **Apply** to execute your settings.



Items	Information
DDNS enable Service provider	To enable/ disable DDNS service. Click to mark or clear the check box. The website that provides DDNS service. Please select noip / dyndns from the drop list.
Domain name User name / Email	The hostname that you have applied for the device.  DDNS login account. For DynDNS users please fill in your user name; for No-IP users please fill in your Email address.
DDNS password Confirm password	The password of your DDNS service account. Retype the password to confirm.

**Note:** If you do not have an account of No-IP or DynDNS,

- 1. Please go to <a href="http://www.dyndns.com">http://www.dyndns.com</a> and register a free account.
- 2. Log into No-IP / DynDNS Website and create a new hostname for the device.
- 3. After applying, please go back to the DDNS page of this device and complete the remaining configuration.

## **Services**



The Service page allows users to:

- 1. Configure FTP settings.
- 2. To enable or disable UPnP AV and iTunes configuration.
- 3. Configure P2P settings.
- 4. Configure printer settings.
- 5. Manage MySQL database and photo gallery.
- 6. Upload/download files with this device.

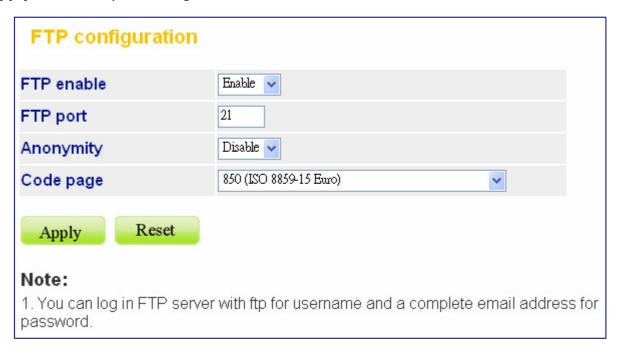
To open the Option page, click **Service** on the configuration categories list.

**Note:** Services may not be available if:

- HD is not installed. Please install HD and build RAID disk.
- HD is unable to use. Please build RAID disk.
- Firmware extensions are not installed.

#### **FTP** server

The device embeds an FTP server (Files Transfer Protocol) that allows users to access this device by FTP client. To setup the FTP server properties, please refer to the following definitions and click **Apply** to execute your settings.



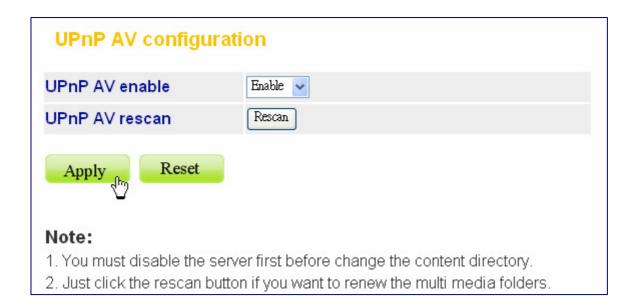
Items	Information
FTP enable	Select Enable or Disable to enact FTP server function or not.
FTP port	The port number of the FTP server. Please fill in a number from 1 to 65535.
Anonymity	Allow FTP clients to connect with the device without username/ password authentication.
Code page	Select a code that fits your computer.

#### Note:

- a. Please DO NOT use the number 80 and 8080 as the **FTP port**. As default, port 80 and 8080 are the Administration Port/Apache for the device.
- b. FTP service may not be available if:
  - HD is not installed. Please install HD and build RAID disk.
  - HD is unable to use. Please build RAID disk.
  - Firmware extensions are not installed.

#### **UPnP AV**

The UPnP AV (Universal Plug and Play) service allows users to play multimedia files through UPnP AV client software on UPnP AV server. To enable/disable UPnP AV server, please select **Enable/Disable** in **UPnP AV enable** drop-down list and click **Apply** to execute. Click on **Rescan** button to rescan the multimedia file in the media folder of this device, which will be shown on the UPnP AV client software list later.



#### After enabling the UPnP,

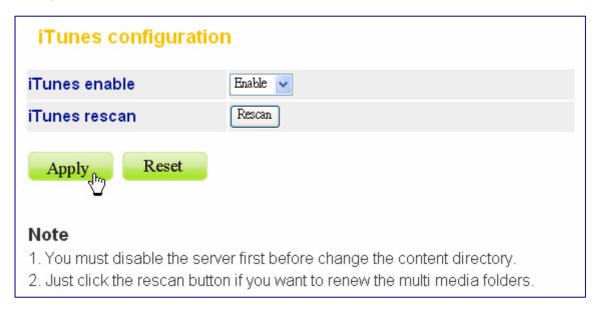
- Users of Windows XP will see a small computer icon showing in the notification area at the lower-right corner of the screen automatically. Right-click the icon to access to the GUI interface directly.
- Users that have no icon shows on your screen, please click My Computer> My Network
   Places> Show icons for networked UPnP devices to show UPnP devices. You will see the
   4Bay NAS computer icon shows under Local Area Network. Double click on the icon to
   confirm that your UPnP has executed normally.

Note: UPnP AV service may not be available if:

- HD is not installed. Please install HD and build RAID disk.
- HD is unable to use. Please build RAID disk.
- Firmware extensions are not installed.

#### **iTunes**

The iTunes service allows users to play audio files through iTunes client software on iTunes server. To enable/disable iTunes server, please select **Enable/Disable** in **iTunes enable** drop-down list and click **Apply** to execute. Click on **Rescan** button to rescan the audio file in the media folder of this device, which will be shown on the iTune client software list later.



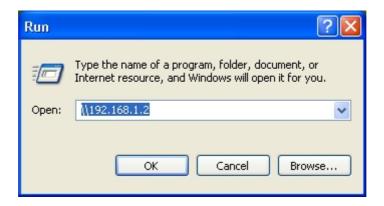
**Note:** iTunes service may not be available if:

- HD is not installed. Please install HD and build RAID disk.
- HD is unable to use. Please build RAID disk.
- Firmware extensions are not installed.

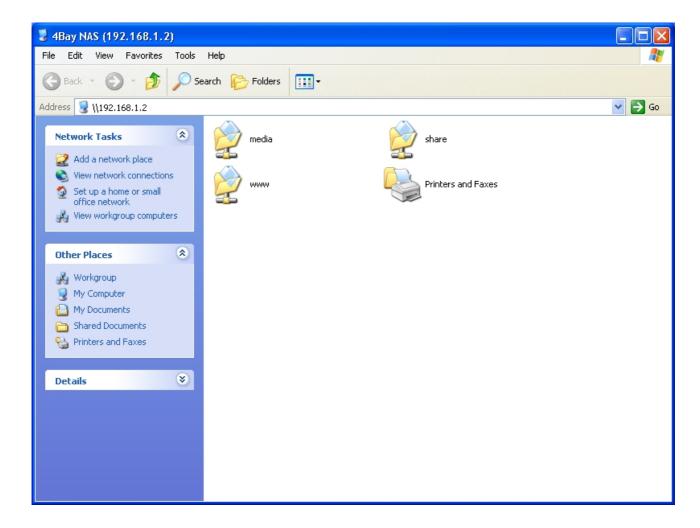
## To Share Multimedia Files with UPnP AV and iTunes Clients

To share your multimedia files with other clients in this device, you have to put files into the media folder first. Please perform the following steps:

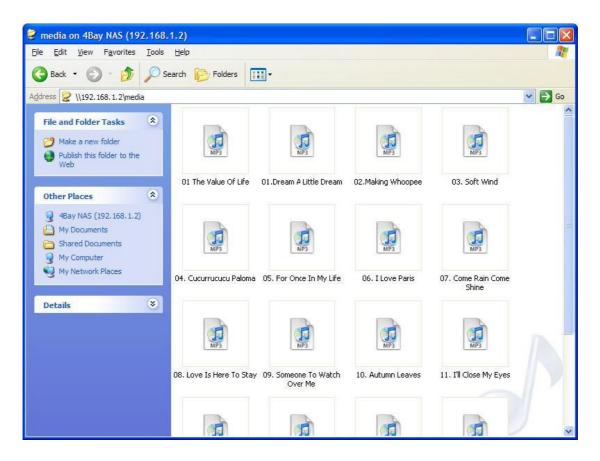
- 1. Click **Start>Run** on your PC.
- 2. Enter the IP Address then click **OK** to access the folders.



3. Click on the media folder icon to open the folder.



4. Put multimedia files that you want to share here.



5. Open UPnP AV or iTunes to check your sharing.



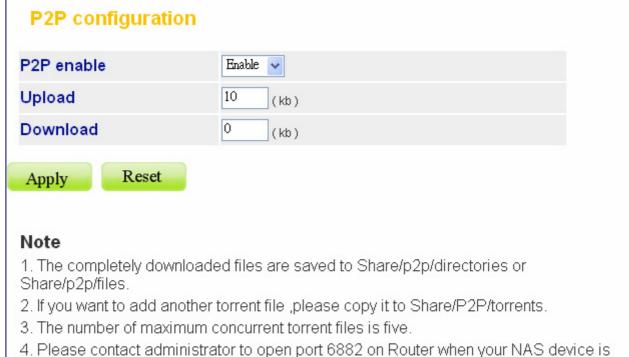
**Note:** You can download the latest iTunes software from official Apple website <a href="http://www.apple.com">http://www.apple.com</a>.

#### P<sub>2</sub>P

The device embeds P2P server (Peer-to-Peer), which supports BitTorrent downloading client to download file automatically. Please setup the P2P configuration and click **Apply** to execute P2P first, and then follow the process step by step to start downloading file from it.

#### Note:

- Number 0 equals to unlimited.
- The recommended upload and download speed are 10/0 KB per second.



1: 1 load contact danimion ator to open port ocoz on reador milen year 14710 device is
located behind firewall.
5. If the root of chaco is under 200M butos, D2D program will stop downloading files

- 5. If the rest of space is under 200M bytes ,P2P program will stop downloading files from Internet.
- 6. You are intended to know the status of downloading files from torrent network, please enter http://192.168.1.2:4080 to check out.

Items	Information
P2P enable	Select Enable or Disable to enact P2P function or not.
Upload	The maximum upload speed.
Download	The maximum download speed.

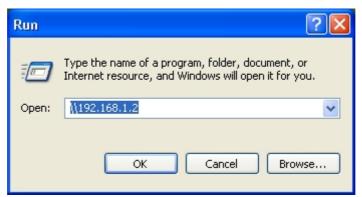
#### Note:

- a. If your NAS device is located behind firewall, please contact administrator to open port 6882 for BT user, or port 4662 (TCP) and port 4662+4(UDP) for emule user.
- b. To check out download status, please go to http:// (your IP address): 4080
- c. P2P service may not be available if:
  - HD is not installed. Please install HD and build RAID disk.
  - HD is unable to use. Please build RAID disk.
  - Firmware extensions are not installed.

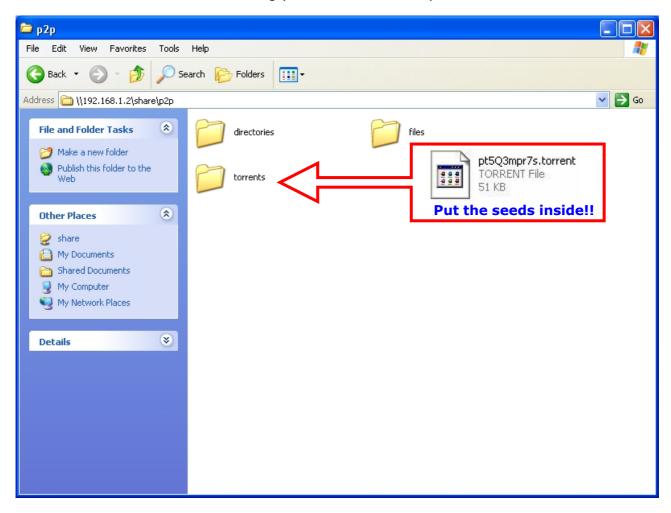
# How to start downloading files from P2P

To start downloading files from P2P,

- 1. Click **Start>Run** on your PC.
- 2. Enter the IP Address then click **OK** to access the folders.



- 3. Click **share** folder> **p2p** folder and you will see three sub-folders inside p2p folder.
- 4. Get a \*.torrent file for downloading your demand file and place it under the **torrents** folder.



5. The downloading starts automatically.



6. The completely downloaded <u>files with a folder</u> will be saved in **directories** folder, the <u>single</u> <u>file</u> will be saved in **files** folder.

#### Warning:

All users of this device are warned against illegal downloading of copyrighted materials. The P2P embedded functionality is provided for downloading authorized files only. Downloading or distributing of unauthorized materials may result in severe civil and criminal penalty. Users of this device are subject to the restrictions of the copyright laws and should accept all the consequences.

#### **Printer**

The printer page allows users to enable/disable printer configuration.

## Procedures to setup the printer

**Note:** The device supports one connected USB printer only. Printer Connections on both the USB ports may not led the printer functional.

- 1. Connect the USB cable of your printer to the device. Power on your printer.
- 2. Open the GUI and select System > Printer. Install the firmware extension file to the device.

Note: Printer service may not be available if:

- HD is not installed. Please install HD and build RAID disk.
- HD is unable to use. Please build RAID disk.
- Firmware extensions are not installed.

To create RAID disk, please refer to <u>RAID</u> on page 78; to install firmware extensions, please refer to <u>Firmware Upgrade > Firmware extension loaded</u> on page 38.

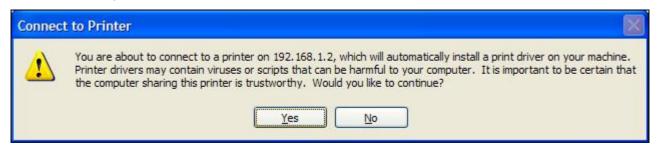
3. Open the Printer page; you can see the information of your printer.



4. Select **Enable** in the drop-down list and click **Apply**.

**Note:** After finishing the four steps above, the printer server function is activated. To setup the computers that are going to use the printer, please follow the instructions from step 5.

- 5. Click **Start>Run** on your PC. Enter the IP address then click **OK** to access the folder of this device.
- 6. You can find a printer icon. Double click on this icon to proceed.
- 7. The system asks for installing the driver for the printer. Click **Yes** on the warning dialogue windows to proceed.

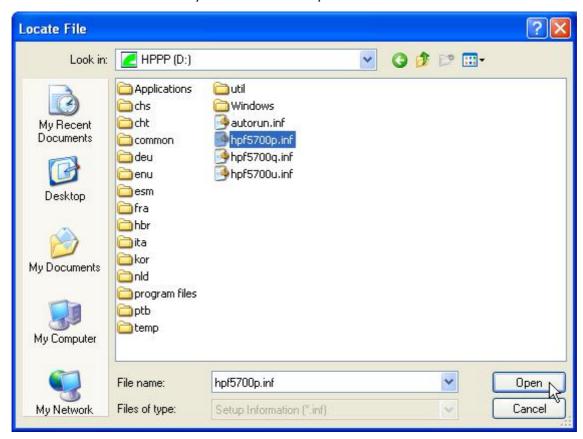


8. Insert your CD that came with your printer. Click the **Have Disk** button.



9. Browse to the driver in your CD. Click **Open** to browse the driver.

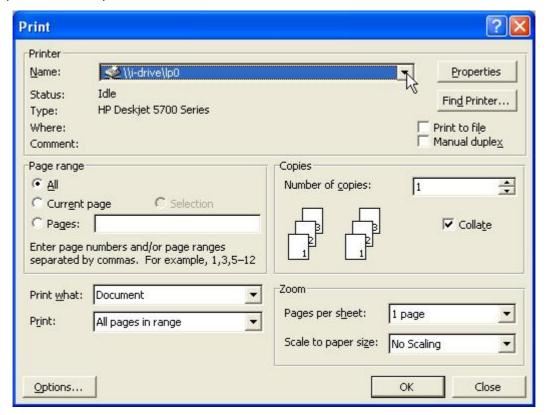
Tip: The correct driver is usually the file with the product name in "\*. Inf" format.



10. Click the **OK** button to start driver installation.

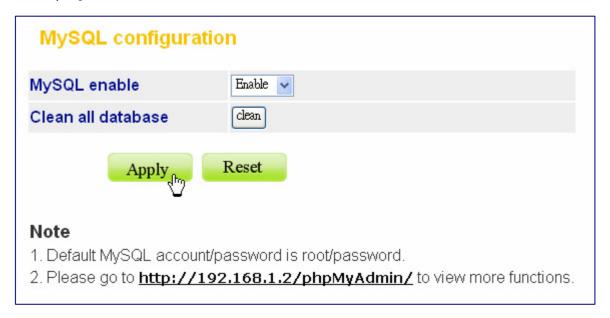


11. The printer is ready for use now.



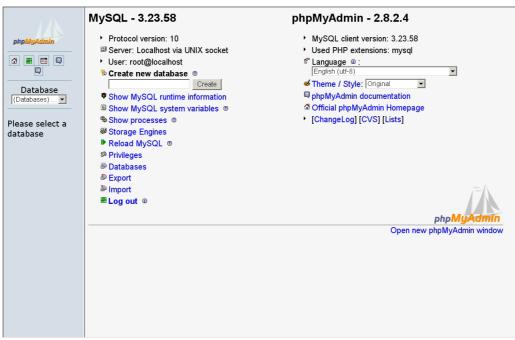
# **MySQL**

This device embeds MySQL (Structured Query Language) database management systems. Users can make use of MySQL and combine with PHP (Hypertext Preprocessor, script language) to design their own personal home page, photo album, guest book, forum, etc. Please select **Enable/Disable** in **MySQL enable** and click **Apply** to execute. The **clean** button can be used to clean all MySQL database.



#### Note:

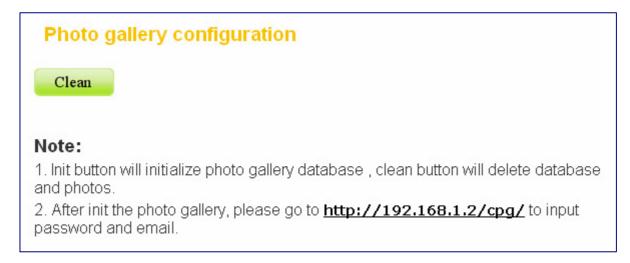
- i. After activating MySQL, please go to http:// (your IP address) /phpMyAdmin and do more configurations.
- ii. MySQL service may not be available if:
  - HD is not installed. Please install HD and build RAID disk.
  - HD is unable to use. Please build RAID disk.
  - Firmware extensions are not installed.



# Photo gallery

The embedding Photo gallery database lets you organize and view your digital photo collection in a gallery view. You can upload your favorite photos in the photo gallery to share with other clients.

Click **Init** button to start the photo gallery database. The **Clean** button will replace the **Init** button in this page after initializing the photo gallery. Use it to clean all Photo gallery database if you need.



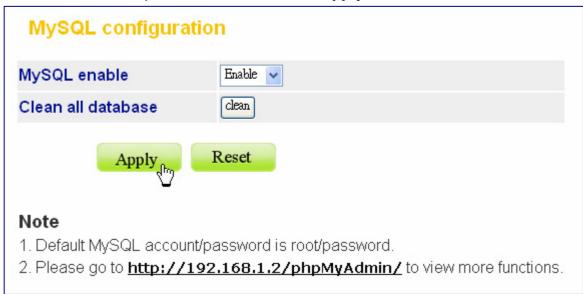
#### Note:

- a. After activating Photo gallery, please go to http:// (your IP address) /cpg and do more configurations. For more information, please refer to <a href="http://coppermine-gallery.net/demo/cpg14x/docs/index.htm">http://coppermine-gallery.net/demo/cpg14x/docs/index.htm</a>.
- b. Photo gallery service may not be available if:
  - HD is not installed. Please install HD and build RAID disk.
  - HD is unable to use. Please build RAID disk.
  - Firmware extensions are not installed.

To create RAID disk, please refer to <u>RAID</u> on page 78; to install firmware extensions, please refer to <u>Firmware Upgrade > Firmware extension loaded</u> on page 38.

#### Procedures to setup the photo gallery

1. Before using photo galley, you have to enable MySQL function first. In the MySQL page, select **Enable** from the drop-down list and then click **Apply**.



- 2. Click on the **Init** button to initialize the photo gallery.
- 3. In the Photo Gallery page, fill in Username and password, and then click on Let's Go!



4. After completed installation, click on **Let's continue!** to go on the proceed.

# Installation completed Coppermine is now properly configured and ready to roll. Login using the information you provided for your admin account. Do not hit back, do not resubmit the installer form! Your server supports the following image package(s): ImageMagick (im), GD Library version 1.x (gd1), GD Library version 2.x (gd2), the installer selected 'im'. Let's continue!

- 4. To change the language shows on the photo gallery, please follow the steps below:
  - c. On the top of the page, click on **Admin mode**.



d. Click on **Config** to do basic configurations.



e. Click on the Language & Charset settings.



f. In the **Language** drop-down list, select the language of your country.



- 5. To set up a new album:
  - a. On the top of the page, click on Albums.
  - b. Click on the **New** button to set up a new folder.
  - c. In the blank, fill in the album name.
  - d. Click on **Apply modifications** to apply.



e. Click **CONTINUE** to go on the procedure.



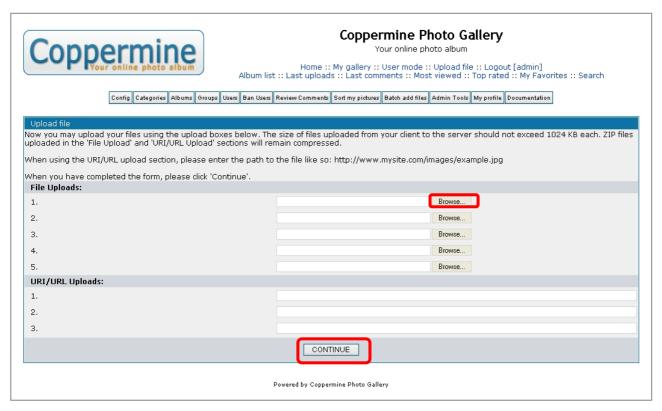
f. The album thumbnail shows on the page, click on the thumbnail to continue.



g. Click Upload file to upload files.



g. Click on **Browse** to select your files and then click on **CONTINUE** to upload.



For users who want to upload files from this device, please add a new folder and put the files in \\192.168.1.2\www\cpg\albums and follow the steps below:

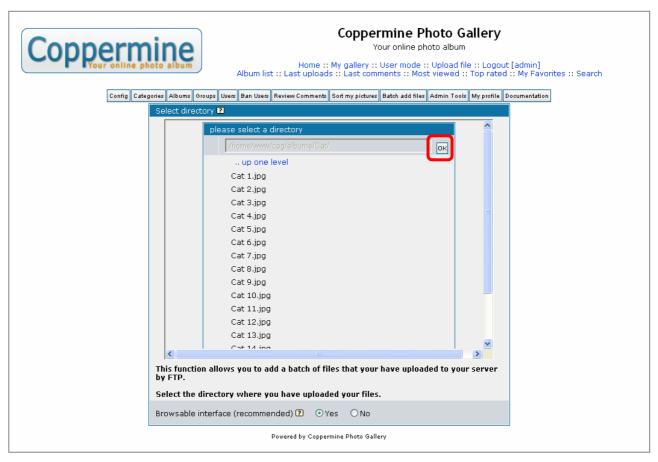
1. Click on the **Batch add files** button.



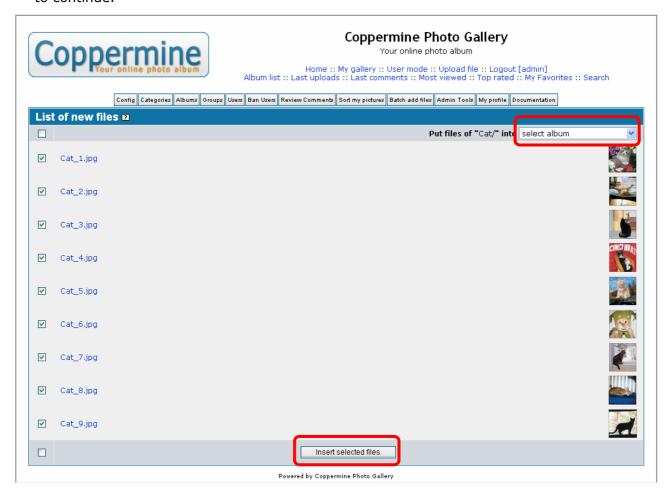
2. Click on the folder you wish to upload.



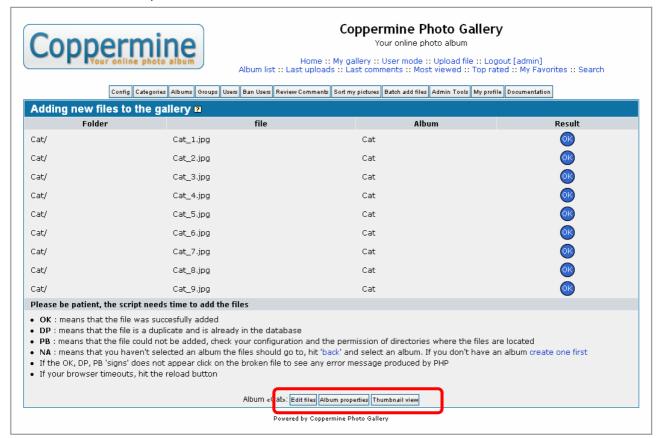
3. The page shows the files in the folder, click **OK** to start upload or click up one level to browse for other files you wish to upload.



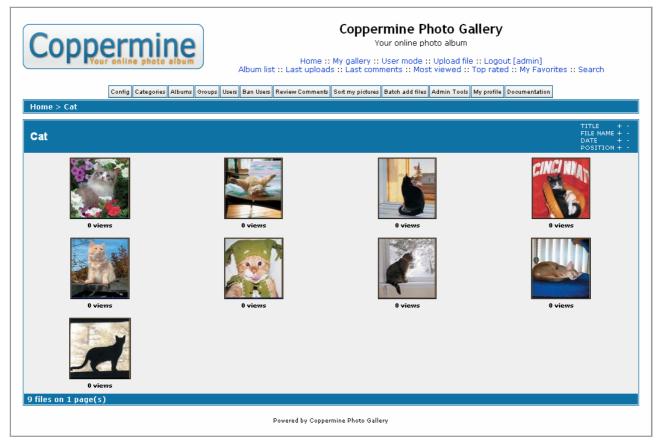
4. The page shows the thumbnail files in the folder. Click to mark the checkbox and select the album you wish to upload to. After selection, please click on the **Insert selected files** button to continue.



5. The page shows the upload result. Click on **Edit files** to do more configurations of the picture, click on **Album properties** to do more configurations of the album, or click on **Thumbnail view** to see the uploaded file in a thumbnail view.



6. This is the illustration of the **Thumbnail view** result.



# **Account**



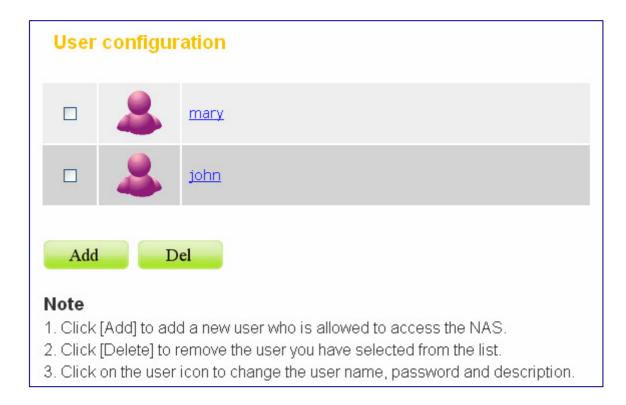
The Account page allows users to manage and configure users, groups, and folders.

To open the Account page, click **Account** on the configuration categories list.

# **User configuration**

The User page allows users to:

- Add users
- · Delete users
- Modify user properties

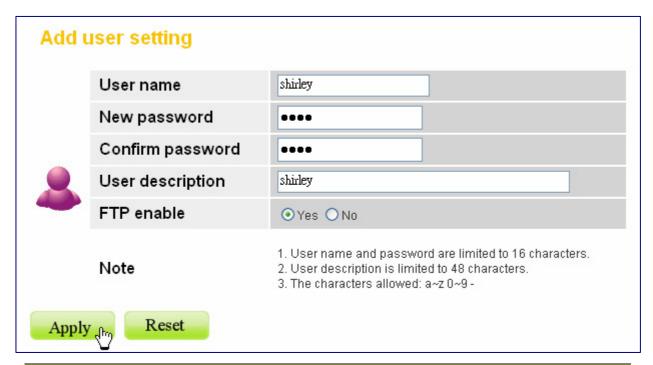


#### To add a new user

1. Click the **Add** button on the user list.



2. Define the user properties in the showing up **Add user setting** page.



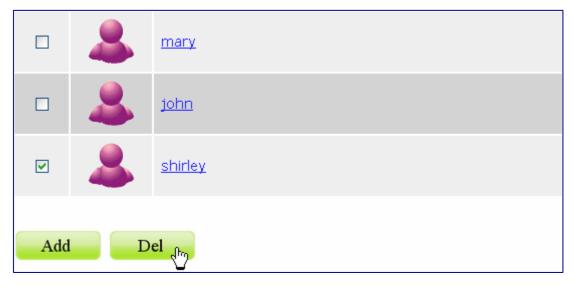
Items	Information
<b>User name</b> (limited to 16 characters)	Specify a name for the newly added user.
<b>New password</b> (limited to 16 characters)	Enter a username for the new user.
<b>Confirm password</b> (limited to 16 characters)	Enter the new password again to confirm the password.
User description (limited to 48 characters) FTP enable	Fill in a description as a note for the user. Select <b>Yes</b> to allow this user to access the device with FTP client. Select <b>No</b> to deny FTP access.

3. Click **Apply** to add the new user, click **Reset** to reload previous configuration.

Note: Only 50 sets of users can be applied.

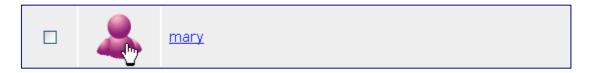
## To delete a user

- 1. Select the user that you wish to remove from the device. Mark the check box of the user.
- 2. Click the **Delete** button to remove the user.

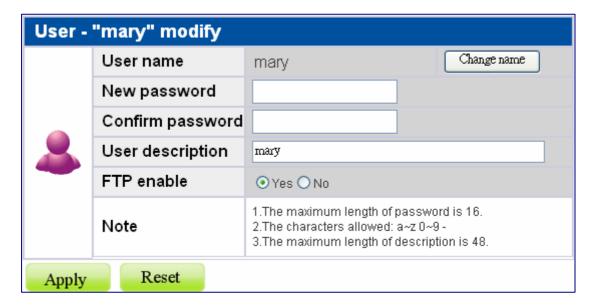


## To configure a user

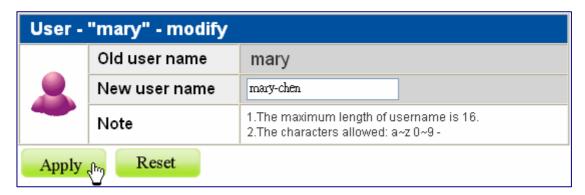
1. Move the cursor onto the icon of the user that you wish to configure.



2. You can change the user's properties by modifying the settings on each item. **Note:** For more information about each item, see <u>To add a new user</u> on page 67.



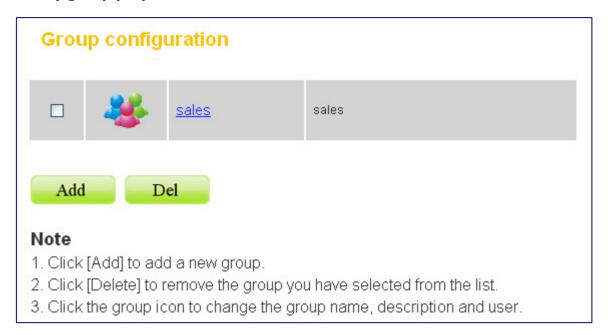
3. To change the user name, click the **Change name** button. The change username page shows up. Fill in the new user name in the **New user name** box. Click **Apply** to execute.



# **Group configuration**

The Group page allows users to:

- Add groups
- Delete groups
- Modify group properties

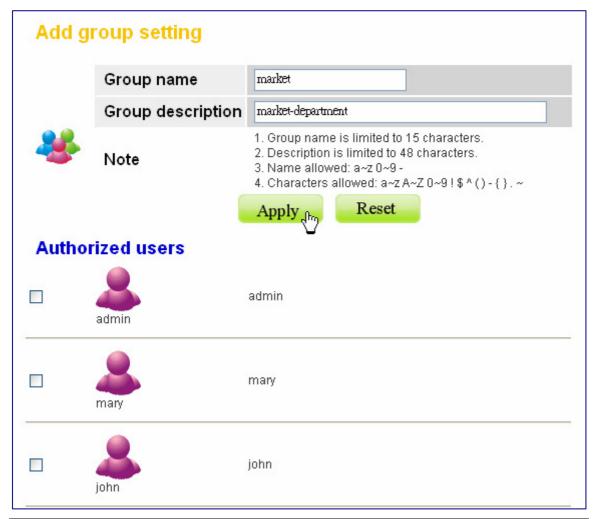


## To add a new group

1. Click the **Add** button on the group list.



2. Configure the properties for this group in the showing up **Add group setting** page.



Items	Information
Group name	Enter a group name as the group ID.
(limited to 16 characters)	<b>Note:</b> The first group name must start with an alphabet.
Group description	Fill in description as a note for the group.
(limited to 48 characters)	
Authorized users	Select group members by marking the check boxes.

3. Click **Apply** to add the new group or click **Reset** to reload previous configuration.

Note: Only 50 sets of groups can be applied.

### To delete a group

- 1. Select the group that you wish to remove from the device. Mark the check box of the group.
- 2. Click **Delete** to remove the group.



### To configure a group

1. Move the cursor onto the icon of the group that you wish to configure.



2. Modify the properties for the group. Click **Apply** to execute the modification or click **Reset** to reload previous configuration.

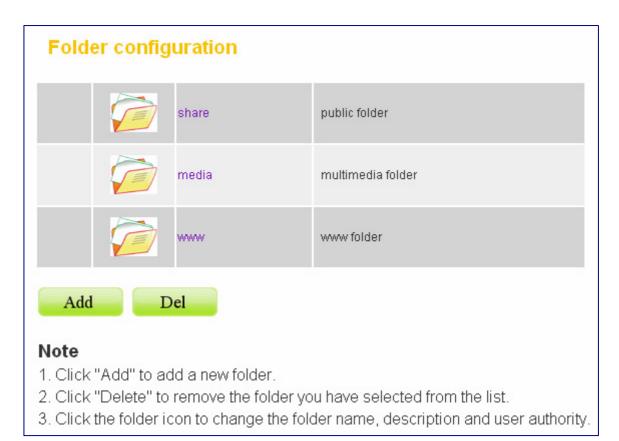
**Note:** For more information about the items, please see <u>To add a new group</u> on page 71.



### Folder configuration

The Folder page allows users to:

- Add folders
- Delete folders
- Modify folder properties



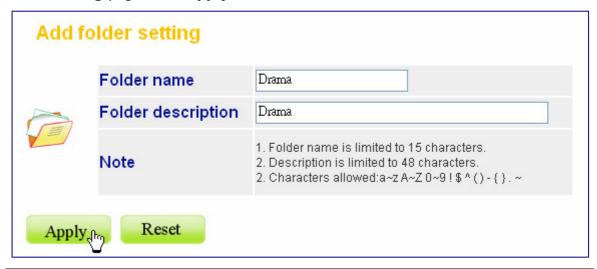
**Note:** The **share**, **media**, and **www** folders are the system default folders. You are not allowed to delete or configure them.

### To add a new folder

1. Click the Add button on folder list.



2. Specify a folder name and description for the newly added folder in the showing up **Add folder setting** page. Click **Apply** to enable.



Items Information

**Folder Name** (limited to 15 characters) The name for the folder. **Description** (limited to 48 characters) A note for the folder.

#### Note:

- Both folder name and description are alphanumeric.
- Blank character is not allowed for folder name and description.
- Only 100 sets of folders can be applied.

### To delete a folder

- 1. Mark the check box of the folder that you wish to delete.
- 2. Click **Delete** to delete the folder.



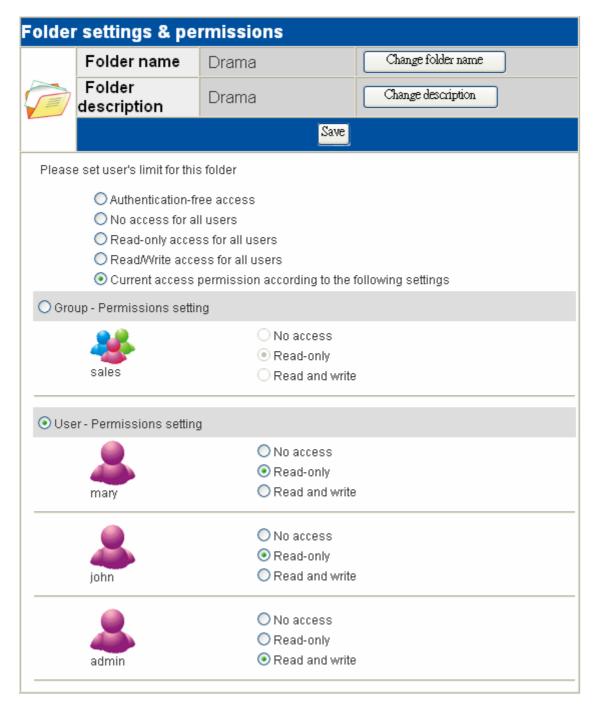
### To configure a folder

Click on the folder that you are going to configure.



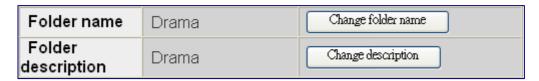
The folder configuration page shows up. This page allows users to:

- · Change folder name/ description.
- Add or remove authorized users or groups for this folder.
- Change folder-accessing authority level for users and groups.



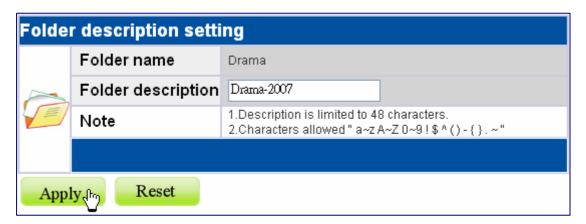
### To change the folder name/ folder description

1. Click on **Change folder name** or **Change description** icon. The **Folder name/ description setting** page shows up.



2. Fill in the new name or new description for the folder and click **Apply**.

**Note:** For more information about the items, please see <u>To add a new folder</u> on page 73.



### **Configure folder-accessing authority level for users and groups**

1. Configure the access-permission rules for all users by pre-defined levels. Select a level and click **Save** to apply this authority for all users. The pre-defined levels use the following access permission rules:



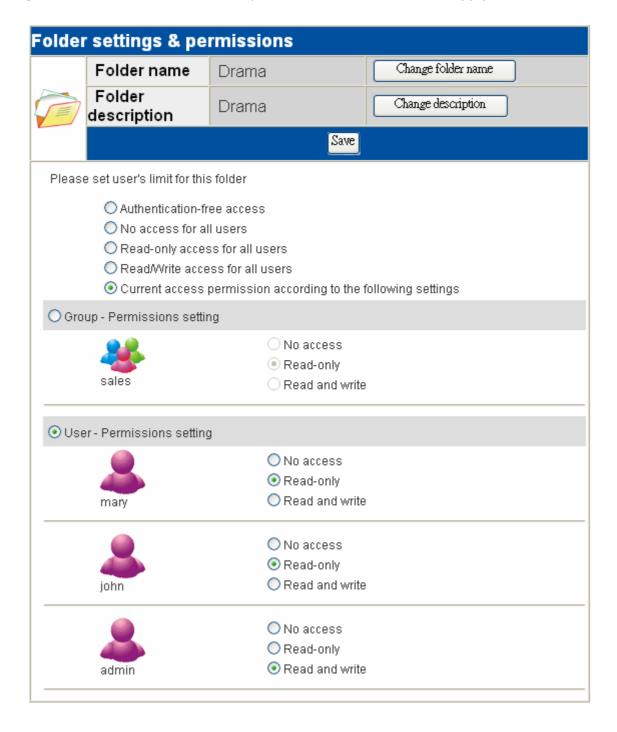
Pre-defined Levels	Access Authority
Authentication-free access	No authentication. Everyone is allowed to get access to this folder without username and password.
No access for all users	No access. No user is allowed to get access to this folder.
Read-only access for all users	All users are allowed to read in this folder. Modification in this folder is not allowed.
Read/ Write access for all users	All users are allowed to read and write this folder.
Current access permission according to following settings	The folder uses user-defined authority settings. The access permissions in <b>Group-Permission setting</b> and <b>User-Permission setting</b> will be applied to this folder. <b>Note:</b> The default access permission are both Read-only.

### 2. Configure the access-permission rules by groups and users:

**Note:** Before starting, you have to select **Current access permission according to the following settings** first.

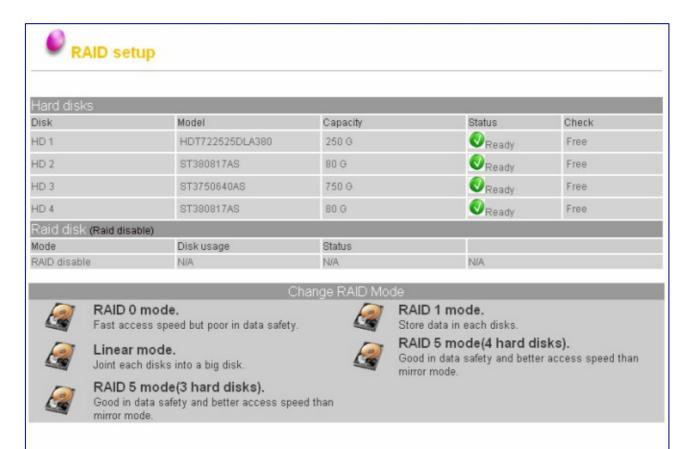
By group: Select an access-permission rule for this group and click Save to apply.

By user: Select an access authority for each user. Click Save to apply.



### **RAID**

RAID (Redundant Array of Independent Disks) combines physical hard disks into a single logical unit to target the aim of providing fault tolerance and improving performance. The RAID page shows the Disk information and allows users to create different types of volumes. To open the RAID page, click **RAID** on the configuration categories list.



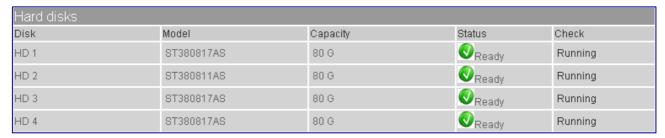
### Note:

- When you are creating a RAID 5 volume, please wait for the process of resyncing RAID and formatting hard disks.
- Notice that all your data in hard drive will be lost when you build any RAID modes, please reload the provided firmware extension file.
- 3. All services will stop in recovery and sync mode.

### Hard disks

The device supports hot swap. You don't have to shutdown the system upon hard disk drive removal or replacement while the system is running. <u>In RAID 1 and RAID 5 mode</u>, you can remove and replace "one" hard disk and simply click on the **Recovery** button to recover files into HD again. However, hot-swap hard disk drive <u>in other mode</u> will cause RAID stop and data loss. Please rebuild RAID disk if you are in the situation.

**Note:** Hot-swap in Linear and RAID 0 mode should NOT be done unless you know exactly what you are doing.



The Hard disks table shows the information of the Hard Disk:

Items	Information
Disk	The serial number of the slot.
Model	The product name of HD.
Capacity	The volume of HD.

**Status** and **Check:** There are some relevant probabilities between Status and Check information, please refer to the following definitions:

Status	Check	Definitions
New HD	Unformat	An unformat new HD has been installed.
Ready	Free	HD is not in RAID array. You cannot use this HD to work.
	Running	HD is in RAID array.
	Recovery Button	HD is in RAID array under RAID 1 or RAID 5 Mode before.
		But a motion of removing HD has caused this result. Click
		this button to recover files into HD again.
RAID Broken	RAID Fail	The RAID mode is broken and failed. You cannot use this
		HD to work.
No HD		There is no hard disk installed.

**Note:** After clicking **Recovery** button, it will cost time to rebuild. The cost of time is in direct ratio to the HD capacity. Please wait patiently and do not remove HD while it is still running.

### **RAID** disk

Raid disk (Raid activ	e)		
Mode	Disk usage	Status	
MODE 5(3 hard disks)	N/A	Report	
HD rebuilding : [===>	] resync = 18.2% (1398	5528/76822720) finish=68.7r	min speed=15236K/sec

The RAID Disk table shows the status and information of the RAID Disk:

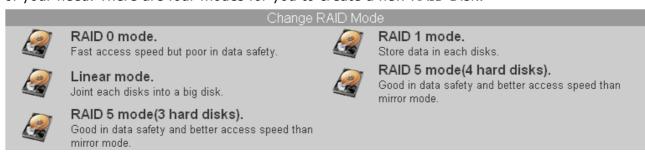
Items	Information
Mode	The RAID mode of the RAID Disk.
Disk Usage	The used percentage of the RAID Disk.
Status	The details of the RAID Disk. Click <u>Report</u> or * <u>Resyncing</u> to see detailed RAID information.

\* You will see HD rebuilding information while during resyncing. Click on <u>Report</u> or <u>Resyncing</u> in Status table to show the following RAID information:



### Create new RAID disk

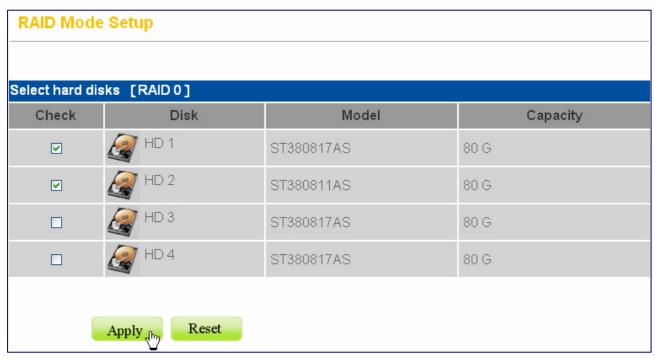
You can combine hard disks to create different types of volumes, and find the data protection level of your need. There are four modes for you to create a new RAID Disk:



Volume Mode	Amount of composed HD	Functionality
RAID 0	2~4	$\ensuremath{RAID}$ 0 offers data striping without data redundancy. Select this mode
		to maximize your disk capacity and access disk with much more faster $% \left( 1\right) =\left( 1\right) \left( 1\right$
		speed, but if one drive fails, all data in the array will be lost.
RAID 1	2	$\ensuremath{RAID}\ 1$ provides mirroring data over both disks. Select this mode to
		assure data integrity, but the storing capacity is equal to a single drive.
Linear	2~4	Linear mode saves data on physical disks sequentially. Select this mode
		to combine disks into one large disk but fail of data protection function.
RAID 5	3~4	RAID 5 includes a backup option. It uses parity mode of store redundant
		data on space equal to the size of one disk for later data on recovery.
		Therefore, the available storage capacity equals to a single drive.

To change or create a RAID disk,

1. Click the types of mode you want to enter into the RAID Mode Setup page.



- 2. Select the disk that you wish to change or create.
- 3. Click **Apply Change** to build RAID.

### Note:

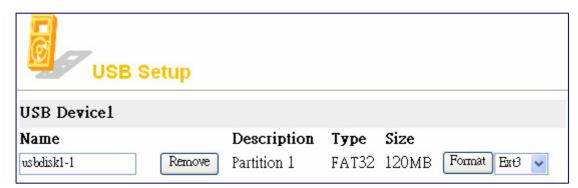
- HD will be format after clicking **Apply Change** button and all contents will be erased!!
- After changing mode, the device will take some time to rebuild your system automatically. The
  required time depends on the mode you select and the capacity of your hard disk drive. (ex. For
  a 100G HDD, it may take 1 hour to rebuild in RAID 1 mode, but take about 5 minutes to rebuild
  in RAID 0 mode) Please wait patiently and do not remove HD when it is still running. Please wait
  patiently and do not remove HD when it is still running.

### Warning:

Before changing or creating a RAID disk, please ensure that a hard disk drive has been installed in the <u>first bay</u> of the device. The system cannot build RAID if you leave the first bay of the device empty. Please insert the hard disk inside!!

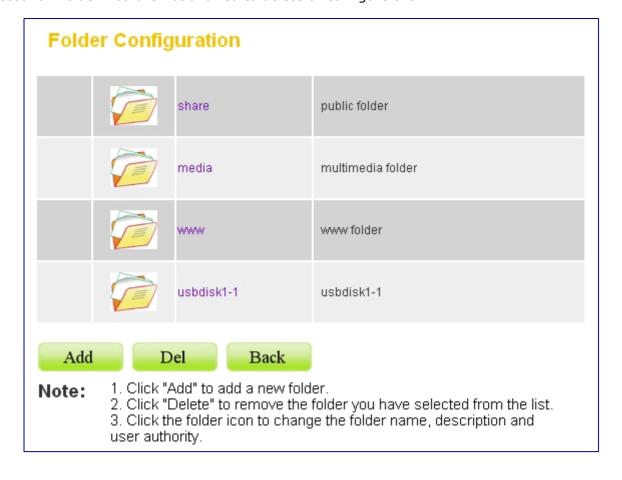
### **USB/eSATA**

The USB/eSATA page shows the information of the connected USB devices. To open the USB/eSATA page, click **USB/eSATA** on the configuration categories list.



Items	Information
Name	The name of the connected USB/eSATA storage.
Description	The partition order of the USB/eSATA storage device.
	<b>Note:</b> The device recognizes the first four partitions of your USB storage only.
	We recommend users not to format the USB storage for more than 4 partitions
Туре	The format type of the connected USB/eSATA storage device.
Size	The volume of the connected USB/eSATA storage device.
<b>Remove button</b>	Click this button to safely remove the connected device.
	Note: Always disconnect your connected USB device by clicking the Remove
	button. To remove your USB improperly may lead to data loss.
Format button	Click this button to format the connected device in EXT3 or FAT32 file format.

After connecting the USB/eSATA storage to the device, you will see the USB/eSATA folder in Account> Folder. You are not allowed to delete or configure them.

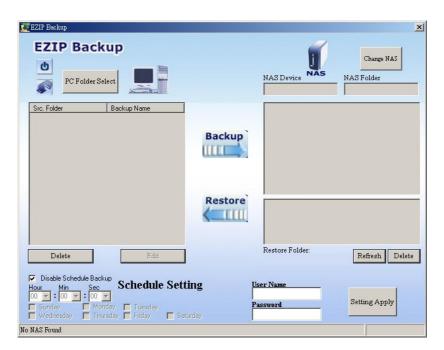


# **Appendix**

### Using EZIP Backup to back up your files

This program helps users to backup the files on you computer to your NAS. Those backup files are going to be compressed as \*.zip format on your NAS.

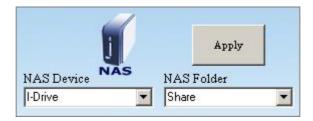
- 1. Double click the shortcut on your desktop.
- 2. Click the icon on system tray. The **EZIP Backup** window pops up. You may click the
  - button to close this program or click the button to minimize this window to system tray.



3. Click **PC Folder Select** button. Browse a folder that you are going to backup and click **OK**. The folder that you selected shows on the list.



4. Click the **Change NAS** button to select a NAS. Select a NAS in the NAS device drop list. Select a destination folder for locating the back-upped files.



5. Fill in a user name and password for accessing this folder. Select the time that you are going to execute backup. Click **Setting Apply**.

**Note:** You may also mark the **Disable Schedule Backup** checkbox to disable EZIP Backup to backup your files by schedule.



- 6. Click the **Apply** button on the up-right corner of the window.
- 7. Click the button to start backup.

To restore a back-upped file to your PC, select the file on the list and click perform restoring.

Restore

### **Trouble Shooting**

## 1. How to shut down the device properly? Ans.

To shut down the System properly, press the Power button on the front panel for five seconds until Status LED blinks red then go off.

## 2. The EZ View utility can't configure My Network setting. Ans.

- ☐ Make sure that your RJ-45 cable is connected with the device and your PC/Switch.
- ☐ Check if the LINK/ACT LED on the device illuminates.
- ☐ Check the power of the device, your PC and Switch. Make sure that it's on.
- □ Check your PC's IP address, make sure that it has a static IP or connects with a router with DHCP server. For instruction about the IP setting, Please refer to the <a href="Management Guide">Management Guide</a> Network > IP Address Setup chapter on page 41.
- Reboot the system with Web-based UI or press the Reset to Factory Default button to restore the factory default setting and reboot.

## 3. The device can't find my SATA interface HD Ans.

- ☐ The HD is unformatted. Please format it with our HD Format tool.
- ☐ The partition format of HD is not EXT3, ex. NTFS. Please format it with the provided Format tool.
- ☐ The HD maybe broken. Please change another HD and try again.

# 4. I use the device as a Web/FTP server, but the users that outside the LAN can't access it.

Ans.

- □ For WAN users to get access to the FTP or WEB server, you should link the device to a router with appropriate configuration. Please make sure that:
  - 1. The NAT functionality is enabled in your router.
  - 2. In the port-mapping session, the "Internal Host IP" should be configured as the IP address of this Device and the value of "Port" should be corresponded to the port number of the WEB server or FTP server you configured.
    - (Ex, If the IP address of your device is 10.10.7.251, the port number of your FTP is configured as 21 and the port for Web Server is as 8080, you should add or modify a port mapping record, set the Internal Host IP address as 10.10.7.251, the Port as 21. then add or modify another port mapping record, set the Internal Host IP address as 10.10.7.251 and the Port as 8080)
  - 3. Before allowing the device to communicate with Internet, we strongly recommend users to add a Firewall device to secure your network from being invading.

## 5. I can't access this device. Ans.

- ☐ Check the LINK/ACT LED of Device illuminates.
- Reboot the system with Web-based UI or press the Reset to Factory Default button to restore the Factory default setting and reboot.
- ☐ Maybe there are too many concurrently connected users. The system blocks the incoming users after meeting the maximum allowed number.

## 6. I have accessed the HD, but I can't access to the folders. Ans.

- □ Verify you have the correct username and password.
- ☐ If you have accessed to any folder in the HD and would like to use another set of username/ password for different authority, please log off your operation system and log in again.

## 7. There are unrecognizable characters as the file name. Ans.

Verify if the Unicode file is loaded to the device successfully. To get instruction loading the file, please see <u>System > Firmware Upgrade > Firmware extension loaded</u> on page 38.

## 8. I have followed the procedures to setup the printer and it just doesn't work. Ans.

- ☐ Check if you power your printer on.
- □ Verify that the cables are connected correctly
- ☐ Make sure that you enactive the printer server functionality, you can refer to Management Guide > Service > Printer on page 55 for more information.
- You may select an incompatible printer driver. Click Start> Setup> Control Panel. Double click the printer icon. Remove this printer and install a different driver and try again.
- ☐ The device supports one connected USB printer only. Printer Connections on both the USB ports may led the printer functioned unsuccessfully.

#### 9. I can't add a new user.

Ans.

This device supports usernames with lower case only. Please check if you specify a new user with a capital letter.

## 10. I can't configure the default user "admin" in User Configuration. Ans.

- ☐ The password of the user **admin** can only be configured in the System> Login on page 25. Please note that you will have to login the GUI with this new Superuser password after changing it.
- The Superuser ID is also the administrator ID while you access folders in this device via samba or ftp. The ID can access all folders in this device.

## 11. My eSATA cannot be detected. Ans.

- □ Verify that you connect the cable correctly between this product and your eSATA device.
- Power off this product and your eSATA device. Power on your eSATA device first and then power on this product. Please note that you should always turn on your eSATA device first.

# **Product Specification**

#### **Standard**

IEEE 802.3, IEEE 802.3u, IEEE 802.3ab

### **Support Protocol**

TCP/IP, HTTP, SMB, FTP, DHCP, UPnP

### **File System**

EXT3

### **Support concurrently connected Users**

32 users

### **Interface**

One 10/100/1000Mbps RJ-45 Ethernet port 2\* USB 1.1/2.0 ports
One eSATA host connection port
One USB backup button
One Reset to Factory Default Button
One Power On/Off Switch Button

### **Connection speed**

10/100/1000 Mbps

### **Support Hard Diskette**

1\* eSATA HDD up to 1TB

4\* removable 3.5" SATA interface HDD up to 1TB for each bay

### **Diagnostic LEDs**

Power (Blue)
Status (Amber, Red)
LAN (Green, Amber)
HDD I, HDD II, HDD III, HDD IV (Green)
USB I, USB II (Green)
HDD Full (Red)
Backup (Green)
eSATA (Green)

### **Dimensions**

200(L) x 130(W) x 185(H) mm

### **Operating Temperature**

Operating -  $0\sim40^{\circ}$ ; Storage -  $-10\sim65^{\circ}$ 

### **Power Supply**

DC 12V 6.7A External power adapter

### Certification

FCC, CE, VCCI Class A