

# Pleiades Giga LAN - User Guide

**Macpower & Tytech Technology Co., Ltd.**

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Firmware: v 2.6.3-20080909

PCB: MP-LN2U23SL-3512 v1.0

Model: PD-LN2U2SS



The diagrams and images contained in this manual may not fully represent the product that you are using and are there for illustration purposes only.

## Table of Contents

<b>1</b>	<b>INTRODUCTION.....1</b>		
1.1	PACKAGE CONTENTS.....1		
1.2	SYSTEM REQUIREMENTS .....1		
1.3	DETAILED VIEW .....2		
1.3.1	Front View.....2		
1.3.2	Rear View.....2		
1.4	QUICK INSTALLATION GUIDE.....3		
1.4.1	Power ON/OFF Procedure.....3		
1.5	ABOUT DATA BACKUP .....3		
<b>2</b>	<b>SYSTEM SETUP .....4</b>		
2.1	HDD INSTALLATION .....4		
2.2	HOW TO LOGIN .....6		
2.2.1	Login on a PC.....6		
2.2.2	Device Name & Web Browser .....8		
2.2.3	Peer to Peer.....9		
2.2.4	Login on a Mac .....9		
2.2.5	Bonjour.....10		
<b>3</b>	<b>WEB CONFIGURATION .....11</b>		
3.1.1	Basic .....11		
3.1.2	Control Panel .....11		
3.1.3	Personal Info.....11		
3.1.4	Logout.....11		
3.2	QUICK SETUP .....12		
3.2.1	Wizard.....12		
3.2.2	Add User.....13		
3.2.3	Add Group.....13		
3.2.4	Add Share .....14		
3.3	USERS AND GROUPS .....15		
3.3.1	User Management .....15		
3.3.2	Group Management .....16		
3.4	FILE AND PRINT .....17		
3.4.1	File Server.....17		
3.4.2	Share Management .....18		
3.4.3	Printer Server.....19		
3.5	SYSTEM .....19		
3.5.1	LAN Settings.....19		
3.5.2	Time Settings.....20		
3.5.3	Restart Server.....20		
3.5.4	Information.....21		
3.5.5	Disk Usage.....21		
3.6	NETWORK SERVICE .....22		
3.6.1	DHCP Server .....22		
3.6.2	Bonjour.....22		
3.6.3	BTorrent.....23		
3.7	MAINTENANCE .....24		
3.7.1	Disk Utility .....24		
3.7.2	Firmware Upgrade .....25		
3.7.3	Save Configuration.....25		
3.7.4	Restore Configuration .....26		
3.7.5	Factory Reset.....26		
3.7.6	Log File.....27		
3.8	PERSONAL INFORMATION .....27		
3.8.1	Account .....27		
<b>4</b>	<b>NETWORK DRIVE.....28</b>		
4.1	FILE ACCESS ON A PC .....28		
4.1.1	FTP.....28		
4.1.2	Windows Explorer .....29		
4.1.3	Mapping a Network Drive.....29		
4.1.4	Disconnecting a Network Drive.... 31		
4.2	FILE ACCESS ON A MAC .....32		
4.2.1	SMB.....32		
4.2.2	FTP.....33		
<b>5</b>	<b>ADDITIONAL FEATURES.....34</b>		
5.1	UPNP .....34		
5.2	BONJOUR & iTUNES .....34		
5.2.1	iTunes.....35		
5.3	USB DRIVE .....36		
5.3.1	Sharing a USB Drive.....36		
5.3.2	Pleiades Giga LAN as USB drive. 37		
5.4	USB PRINTER .....38		
5.4.1	Installation on a PC.....38		
5.4.2	Installation on a Mac .....40		
5.5	BTORRENT .....43		
<b>6</b>	<b>APPENDIX .....45</b>		
6.1	SPECIFICATIONS .....45		
6.2	TECHNICAL TERMS .....45		
6.3	FAQ .....46		
6.4	ABOUT THIS MANUAL .....47		

# 1 Introduction

All the benefits of the classic Pleiades enclosure, now with ultra fast Giga-bit LAN technology. Passive cooling in an all aluminium chassis keeps your internal components and hard drive running efficiently. Transfer your data via commonly used, high-speed USB 2.0 interface. Or better yet, via Giga-bit LAN, upload your data via network for quick and convenient data back-up. An additional upstream USB port allows you to connect more devices such as USB hard drives and USB printers to be accessed and shared via network too! Versatile, compact, and reliable storage for your home or office.

Product Dimensions:            23.7cm x 13.7cm x 4.2cm  
    9.3in x 5.4in x 1.7in

## 1.1 Package Contents

- Pleiades Giga LAN (no HDD included)
- Power Adapter;  
  Input 100-240V, Output +12V/2A
- Ethernet and USB cable
- Utility CD
- Manual

*Note: Package contents may vary, depending on vendor & version.*

## 1.2 System Requirements

- Computer with internet browser and network access for setup
- Switch or Router with one free Ethernet port for the Pleiades Giga LAN
- One 3.5" SATA-I or SATA-II hard drive with 20GB - 1TB (1.5Gb/s)

Supported Operating Systems:

- PC running Win2000, WinXP or Windows Vista
- Mac running Mac OS 10.2 or later

*Note: For external USB devices, we recommend using self-powered USB drives that have their own power supply.*

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## 1.3 Detailed View

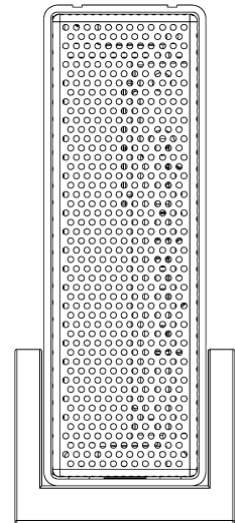
Detailed description for the ports, buttons and LEDs of the Pleiades Giga LAN.

### 1.3.1 Front View

The LED indicators are hidden behind the front panel.

LED	blue	red
	power	data access

*Note: This device does not have a power ON/OFF switch. To turn it off, simply remove the power supply from the wall socket. To turn it back on, re-connect the power supply. For the network drive, it takes about two minutes for the system to boot before it is ready.*



### 1.3.2 Rear View

This device does not have an ON/OFF power switch.

1. Gigabit Ethernet port
2. Restart button
3. Reset button
4. USB device port
5. USB host port (upstream)
6. Power receptacle

#### Restart Button

Press and release this button for a hardware reset of the network drive. The device will restart after you release the button.

#### Reset Button

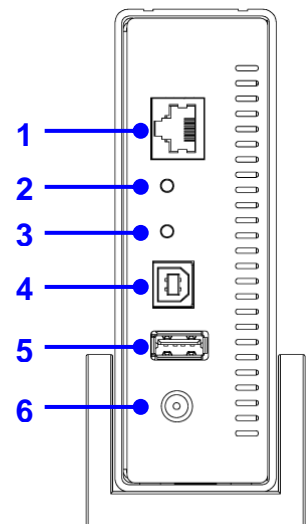
When the network drive is powered up and ready, press and release this button for a software reset or press and hold it for 5 seconds and then release it to reset all the network drive settings to factory default. All user accounts and groups will be erased!

#### Ethernet Port LED

The green LED on the left indicates data access and the LED on the right the network link and connection speed.

Speed	green	yellow
	10/100Mbps	1000Mbps

*Note: The device can be used as a network drive or an external USB drive but not both at the same time. When both USB (USB device port) and Ethernet cables are connected, the device will act as USB hard drive.*



## 1.4 Quick Installation Guide

Following is a quick installation guide to get you up and running. For further details on each of the settings, please refer to Chapter 2 and subsequent chapters.

1. Install a hard drive.
2. Connect the Ethernet cable from your network router or switch to the device.
3. When everything is connected, turn the Pleiades Giga LAN on by connecting the power supply and give it about two minutes to boot up.
4. Access the web configuration interface via your web browser. See “How to login” in chapter 2.
5. Go to the “Maintenance” menu and use the disk utility to format the drive. When only using it as network drive, we recommend using EXT2, when also using it as USB drive, NTFS or FAT32 will be more convenient, depending on your Operating System.
6. Once the drive has been formatted, go to the “Basic” menu and follow the quick setup wizard. This will help you to set up the IP configuration, add the first user and prepare file sharing.
7. You are now ready to start sharing or downloading files.

*Note: Set the speed for your network card to AUTO and not full or half speed.*

*Note: Without installing and formatting a drive first, the other functions of the Pleiades Giga LAN will not be available.*

### 1.4.1 Power ON/OFF Procedure

Always connect the power adapter to your device before you plug it into the wall socket. To turn on the power, simply connect the power supply. It will take about two minutes for the network drive to go online and be ready.

To turn off the network drive, login via web browser, stop all current downloads and then remove the power supply from the wall socket. When using it as a USB drive, eject the external drive from your system and then remove the power supply to turn it off.

## 1.5 About Data Backup

To protect your files and help prevent the loss of your data, we strongly recommend that you keep two copies of your data, one copy on your Pleiades Giga LAN and a second copy either on your internal drive or another storage media such as a CD, DVD, Tape or an additional external drive.

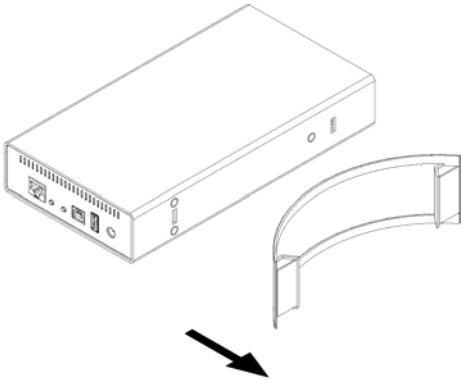
Any loss or corruption of data while using the Pleiades Giga LAN is the sole responsibility of the user, and under no circumstances will the manufacturer be held liable for compensation or the recovery of this data.

## 2 System Setup

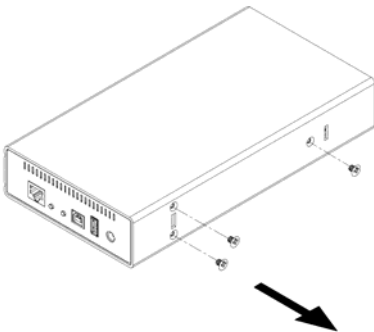
### 2.1 HDD Installation

Your unit may come with a pre-installed hard drive. Before opening such an enclosure, please read the warranty and any other notes from your vendor carefully before doing so, as this could void your warranty.

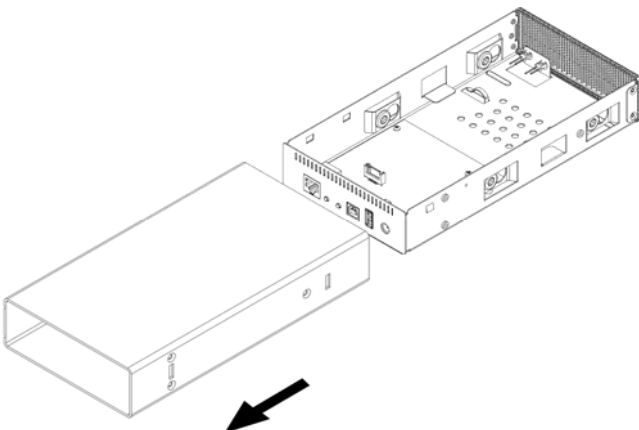
1. Remove the stand.



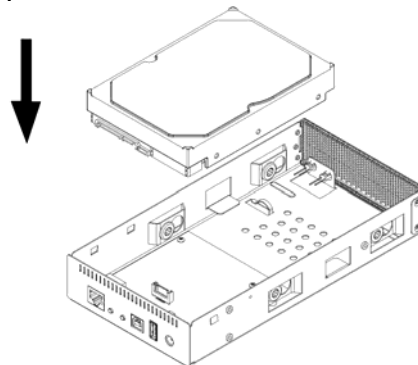
2. Remove the three screws from the bottom of the case.



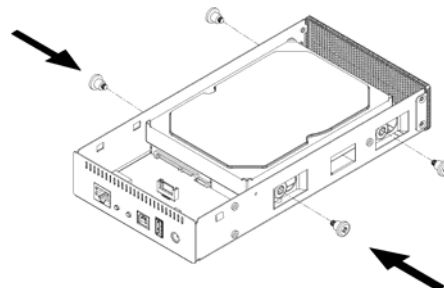
3. Push the inner enclosure out, and remove the outer chassis.



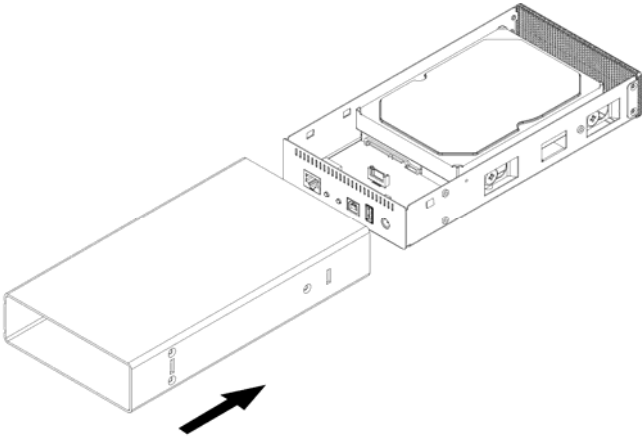
4. Install the hard drive by placing it in the enclosure and connecting the SATA plus power cables.



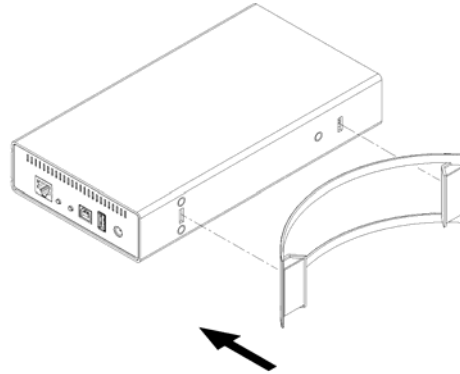
5. Mount the drive with two screws on each side.



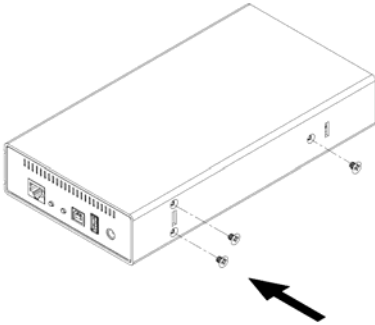
6. Slide the inner enclosure back into the outer chassis.



8. Align the stand with the holes in the chassis and push lightly into place.



7. Fasten the three screws to finish the assembly.



*Note: Be careful not to damage any cables or components during the assembly, and make sure the cables are connected firmly.*

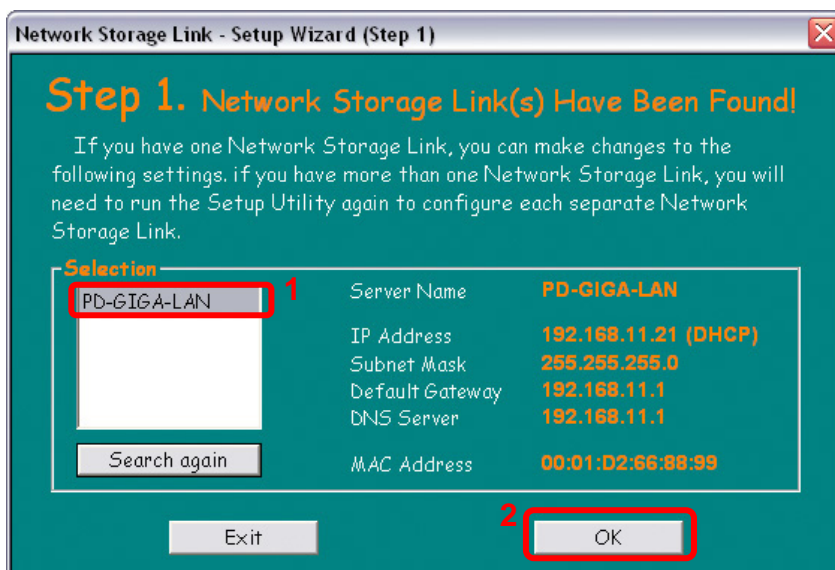
## 2.2 How to login

To configure your network drive, you will need to use the web browser, enter the IP address and then use the web configuration for further setup. To find out the IP address of your device once it is connected to the network, there are several different ways as described on the following pages.

### 2.2.1 Login on a PC

Use the NetTool utility included on the CD. This will list the device automatically and allow you to access the web configuration interface with a simple click of your mouse. You may also use the same utility at a later point to map the network drive after you setup your shares.

1. Turn on your Pleiades Giga LAN and make sure it is connected to the same network as your computer.
2. Start the NetTool utility by double clicking on the EXE file and then pressing the Setup button.
3. Your Pleiades Giga LAN will automatically show up in the device list, but if not, make sure the NetTool has access to the network and search again. You might have to configure your firewall or even temporarily turn it off.
4. Select your device and click on OK to start the setup wizard.



5. Before you can access the device, you will have to enter the admin password. The default login is admin/admin, so enter admin for the password and press OK to login.





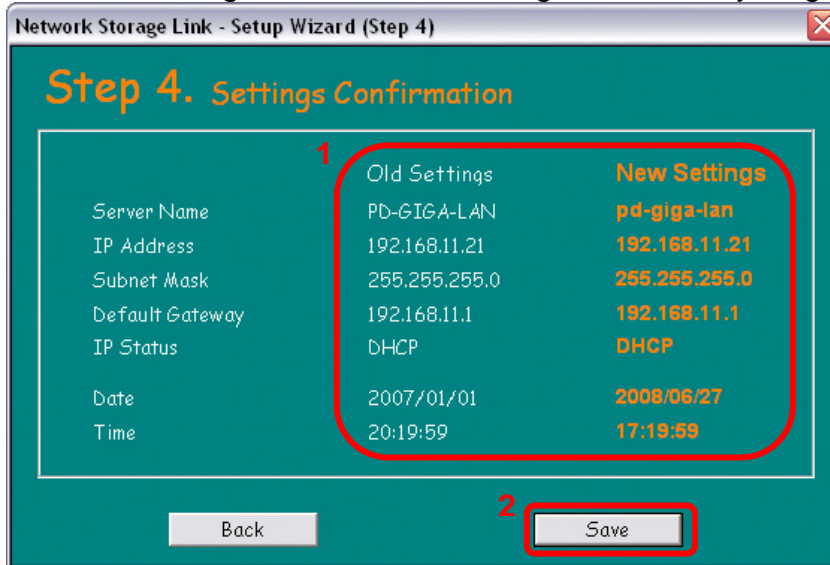
6. In step 2, you can define the name for your device and set up the IP configuration. We recommend using “Automatically obtain an IP address (DHCP)”. When set, press Next to continue.

The screenshot shows the 'Network Storage Link - Setup Wizard (Step 2)' window. The title bar reads 'Network Storage Link - Setup Wizard (Step 2)'. The main heading is 'Step 2. IP Settings'. Below the heading, there is a 'Server Name' field containing 'pd-giga-lan'. Two radio buttons are present: 'Set IP configuration manually' and 'Automatically obtain an IP address (DHCP)'. The 'Automatically obtain an IP address (DHCP)' option is selected. Below these are four input fields: 'IP Address' (192 . 168 . 11 . 21), 'Subnet Mask' (255 . 255 . 255 . 0), 'Gateway' (192 . 168 . 11 . 1), and 'DNS Server' (192 . 168 . 11 . 1). A note states: 'An IP address must be specified in order to access the Network Storage Link from the network.' At the bottom, there are 'Back' and 'Next' buttons.

7. In step 3, you can set up the date and time. Select your time zone from the drop down menu, set the date, the time and then press Next to continue.

The screenshot shows the 'Network Storage Link - Setup Wizard (Step 3)' window. The title bar reads 'Network Storage Link - Setup Wizard (Step 3)'. The main heading is 'Step 3. Date and Time'. Below the heading, there is a 'Time Zone' dropdown menu showing '(GMT+09:00) Osaka, Sapporo, Tokyo'. Below that are 'Date' and 'Time' dropdown menus. The 'Date' dropdown shows '6/27/2008' and the 'Time' dropdown shows '5:19:59 PM'. At the bottom, there are 'Back' and 'Next' buttons.

8. In step 4, you can compare your new settings with the previous configuration. If you find a mistake, go back to make changes but if everything is OK, press Save.



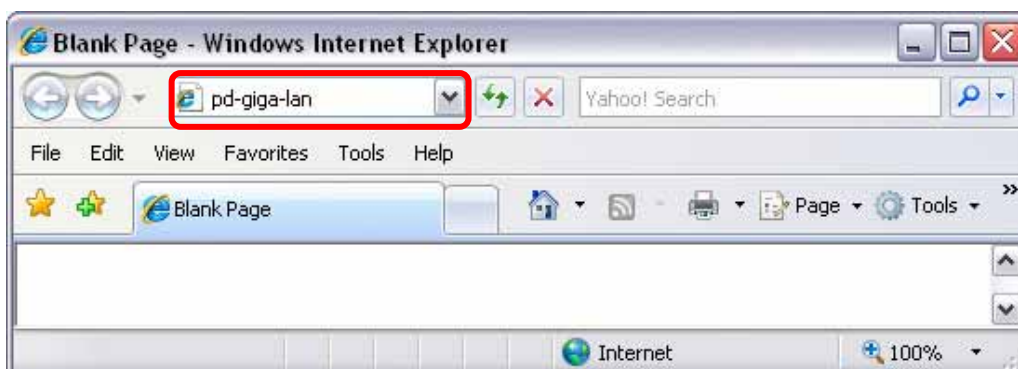
9. The setup wizard will remind you that the previous settings will now be updated with the new configuration. Press OK to finish the setup wizard.



*Note: Alternatively, you could also write down the IP address in the first step of the setup wizard, input that number into the URL field of our web browser and then access the web configuration interface of your Pleiades Giga LAN.*

### 2.2.2 Device Name & Web Browser

Use the device name, which by default is "pd-giga-lan", enter that into the URL field of our web browser and then access the web configuration interface of your Pleiades Giga LAN.



*Note: This only works for Windows but not for a Mac!*

### 2.2.3 Peer to Peer

If you connect the Pleiades Giga LAN directly to your computer (PC or Mac) via Ethernet cable, you can access it using its default IP 192.168.1.1. Open the web browser and enter 192.168.1.1 to access the web configuration interface.

*Note: This only works when the Bonjour service is disabled!*

### 2.2.4 Login on a Mac

When the Bonjour service is disabled, the only way to access the login page is by using its IP address. First, you will have to find out the IP address of your Pleiades Giga LAN and then use the web browser to access the web configuration interface.

1. Turn on your Pleiades Giga LAN and make sure it is connected to the same network as your computer.
2. Start the Terminal utility, which is usually located in your Applications folder under Utilities.

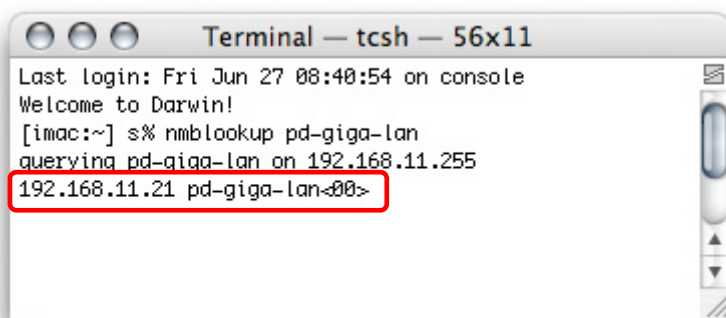


Terminal

3. Type `nmblookup pd-giga-lan`. This is the default name of your Pleiades Giga LAN, so if that has previously been changed and you don't know the correct name, reset the device first.

The command looks like this:  
`nmblookup pd-giga-lan`

4. After entering the previous command and pressing the Enter key, it should return an IP address, followed by the name you just entered.



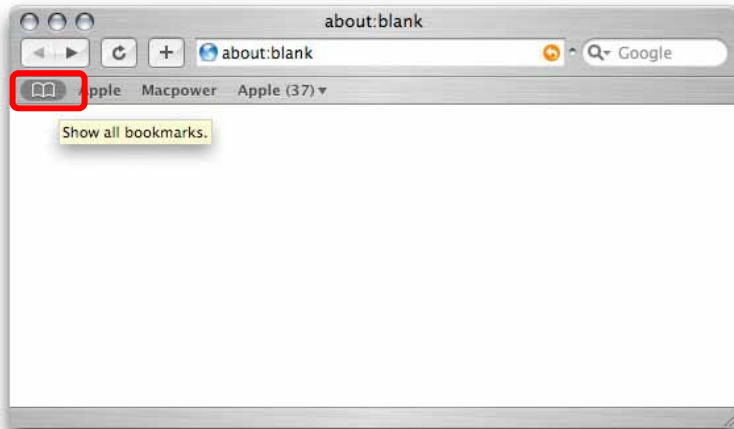
5. Open your web browser and enter the IP address from the previous step to access the web configuration interface.
6. The default username and password is admin.

*Note: When the Bonjour service is disabled, you could also use the “Peer to Peer” method to login and set up your network drive.*

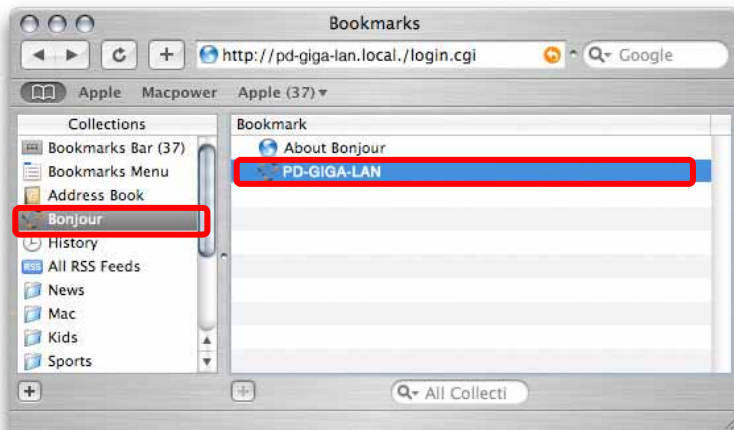
## 2.2.5 Bonjour

When the Bonjour service on the Pleiades Giga LAN is enabled, all you need to do is access the Bonjour tab in your bookmarks folder and select the Pleiades Giga LAN.

1. Turn on your Pleiades Giga LAN and make sure it is connected to the same network as your computer
2. Start your web browser (Safari). If not already displayed, click on the bookmarks icon to show all bookmarks.



3. Select Bonjour and browse for the PD-GIGA-LAN. Click on it to open the login page.



4. The default login is "admin" for both username and password.



## 3 Web Configuration

Open your web browser, enter the IP address of your Pleiades Giga LAN and login. The default login is as follows:

Username: **admin**  
Password: **admin**

For more information about the initial setup and finding your IP address, refer to Chapter 2.



### 3.1.1 Basic

The settings in this menu are aimed at the user who wants to quickly set up the LAN disk and share files on the local network. Only the most basic functions and settings are available but it is ideal for someone first using this device. For a more advanced set up, see Control Panel.

### 3.1.2 Control Panel

This menu includes all the settings and information the Pleiades Giga LAN offers. Sorted into individual categories, the user can access only particular settings or adjust and modify everything manually.

### 3.1.3 Personal Info

This menu is for the system administrator account. It includes the option to set the password and some other options related to the web interface.

### 3.1.4 Logout

This can be used to logout once all the settings have been configured.

*Note: Without installing and formatting a drive first, the other functions of the Pleiades Giga LAN will not be available. The settings seen in this chapter only affect the network drive and do not apply to the USB drive.*

## 3.2 Quick Setup

The settings in this menu are aimed at the user who wants to quickly set up the LAN disk and share files on the local network. Only the most basic functions and settings are available but it is ideal for someone first using this device. For a more advanced set up, see Control Panel.

### 3.2.1 Wizard

The setup wizard can be used to configure all the basic LAN settings for your network drive.

For PC users, if you have followed the setup wizard in Chapter 2, there is no need to go through this again, unless you want to change some of the settings or have not yet completed the setup.

For Mac users, follow the setup wizard from step 1 to 6 to quickly prepare your network drive for file sharing.

- **Step 1:** Select your preferred language for the web interface from the drop down list.
- **Step 2:** Set a new password for the web configuration interface. Not required but strongly recommended.
- **Step 3:** If you prefer a different hostname for your Pleiades Giga LAN, you can change the name here, otherwise simply use the default name.
- **Step 4:** We recommend setting both IP Address and DNS Server to obtain the IP automatically but if required, you can set it manually. If you need assistance in manually filling out these fields, please contact your network administrator for help.
- **Step 5:** Set the date and time manually or select your time zone from the drop down list and use a NTP server to synchronise the time via the internet.
- **Step 6:** Compare the new settings with the previous configuration and if OK, complete the setup wizard to save the new settings.

*Note: For a more detailed explanation of each of the settings, refer to the “System” section.*

### 3.2.2 Add User

Use this setup wizard to quickly add and configure a new user account.

The screenshot shows the 'Add User' step (Step 1/3) of the setup wizard. The interface includes a navigation pane on the left with options: Quick Setup, Wizard, Add User (highlighted), Add Group, and Add Share. The main area contains the following fields and options:

- User Name:
- Password:
- Please enter password again
- Description (optional):
- Create Shared private Folder
  - Shared Private Folder Location:
- Enable Quota of  MB

At the bottom right, there are 'Back' and 'Next' buttons.

- **Step 1:** Enter the user name and password for the new account. At the same time, you can also create a private folder for that user and set the quota limit.
- **Step 2:** If there are other users already set up, they can be added to the user account management.
- **Step 3:** In the last step you can configure the permissions to the shared folder and add or remove other users.

### 3.2.3 Add Group

Use this setup wizard to quickly add a new group.

The screenshot shows the 'Add Group' step (Step 1/3) of the setup wizard. The interface includes a navigation pane on the left with options: Quick Setup, Wizard, Add User, Add Group (highlighted), and Add Share. The main area contains the following fields and options:

- Group Name:

At the bottom right, there are 'Back' and 'Next' buttons.

- **Step 1:** Enter the group name.
- **Step 2:** Configure which members will be included in this group by adding and removing the members from the list.
- **Step 3:** Configure the share permissions by adding (read only or writable) and removing the shares from the list.

### 3.2.4 Add Share

Use this setup wizard to quickly add a new share.

The screenshot shows a web-based configuration interface. At the top, there are three tabs: 'Basic', 'Control Panel', and 'Personal Info'. A 'Logout' button is located in the top right corner. On the left side, there is a 'Quick Setup' menu with options: 'Wizard', 'Add User', 'Add Group', and 'Add Share' (which is highlighted with a dashed border). The main content area is titled 'Step 1/3' and 'Add Share'. It contains three input fields: 'Share Name', 'Path', and 'Description (Optional)'. At the bottom right of the form, there are 'Back' and 'Next' buttons.

- **Step 1:** Enter the share name and an optional description for the share.
- **Step 2:** Configure the Windows/FTP access permissions by adding (read only or writable) and removing the members or group from the list.
- **Step 3:** Configure the NFS access permissions by adding unique IP addresses or a subnet.

*Note: For a more detailed explanation to each of the settings, refer to the “Users and Group Management” or “File and Print” section.*



### 3.3 Users and Groups

In this menu, the admin can manage the users and groups for the Pleiades Giga LAN. Start by adding your users first, then create the groups and assign the members to their groups.

*Note: These settings only apply to the network drive but not when the drive is connected to the computer directly via USB.*

#### 3.3.1 User Management

In this section you can see all existing users for the Pleiades Giga LAN and manage them by adding or removing them from the list.

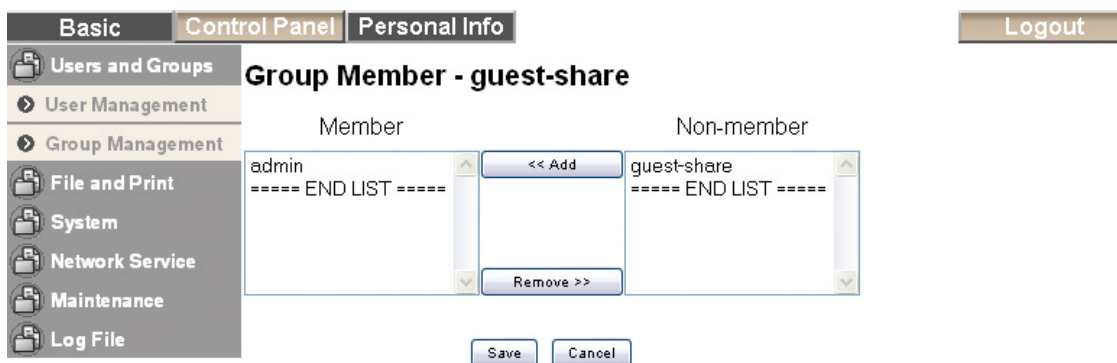
- **Existing Users:** Lists the current users of the Pleiades Giga LAN.
- **Adding Users:** To add a new user, clear the form by pressing the “Clear Form” button, then fill out a user name and password. The description is optional but will help you to manage multiple users, so we recommend filling out a short description. If required, you can create a private folder for that user and set a limit for the capacity. Once done, press the “Save” button to create the new user. If you would like to add this user to an existing group, select the user from the existing users list and press the “Groups” button for further settings.
- **Modifying Users:** Select the user from the existing users list and modify the settings. Once done, press the “Save” button to apply the new settings.
- **Removing Users:** To remove a user, select it from the existing users list and then press the “Delete User” button.

### 3.3.2 Group Management

In this section you can see all existing groups for the Pleiades Giga LAN and manage them by adding or removing them from the list. Groups are not required to grant access to the Pleiades Giga LAN but will help the admin to manage multiple users and easily share a folder among a group of people.



- **Existing Groups:** Lists the current groups of the Pleiades Giga LAN.
- **Adding Groups:** To add a new group, clear the form by pressing the “Clear Form” button, then enter a new group name. Once done, press the “Save” button to create the new group. If you would like to add some members to this group, select the group from the existing groups list and press the “Members” button for further settings.
- **Modifying Groups:** Select the group from the existing groups list and modify the members by pressing the “Members” button for further settings. Once done, press the “Save” button to apply the new settings.



- **Removing Groups:** To remove a group, select it from the existing groups list and then press the “Delete Group” button.

## 3.4 File and Print

In this menu, you can configure all the settings related to the FTP, NFS and printer server. Use this to manage how your files and folders are shared.

### 3.4.1 File Server

In this section you can modify the server settings and also enable or disable a service.

The screenshot shows the 'File Server Setting' page. On the left is a navigation menu with categories: Users and Groups, File and Print, File Server (selected), Share Management, Printer Server, System, Network Service, Maintenance, and Log File. The main content area is titled 'File Server Setting' and is divided into several sections:

- Character set:** A dropdown menu set to 'Traditional Chinese (CP950)'.
- Windows Setting:**
  - Enable:
  - Workgroup:
  - Description:
  - WINS Server (Optional):  .  .  .
- FTP Server Setting:**
  - Enable:
  - Port Number:
- NFS Server Setting:**
  - Enable:
- Guest Access Setting:**
  - Enable:
  - Enable Quota:
  - Guest-user Quota:  MB

A 'Save' button is located at the bottom right of the settings area.

- **Character set:** By default, this is set to Traditional Chinese (CP950). If your file names include characters from another language, change the encoding here and select your language from the drop down list (e.g. English CP437).
- **Windows Setting:** In this section, you can change the workgroup that the Pleiades Giga LAN belongs to and modify its description. The IP for the WINS Server (Windows Internet Name Server) can be left blank unless this is required for your network.
- **FTP Server:** This service can be enabled or disabled. When enabled, the default FTP port number will be set to 21 but you can change that if required.
- **NFS Server:** This service can either be enabled or disabled depending on your requirements.
- **Guest Access:** To enable guest access (guest-share), enable it and if required, set a limit for the disk space. For security reasons, the guest access can also be disabled.

*Note: After changing any of the settings, press the “Save” button to apply the new configuration and save its settings.*

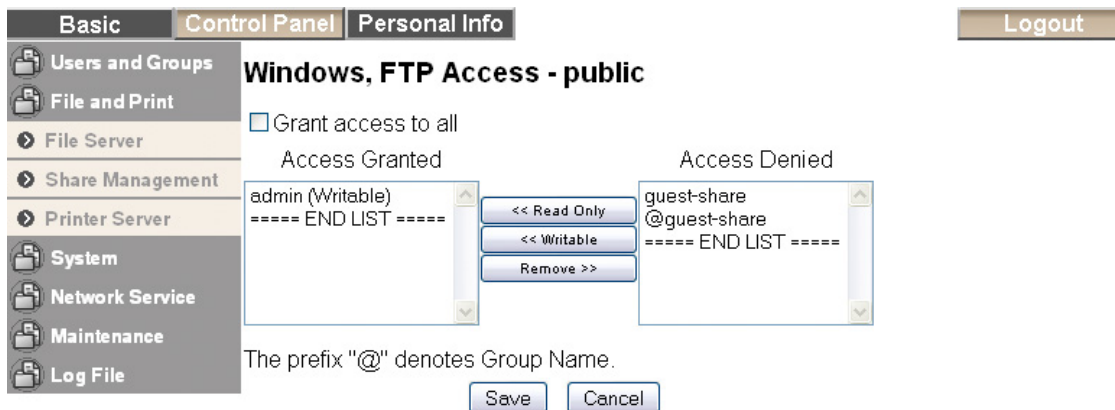
### 3.4.2 Share Management

In this section you can manage the shares and access rights.



- **Existing Shares:** Lists the current shares on the Pleiades Giga LAN.
- **Adding Shares:** To add a new share, clear the form by pressing the “Clear Form” button, then enter a new share name. Once done, press the “Save” button to create the new group.

Select the new group from the existing shares list, then depending on how you share the files, click on “Windows, FTP Access” or “NFS Access” and add the users or groups that will have access to this share. You can allow access for all users or define each user and group separately. The names with an @ for the first letter are groups.



- **Modifying Shares:** Select the share from the existing shares list and modify the access rights by pressing the “Windows, FTP Access” or “NFS Access” button for further settings. Once done, press the “Save” button to apply the new settings.
- **Removing Shares:** To remove a share, select it from the existing shares list and then press the “Delete Share” button.

### 3.4.3 Printer Server

In this section you can enable or disable the printer server and check the details of the connected USB printer.



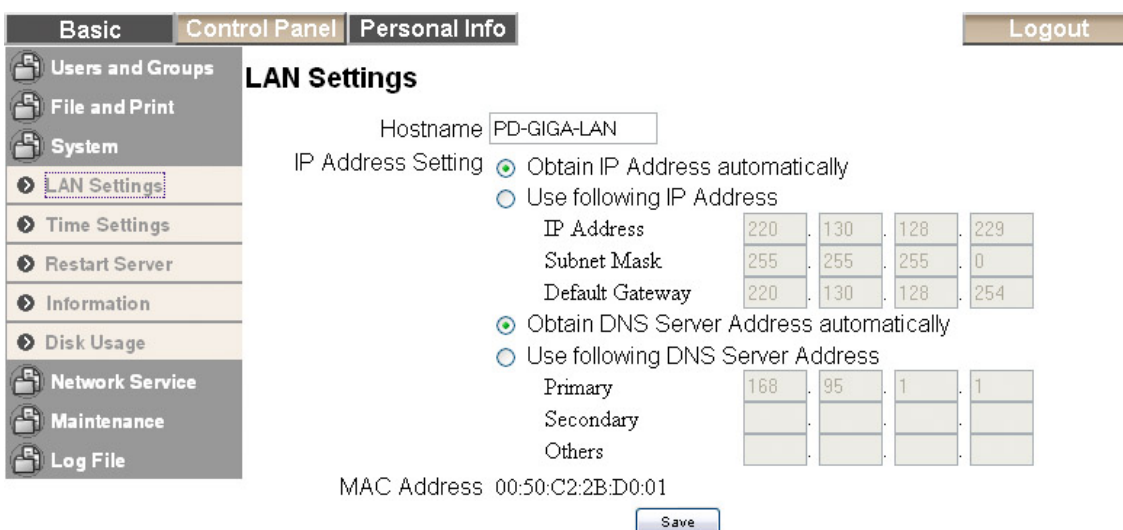
## 3.5 System

In this menu you can configure the basic network settings for the Pleiades Giga LAN and find some details related to the firmware or disk usage.

### 3.5.1 LAN Settings

In this section you can define the hostname for your Pleiades Giga LAN and set up the IP configuration. We recommend using “Obtain IP/DNS address automatically”. When selecting a hostname, make sure to use a unique name and not one that has already been used on the local network.

If required, you can also set the individual addresses yourself. If you need assistance in manually filling out these fields, please contact your network administrator for help.



*Note: After changing any of the settings, press the “Save” button to apply the new configuration and save its settings.*

### 3.5.2 Time Settings

In this section, you can set the date and time manually or select your time zone from the drop down list and use a NTP server to synchronise the time via the internet

When set manually, press the “Save” button to apply the new time and save the settings or when synchronised via the internet, select the NTP server and press the “Update Time” button.

The screenshot shows the 'Time Settings' page. The left sidebar contains a menu with 'Time Settings' highlighted. The main area has three tabs: 'Basic', 'Control Panel', and 'Personal Info'. The 'Time Settings' section contains the following fields:

- Date: Month 9, Day 15, Year 2008
- Time: Hour 3, Minute 19, AM
- Time Zone: (GMT+08:00) Taipei
- NTP Server:  Default (None selected in dropdown),  User Define

Buttons for 'Save' and 'Update Time' are located at the bottom of the form.

*Note: To use the NTP function, you need to enter a valid NTP server or select one from the drop down list. If the default address at time.windows.com does not work, find a new one and then try again or turn off the NTP server and set the time manually.*

### 3.5.3 Restart Server

In this section, you can restart the Pleiades Giga LAN via the web browser. Make sure that nobody is accessing the device when you restart it.

Press the “Restart” button to restart the server. The system will restart and automatically prompt you for the login when it’s ready.

The screenshot shows the 'Restart Server' page. The left sidebar contains a menu with 'Restart Server' highlighted. The main area has three tabs: 'Basic', 'Control Panel', and 'Personal Info'. The 'Restart Server' section contains a single button labeled 'Restart'.

### 3.5.4 Information

In this section, you can find the product name, the current firmware and the current IP address.

**System Information**

Product Name	PLEIADES GIGA LAN
Firmware Version	2.6.3-20080909
IP Address	192.168.11.21

### 3.5.5 Disk Usage

In this section, you can find a summary of the hard disk status and disk usage. Press the “Refresh” button to update the information.

**Disk Usage**

Last Checked: 9/15/2008 04:40:48

Please select statistics information:

Disk Name	Capacity	Used	Free	Disk Usage (%)
/dev/hdd	151939MB	1025MB	150914MB	0%



## 3.6 Network Service

In this menu, you can enable or disable the network services like the DHCP server, Bonjour and the BitTorrent™ download service.

### 3.6.1 DHCP Server

In this section, you can enable and set up the DHCP server. In general, there is already a DHCP server on the local network, so you don't need to enable this but if required, enable it and configure the addresses.

Once you have set everything up, press the “Save” button to start the DHCP server and save the settings.

The screenshot shows the 'DHCP Server Setting' page. The left sidebar contains a navigation menu with 'DHCP Server' selected. The main content area has the following settings:

- Enable Server
- DHCP Client Setting
- Subnet Mask (optional)
- Default Gateway (optional)
- Primary DNS (optional)
- Secondary DNS (optional)
- Others DNS (optional)
- DHCP IP Address Start
- DHCP IP Address End
- Maximum Lease Time

At the bottom, there are three buttons: 'Save', 'DHCP lease list', and 'Static IP'. A 'Logout' button is located in the top right corner of the page.

### 3.6.2 Bonjour

In this section, you can enable or disable the Bonjour service. For Mac users, turn it on to offer easy access to the login page via the Safari web browser. In addition to that, you can also enable the iTunes service, so that music files can be accessed directly from iTunes.

When the iTunes option is enabled, you can store your MP3 music files in the “/public/music” folder and play them directly from iTunes. The Pleiades Giga LAN will automatically appear in iTunes under shared devices.

The screenshot shows the 'Bonjour Setting' page. The left sidebar contains a navigation menu with 'Bonjour' selected. The main content area has the following settings:

- Enable
- iTunes Enable

At the bottom, there is a 'Save' button. A 'Logout' button is located in the top right corner of the page.



### 3.6.3 BTorrent

In this section, you can manage your torrents and add new downloads to the queue. Before you add the first job, set a limit for the download and upload speed according to your network’s bandwidth. After changing the settings, press the Save button to apply the new configuration.

To start downloading files, you will have to download a torrent file from the internet first and then upload it to the Pleiades Giga LAN. Once the torrent file has been added, you can start downloading. The downloaded files will be stored in your “/public/btdownload” folder.

The BitTorrent™ client on the Pleiades Giga LAN can download 5 files at a time with a maximum of 40 files in the queue. Remember to start the download again if the device has been turned off or rebooted before the file has been downloaded completely.

For more details, see “BTorrent” under “Additional Features” in chapter 5.

*Note: The BitTorrent™ client on the Pleiades Giga LAN is using the TCP protocol and the ports 6881-6889. Make sure those ports are not blocked by your router or its firewall and if necessary, set up port forwarding, so that the traffic for those ports is forwarded to your Pleiades Giga LAN.*

## 3.7 Maintenance

In this menu, you can format the hard drive, upgrade the firmware and manage the configuration settings.

### 3.7.1 Disk Utility

This utility can be used to format the hard drive and see all the related disk information.

Device Name	Type	Mount Point	Status	Encrypt/Password/Format Type/Format	Scandisk	Unmount	Health
/dev/hdd	ext2	/mnt/ide4	mounted	<input type="checkbox"/> encrypt ext2 <input type="button" value="Format"/>	<input type="button" value="Scan"/>	<input type="button" value="Unmount"/>	PASSED <input type="button" value="Detail"/>

Disk spin down time: 10 Minute

- Encryption:** The Pleiades Giga LAN supports 128bit loop-AES encryption for the EXT2 file system. When enabled, the drive has to be formatted again and you will be prompted for a password (has to be exactly 20 characters).
- File System:** The available file systems are EXT2, EXT3, FAT32 and NTFS. For the drive installed in the Pleiades Giga LAN, we recommend using EXT2 for optimum performance and functionality when it is used as network drive only. If it will be connected to a PC via USB as well, then NTFS is the preferred file system, so that it can be mounted without the need to install additional applications to read the EXT2 partition but the performance of the network drive will not be as good as with EXT2.
- Scandisk:** Press the “Scan” button to check the disk integrity. If possible, any errors found will automatically be fixed. This will take a while to finish depending on the capacity of the drive, and also the disk can not be used in that time.
- Unmount:** This function is only available for external USB drives that are attached to the Pleiades Giga LAN. Press the Unmount button to eject the USB drive before you disconnect it.
- Detail:** Press the “Detail” button to see further disk information. If the HDD supports S.M.A.R.T, it will also report the disk’s health status.
- HDD Power Management:** To save power and reduce heat, you can let the hard disk spin down if not used for a certain amount of time. Enter a time in minutes and press the “Save” button to apply the new setting.

*Note: The “disk spin down” function might not work properly for some WD hard drives due to lack of the E3h command.*

### 3.7.2 Firmware Upgrade

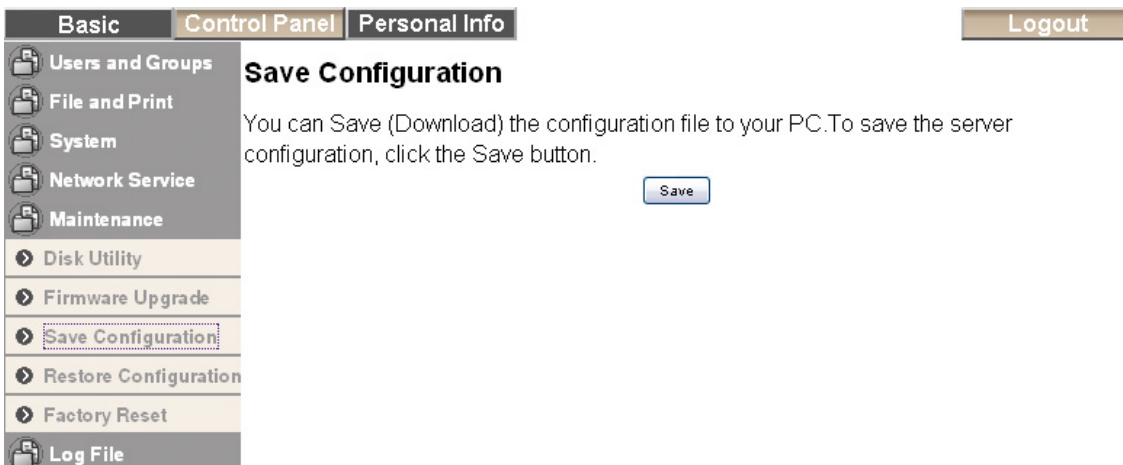
In this section you can check the current firmware version and upgrade if a new one is available. Download the latest firmware and store it on your computer, then browse for the \*.gz file, select it and start the upgrade. The upgrade process takes about 10-20 minutes.



*Note: Never turn off your unit during the firmware upgrade procedure. This may damage your device! If for any reasons (e.g. power supply failure during firmware update) the procedure fails, you may not be able to operate your device any more.*

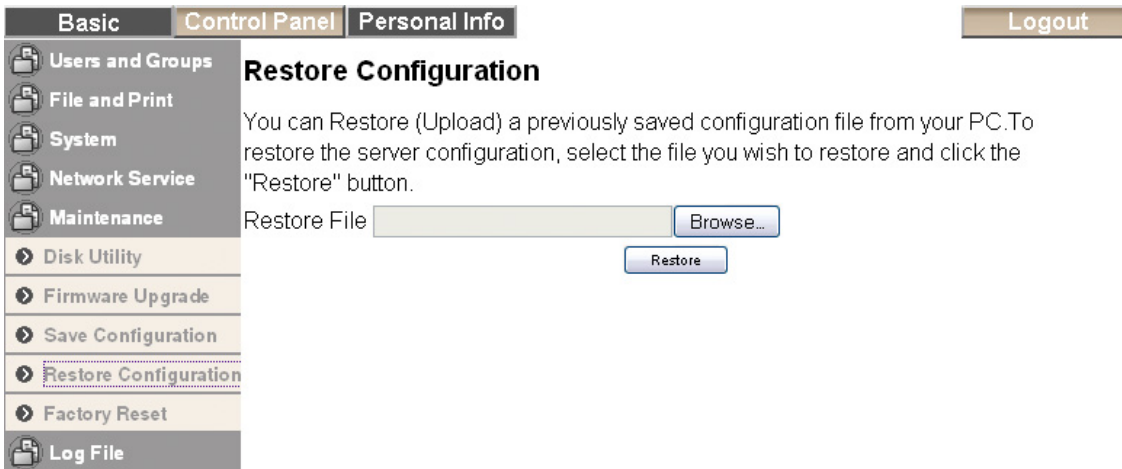
### 3.7.3 Save Configuration

For backup and before every firmware upgrade, you can use this function to save your current configuration. Press the “Save” button and save the “config.tar” file on your computer.



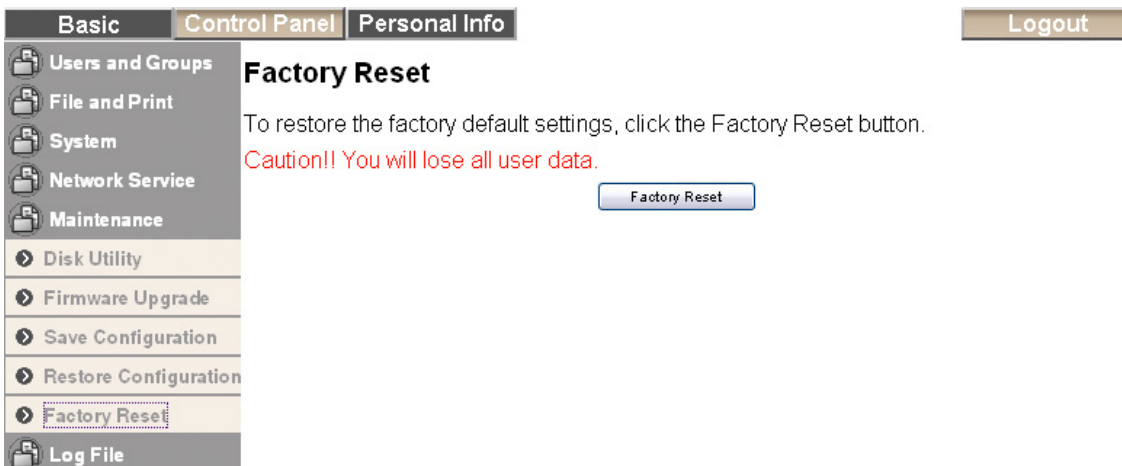
### 3.7.4 Restore Configuration

To quickly restore previous settings or set up multiple units, you can save the configuration and then use this function to upload a previous backup. Browse for the “config.tar” file on your computer and press the “Restore” button to restore the previous settings.



### 3.7.5 Factory Reset

Pressing the “Factory Reset” button will restore all settings to their default configuration. Before pressing this button, we recommend saving your current configuration in case you want to restore it again later.



*Note: When the “Factory Reset” button is pressed, all users, groups and other configurations will be lost! The files inside the shared folders will not be erased but only the administrator will have access to them via SMB connection, unless the same share name is set up again and access is granted for new users.*

*To completely erase the files inside the shares, use the “Share Management” menu to remove the shares before the reset or use the administrator account after the reset, login via SMB and delete the files.*

### 3.7.6 Log File

This menu includes all the log files of your Pleiades Giga LAN. You can find logs for the SAMBA, FTP and DHCP server as well as system and administration logs.

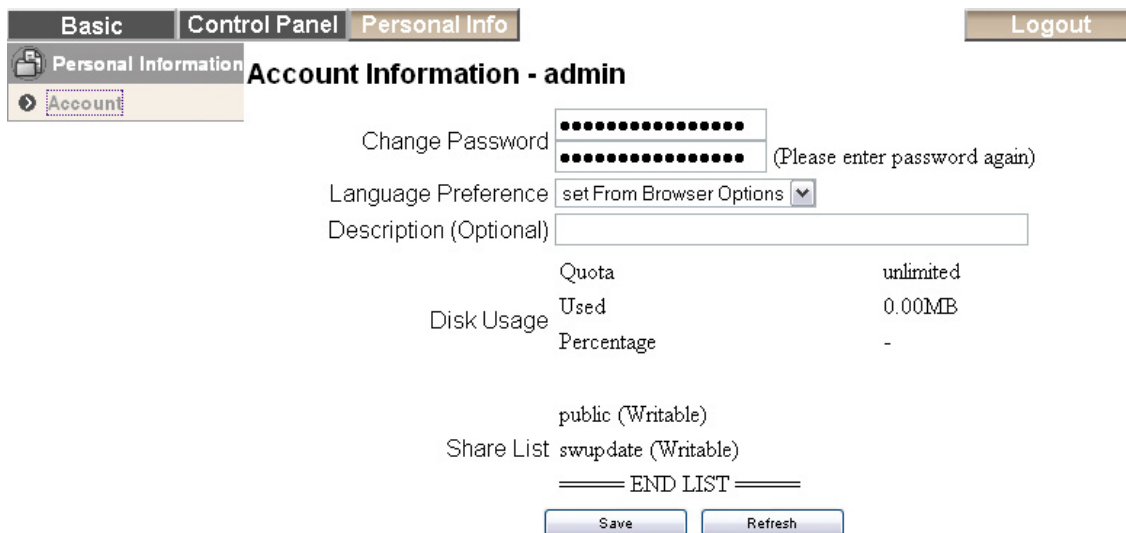


Note: To delete the old log files, press the Clean button beneath the log.

## 3.8 Personal Information

### 3.8.1 Account

In this menu, you can change your admin password and the menu language for the configuration interface. There is also an overview of disk usage and share list available.



## 4 Network Drive

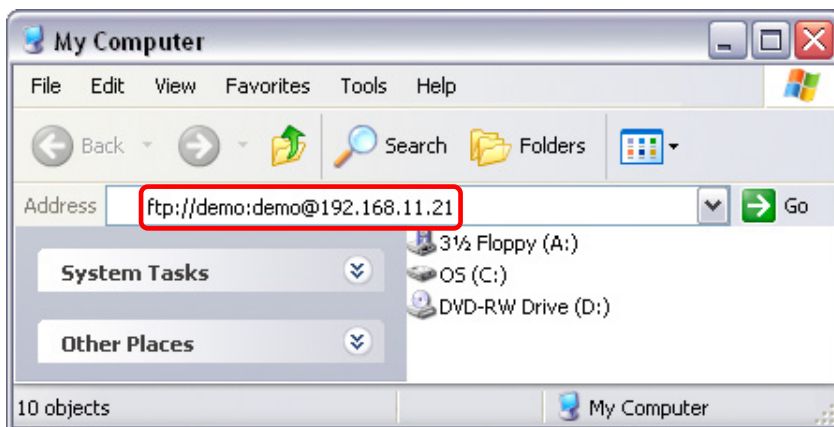
To access the data on the Pleiades Giga LAN via the network connection, you may use either FTP or SMB. Before you can access the shared folders, you will have to set up your users, groups and shares. See chapter 3 for more details about user, group and share management.

### 4.1 File Access on a PC

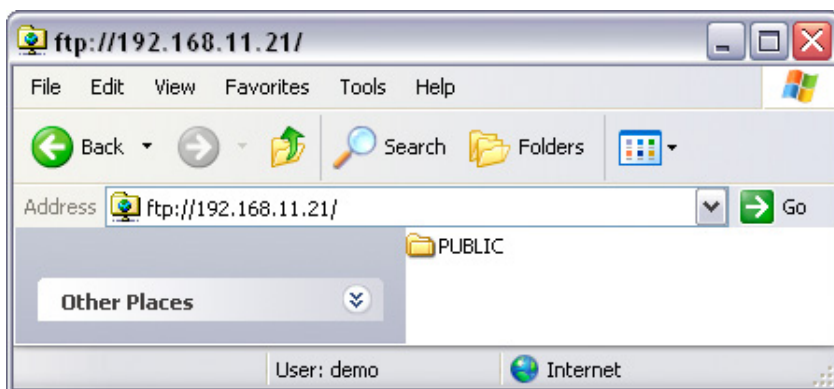
#### 4.1.1 FTP

Use Windows Explorer and type “ftp://” followed by the IP address of your Pleiades Giga LAN. Add the user name and password in front of the IP address with an @ sign in between.

As an example, your URL might look something like this:  
ftp://demo:demo@192.168.11.21



After login, you can access the available folders and transfer your files. Remember that files can not be opened directly via FTP, you will always have to transfer them to your computer first.

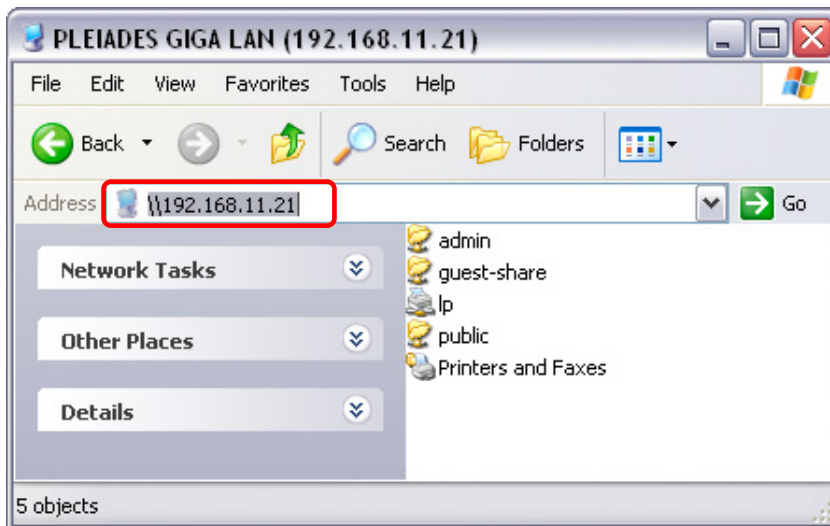


*Note: For FTP transfers, we recommend installing and using a dedicated FTP application, which can either be a free utility or professional shareware program.*

### 4.1.2 Windows Explorer

Use Windows Explorer and type \\ followed by the IP address of your Pleiades Giga LAN (e.g. "\\192.168.11.21"). It will list all available folders and shares on your Pleiades Giga LAN, which you can then access directly.

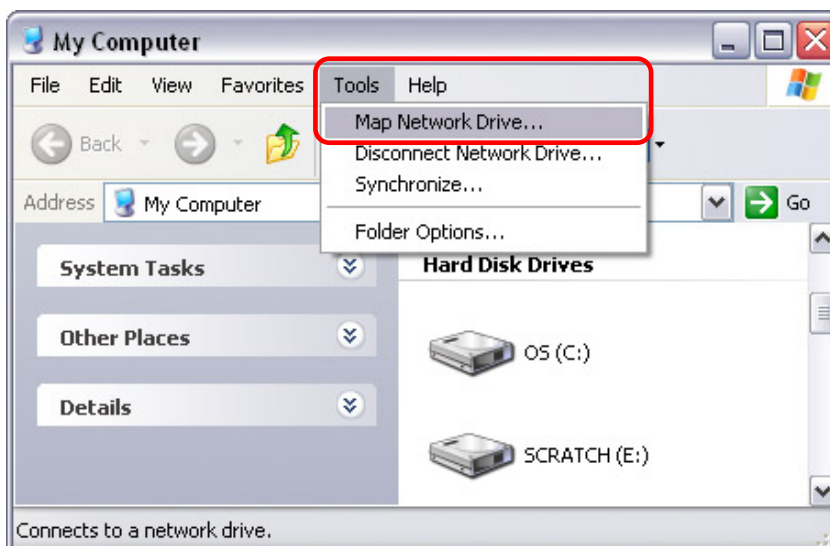
You can copy files to the network storage as if it were a folder on your local drive. Depending on the bandwidth, you can also directly play and open the files, although we recommend transferring the data to your local drive first.



### 4.1.3 Mapping a Network Drive

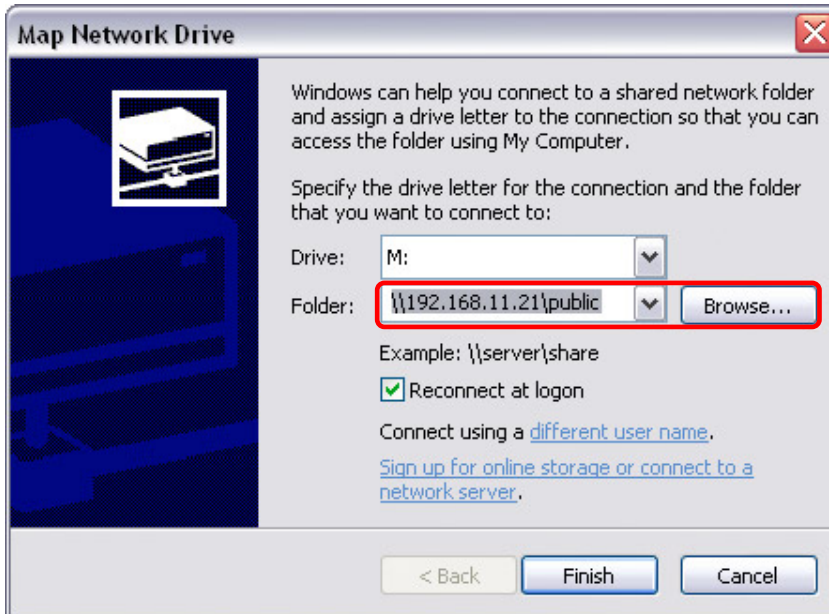
For easy access, we recommend mapping the storage as network drive.

1. Double click on My Computer, go to the Tools menu and select "Map Network Drive...".

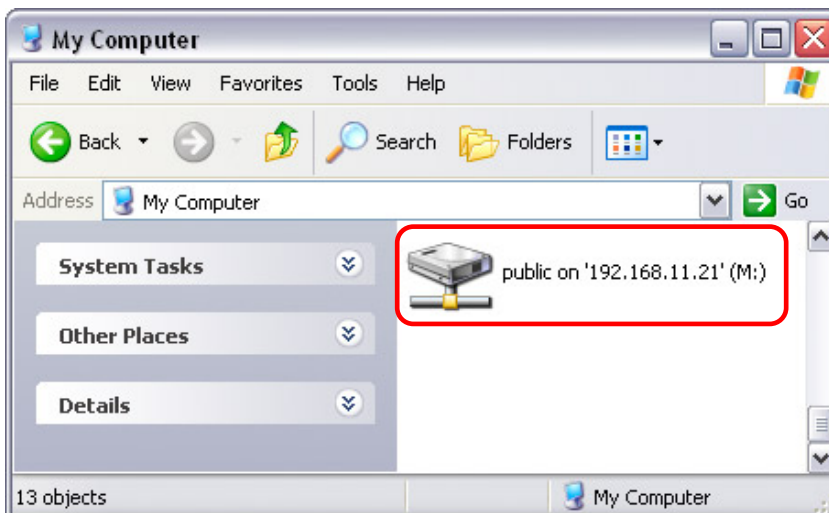




2. Follow the setup wizard and fill in the path to your Pleiades Giga LAN. When entering the IP address, also add the folder (e.g. "\\192.168.11.21\public"). Alternatively, you can also browse for the shares by clicking on the Browse button and locating the folder that way.



3. Once the drive has been mapped, you are able to find and access it under My Computer. This link will still be there even after rebooting your Operating System if you have selected the option "Reconnect at logon".



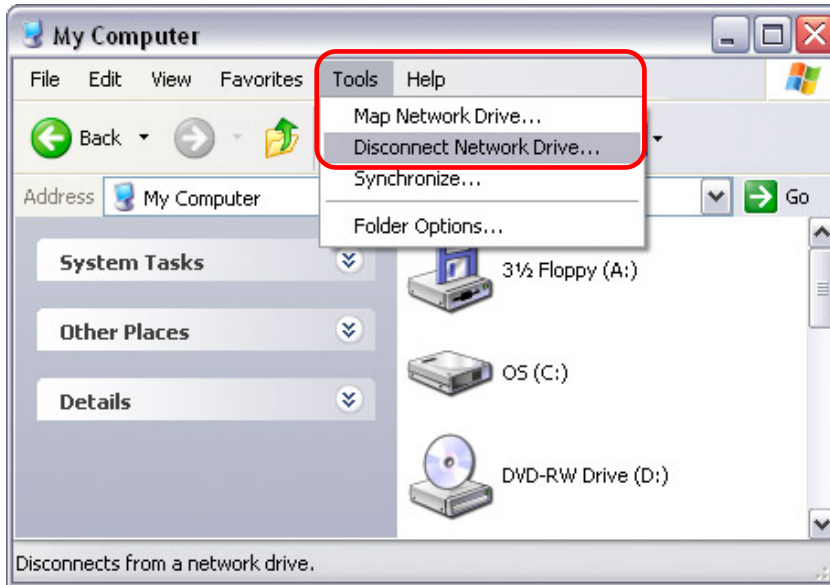
*Note: For quick and temporary access, you can also simply go to My Network Places, view the workgroup computers and select your Pleiades Giga LAN.*



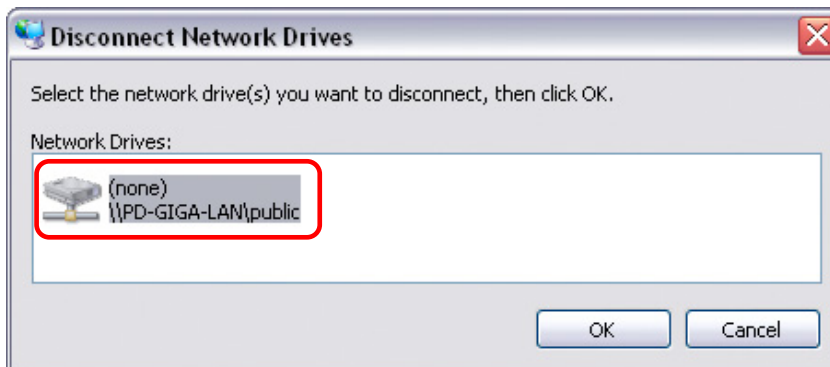
#### 4.1.4 Disconnecting a Network Drive

When you don't need a mapped network drive any more, we recommend disconnecting it. It is also necessary to disconnect a temporary network drive when you try to login with a new password but have not restarted the computer in between.

1. Double click on My Computer, go to the Tools menu and select "Disconnect Network Drive..."



2. Select any temporary or mapped network drives that you would like to remove and then click OK.

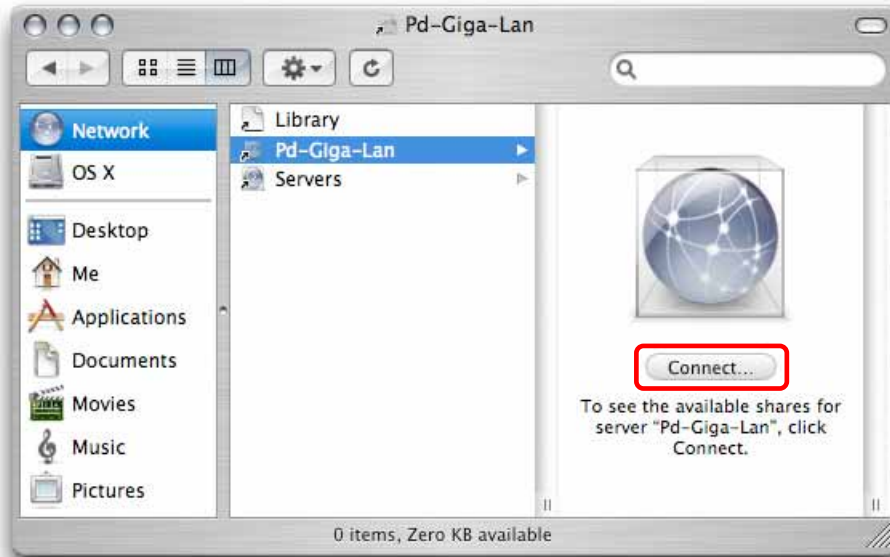


*Note: If you experience problems with the network access, disconnect all network drives on the Pleiades Giga LAN, reboot your computer and then try again.*

## 4.2 File Access on a Mac

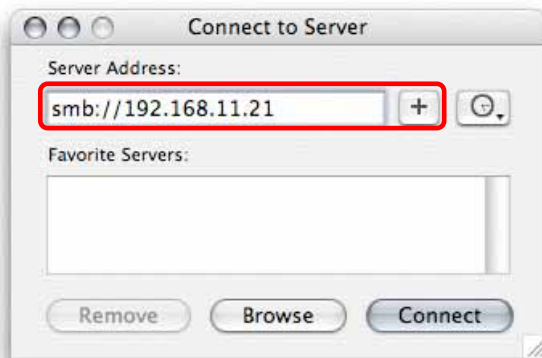
### 4.2.1 SMB

To mount and access the network storage, open your Finder, click on “Go” and choose “Network”. Browse for your network drive and click on it to access the folder.



Alternatively, you can use the “Connect to Server” command.

1. Click on “Go” and choose “Connect to Server”.
2. Type `smb://` followed by the IP address of your Pleiades Giga LAN or click on the Browse button to locate the folder on your network. Click on the Connect button once the server address has been filled out.



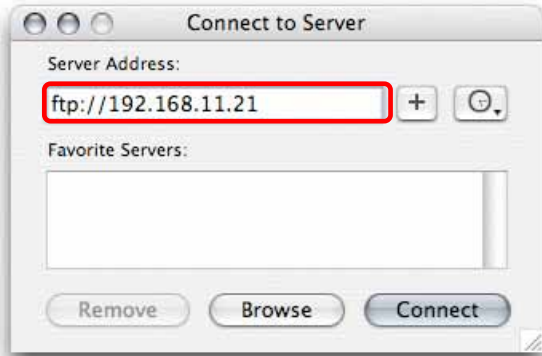
3. You will be asked to choose a folder and after entering the correct password (if passwords have been set), it will mount the folder on your desktop.



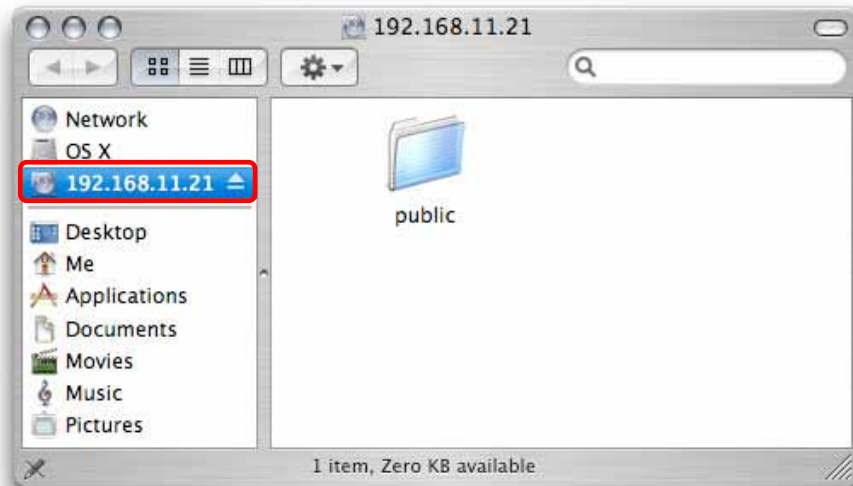
### 4.2.2 FTP

The FTP utility on the Mac will be able to read the data on the network drive but you can not upload new data to the drive. To do that, you will need to install a dedicated FTP application, which can either be a free utility or professional shareware program.

1. Click on “Go” and choose “Connect to Server”.
2. Type “ftp://” followed by the IP address of your Pleiades Giga LAN. Click on the Connect button once the server address has been filled out.



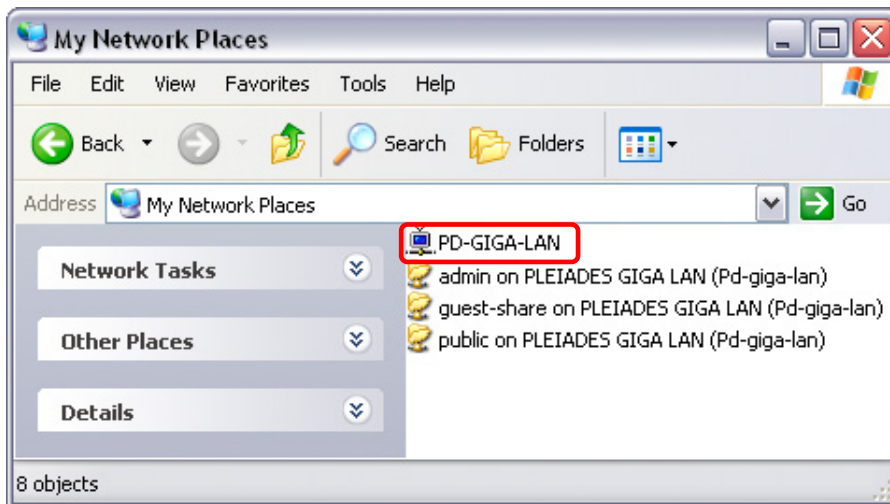
3. You will be asked to choose a folder and after entering the correct password (if passwords have been set), it will then mount the folder on your desktop.



## 5 Additional Features

### 5.1 UPnP

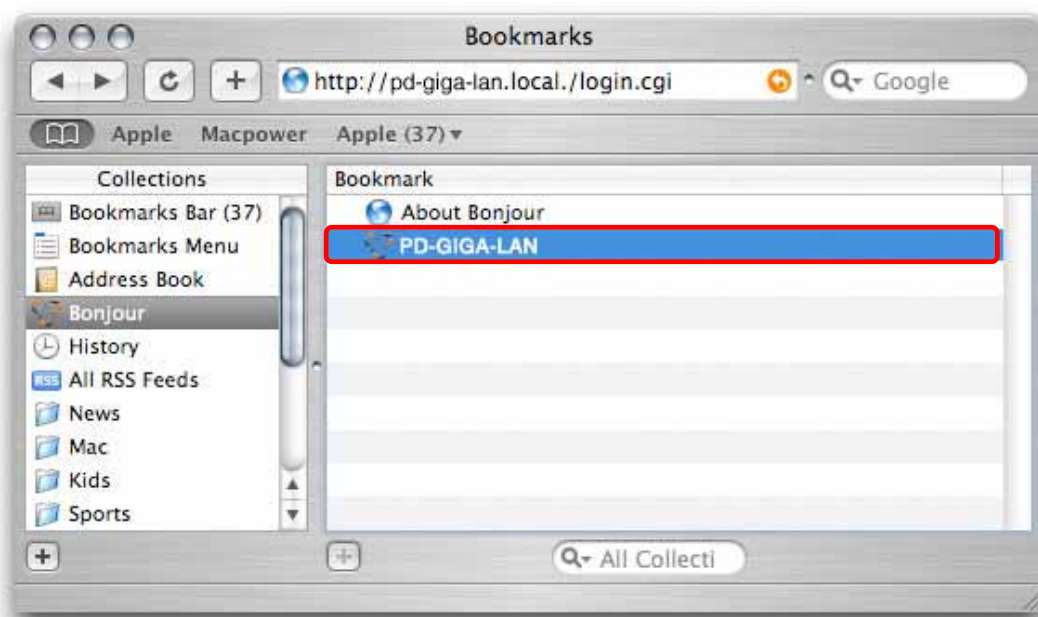
The Pleiades Giga LAN supports UPnP v1.0. To access the device on a PC, go to My Network Places and the Pleiades Giga LAN will be listed as an UPnP device. You can select it and access the configuration page.



*Note: There is no need to configure anything, this function is turned ON by default and other devices will be able to recognise it automatically.*

### 5.2 Bonjour & iTunes

For easy access to the web configuration interface on the Mac, a shortcut to the Pleiades Giga LAN will be available in the bookmarks collection under Bonjour.



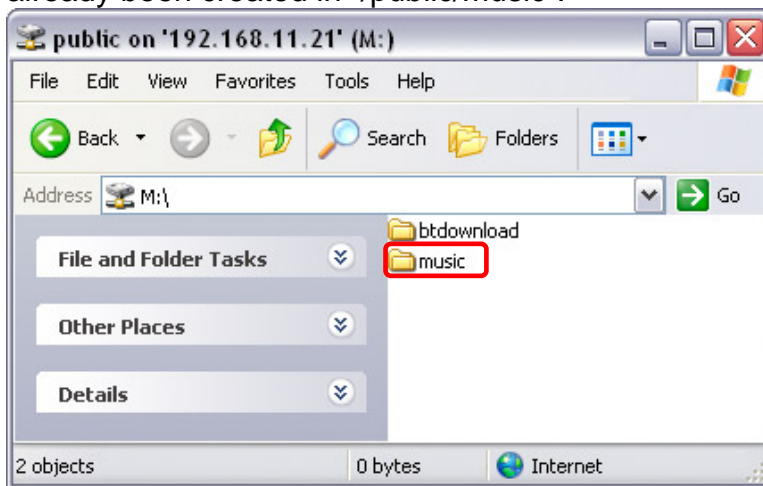
### 5.2.1 iTunes

When the iTunes support for Bonjour is enabled, the Pleiades Giga LAN will appear as a shared music folder in your iTunes library. Store your MP3 files in the music folder of the Pleiades Giga LAN and play them over the network.

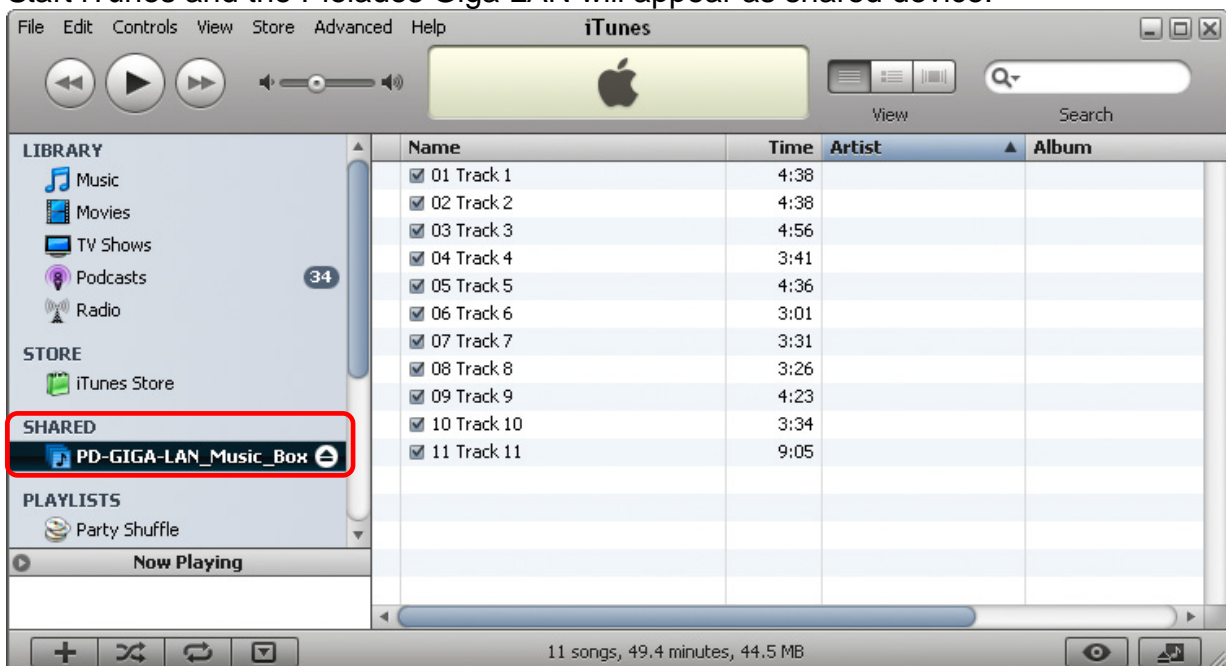
1. Make sure the support for iTunes in the Bonjour menu is enabled.



2. Store your MP3 files in the music folder of your Pleiades Giga LAN. The folder has already been created in “/public/music”.



3. Start iTunes and the Pleiades Giga LAN will appear as shared device.

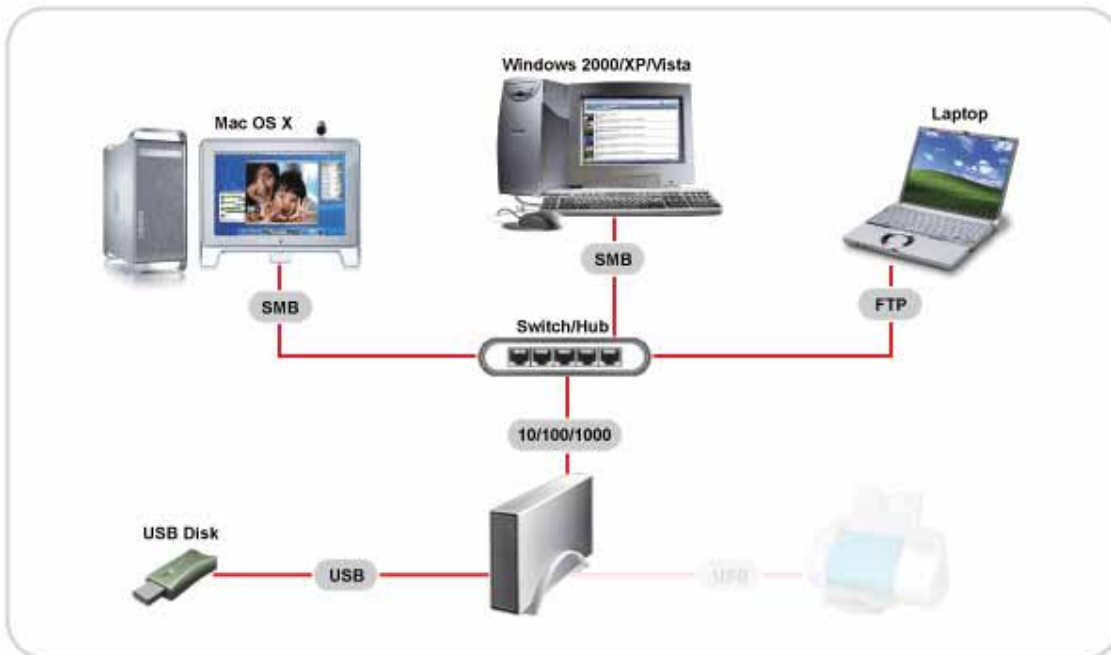


## 5.3 USB Drive

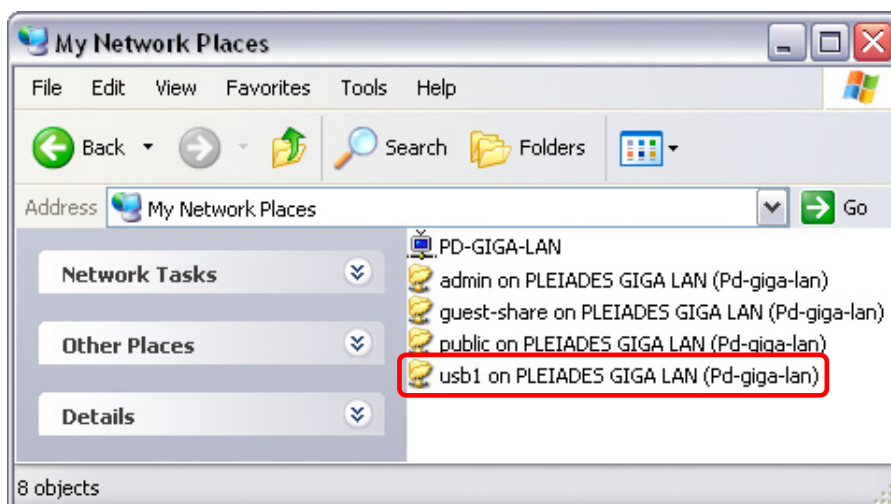
USB drives connected to the network drive can be shared and accessed on the network, plus, instead of using the Pleiades Giga LAN as network drive, it can act as USB drive.

### 5.3.1 Sharing a USB Drive

A USB drive with the file system FAT32 or NTFS that is connected to the Pleiades Giga LAN can be shared and accessed over the network via SMB or FTP.



Connect the USB drive to the Pleiades Giga LAN and then go to “My Network Places”. The external drive will show up as “usb1” and you can access it to transfer files without further login. Before disconnecting it, go to the “Disk Utility” menu and press the “Unmount” button to eject the drive.



*Note: To access the USB drive via FTP, leave the “md1” directory and you will find the “usb1” folder in the root directory (top folder).*



### 5.3.2 Pleiades Giga LAN as USB drive

When the Pleiades Giga LAN is not connected to the network, it can also be used as a simple USB mass storage device.



1. Login via web browser, stop all current downloads and then remove the power supply from the wall socket.
2. Once the system has shut down, disconnect the Ethernet cable.
3. Connect the USB cable to the USB device port on the Pleiades Giga LAN and then connect it to the USB port on your computer.
4. Plug in the power supply to turn on the device.
5. The USB drive will automatically show up on under “My Computer” for Windows or on the desktop for the Mac.

#### Important:

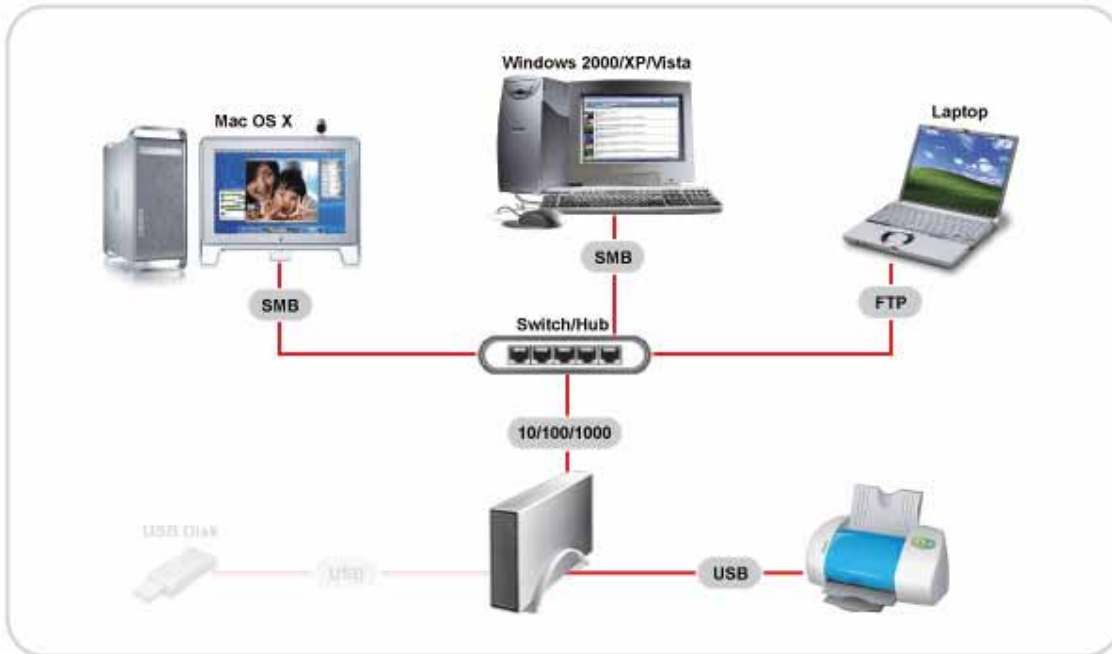
Depending on the file system that has been used to format the drive and the Operating System, the USB drive might not be accessible without installing additional software applications to mount the drive. The EXT2 file system is ideal for the network drive but not natively support by Windows or Mac, so if you intend to use it as USB drive, choosing NTFS or FAT32 might be more convenient to use, although slower for the network drive. Remember that when formatting the drive, all data will be lost, including the data related to the network drive.

The user accounts and access rights used for the network drive do not apply to the USB drive. When connected directly to the computer via USB, all data can be accessed and modified!

*Note: The Pleiades Giga LAN has to be turned off to change it acting as a USB drive to a network drive and vice versa. When both USB cable and Ethernet cable are connected, the USB connection has priority and it will act as a USB drive until disconnected and restarted.*

## 5.4 USB Printer

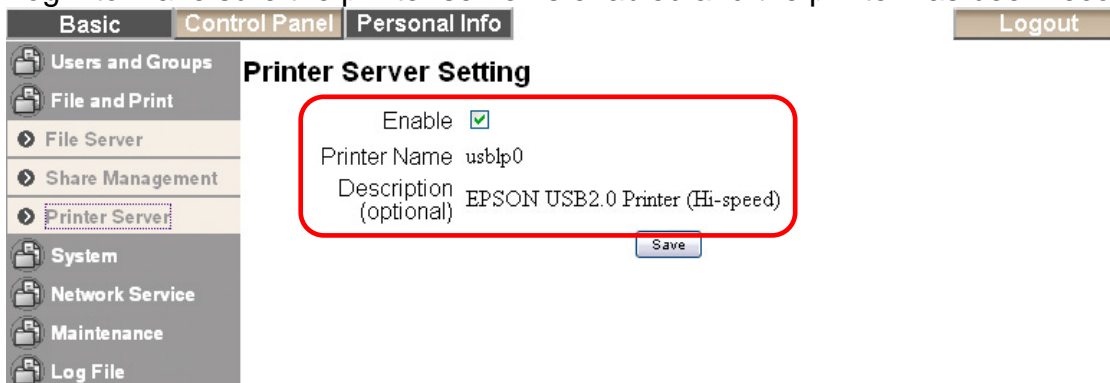
The Pleiades Giga LAN is equipped with an additional USB host port and a printer server. Connect your USB printer to the USB host port on the Pleiades Giga LAN and enable the printer server to share the printer among other workstations on the same local network.



### 5.4.1 Installation on a PC

Printing via the shared network printer will be slower than when the printer is connected directly to the USB port on the computer. After you press the Print button, please wait for the printer to receive the data.

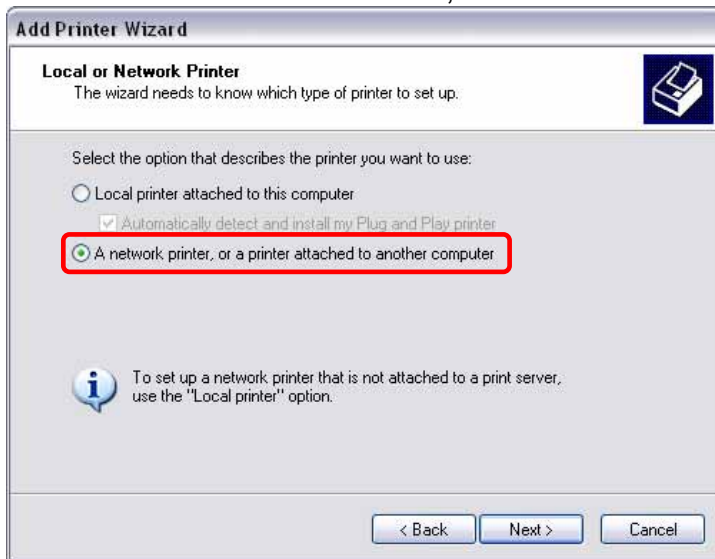
1. Connect your USB printer to the USB host port on the Pleiades Giga LAN and turn both devices on.
2. Login to make sure the printer server is enabled and the printer has been recognised.



3. On your PC, go to Start and select "Printers and Faxes".
4. Go to File and select "Add Printer" to bring up the printer setup wizard.



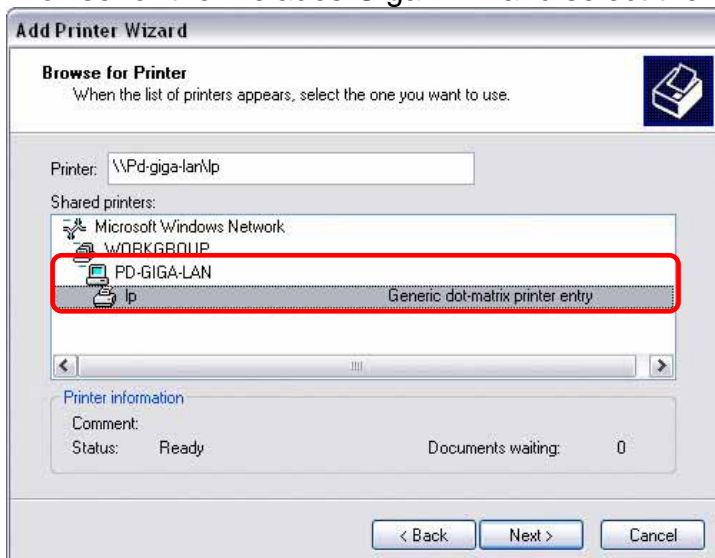
5. Press “Next” to start the wizard, then select “A network printer...” and press “Next”.



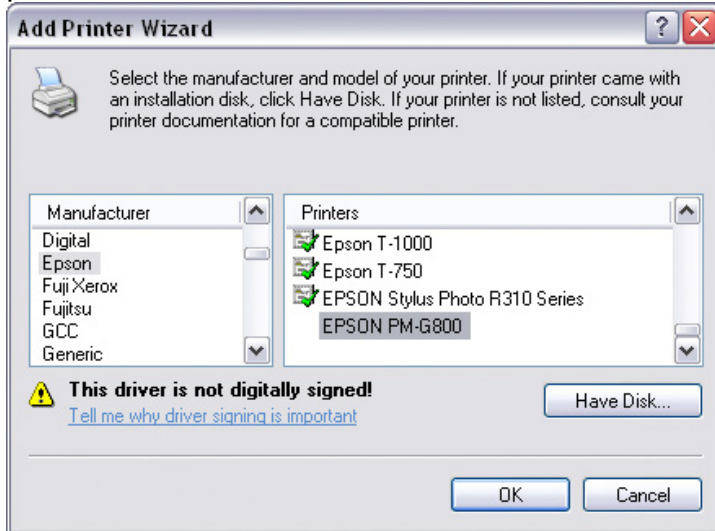
6. Select “Connect to this printer...” and click on “Next”.



7. Browse for the Pleiades Giga LAN and select the Ip printer, then click on “Next”.



- After clicking on “Next”, a pop-up window will appear asking for a driver. Select your printer model from the list or browse for the corresponding driver on your local drive.

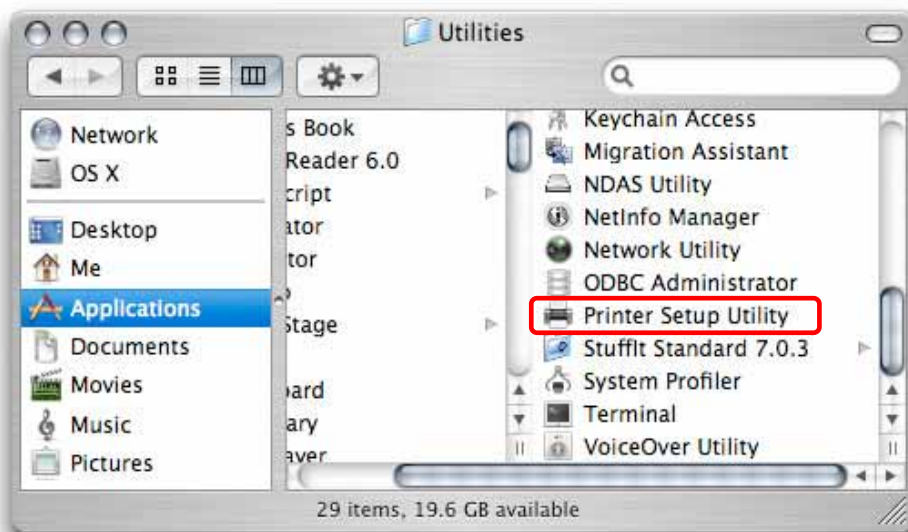


- Finish the wizard and you are done. Your printer is now set up and you can print the first page.

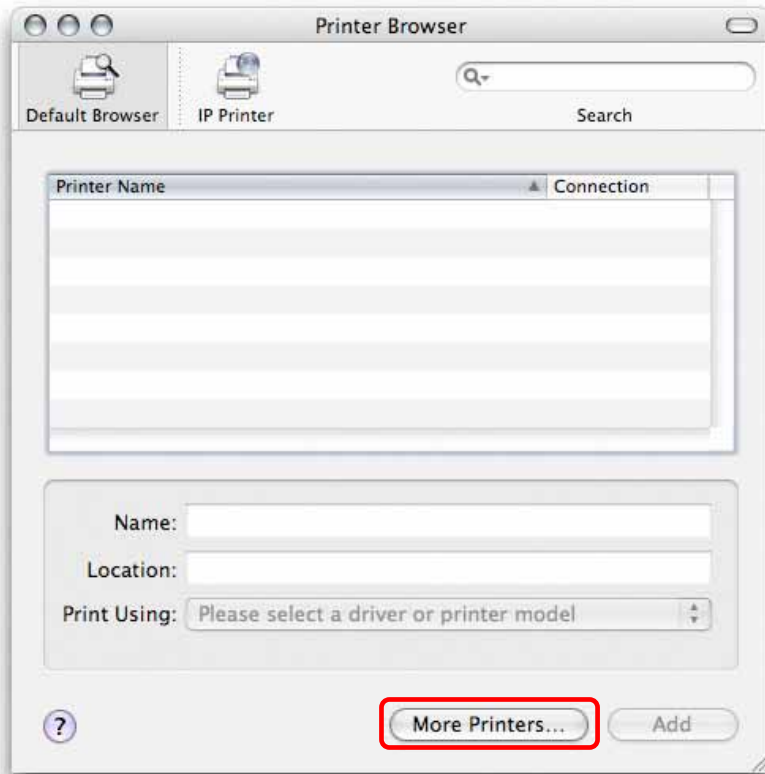
#### 5.4.2 Installation on a Mac

Printing via the shared network printer will be slower than when the printer is connected directly to the USB port on the computer. After you press the Print button, please wait for the printer to receive the data.

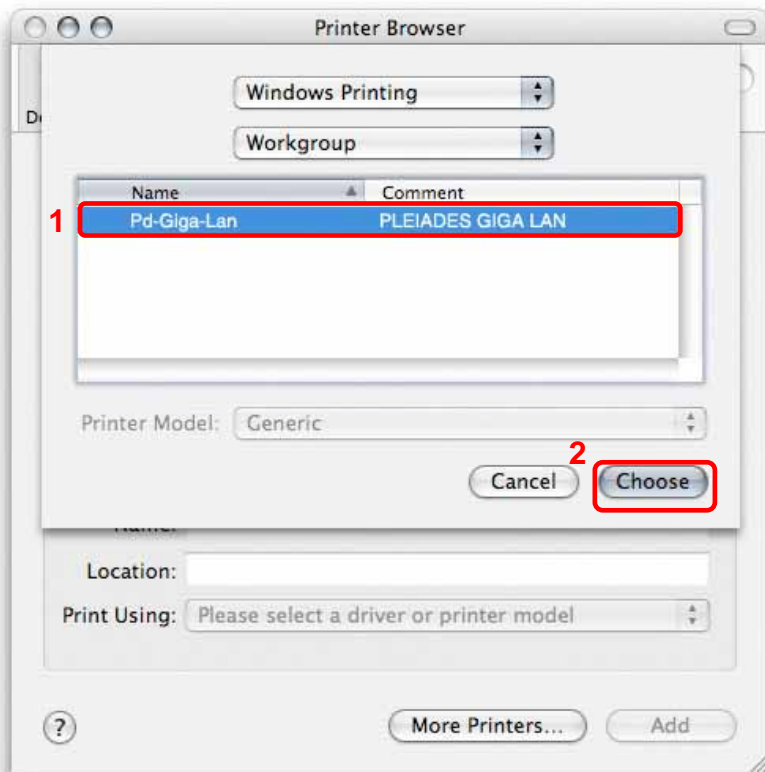
- Start the Printer Setup Utility in the Utilities folder.



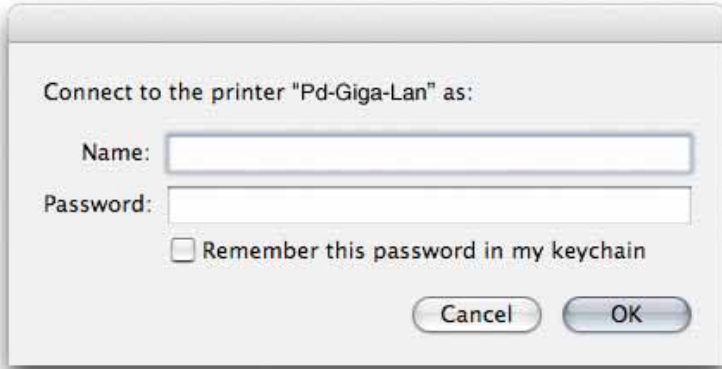
2. Select and click on “More Printers”.



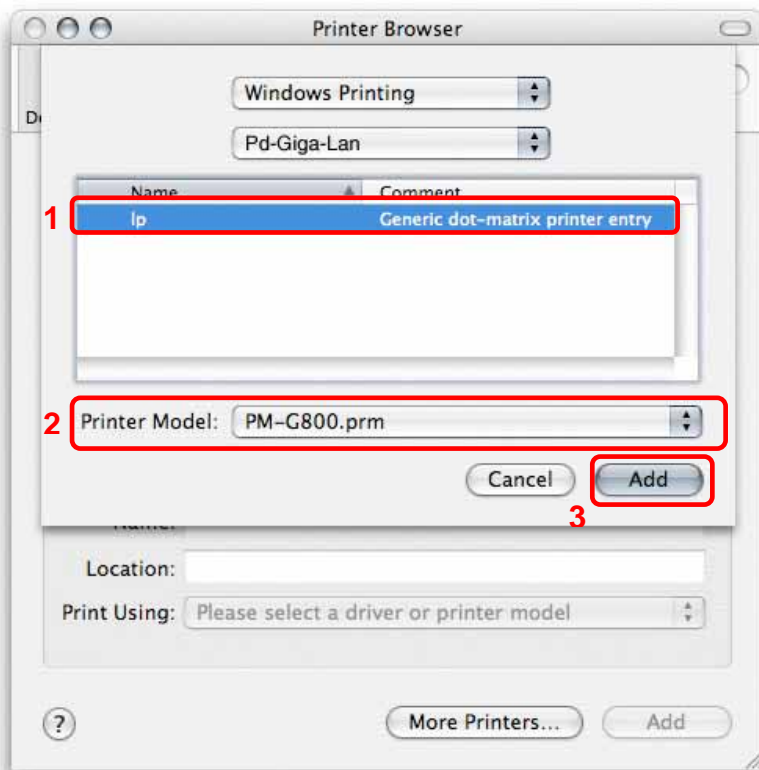
3. Select Windows Printing and the Workgroup your computer and Pleiades Giga LAN belong to. Browse for the Pleiades Giga LAN, select it and click on “Choose”.



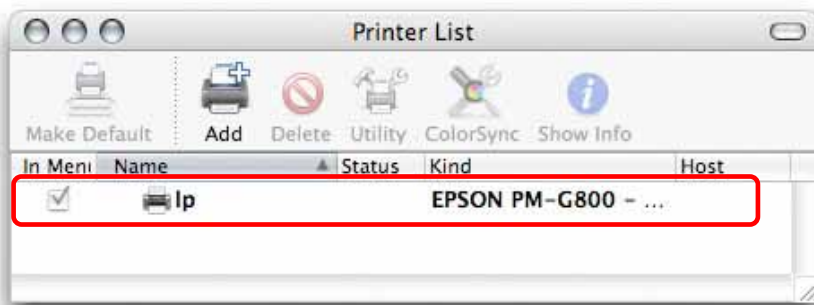
- 4. Enter the login and password, which can either be your administrator's login or the login of a user account.



- 5. Select the lp printer from the list, browse for the corresponding printer model to install the correct printer driver and click on "Add".

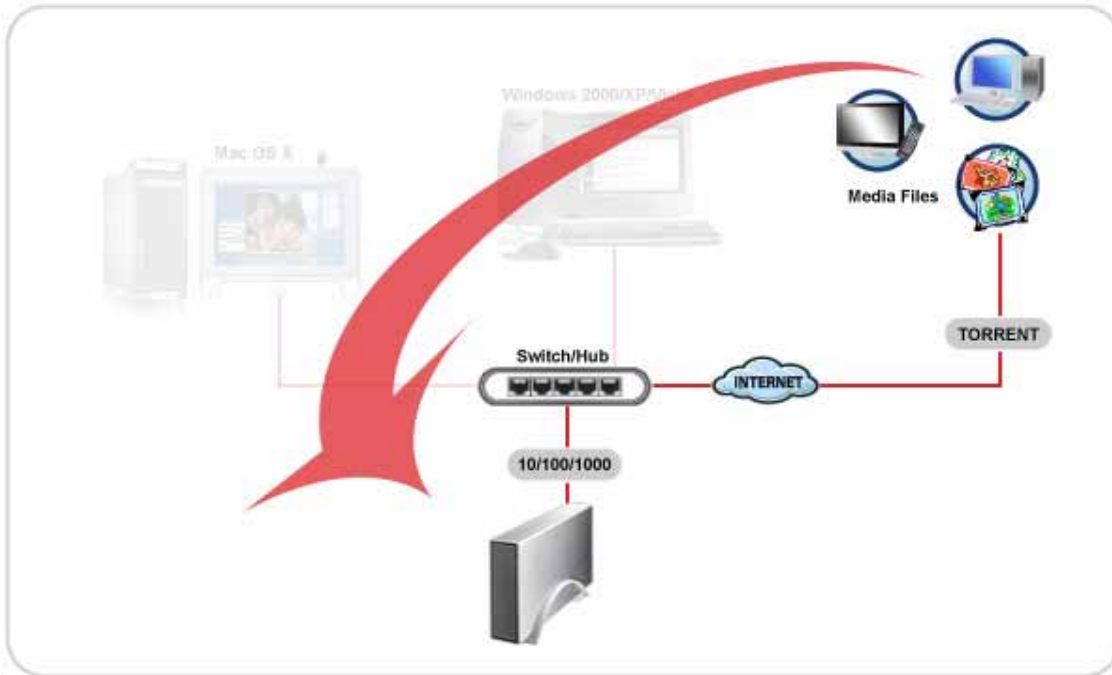


- 6. Done, your printer has been set up and you can now print the first page.



### 5.5 BTorrent

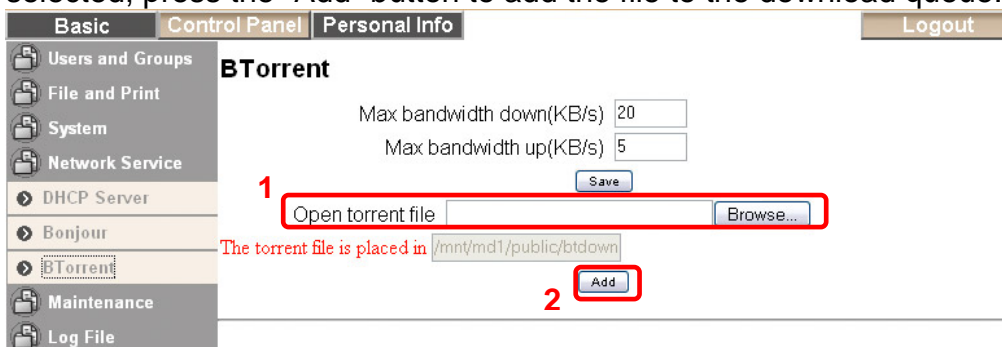
Used in conjunction with its built-in BitTorrent™ client, the Pleiades Giga LAN can be set to download media files from the Internet and have them saved directly to the internal SATA hard drive. You can then turn off your computer and go about other things.



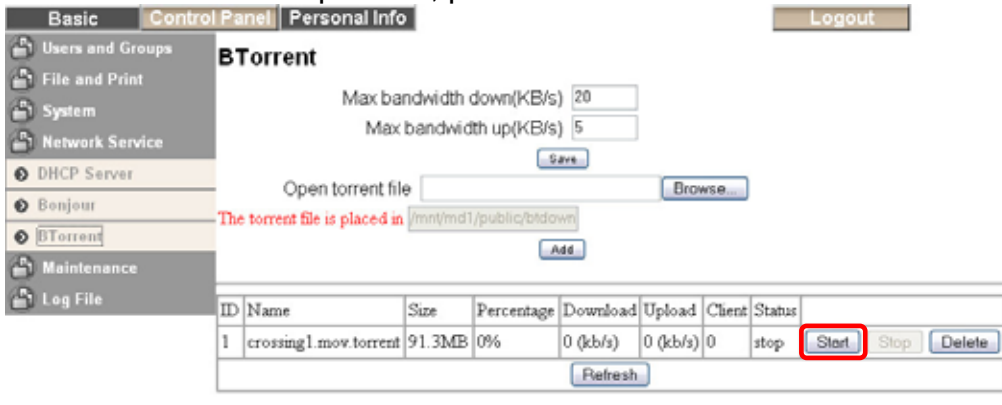
The BitTorrent™ client on the Pleiades Giga LAN is using the TCP protocol and the ports 6881-6889. Make sure those ports are not blocked by your router and if necessary, set up port forwarding, so that the traffic for those ports is forwarded to your Pleiades Giga LAN.

The BitTorrent™ client on the Pleiades Giga LAN can download 5 files at a time with a maximum of 40 files in the queue. Before turning off the device, we recommend first stopping all current downloads. After the device has been rebooted or turned off, the partial downloads will have to be started again to continue the download process.

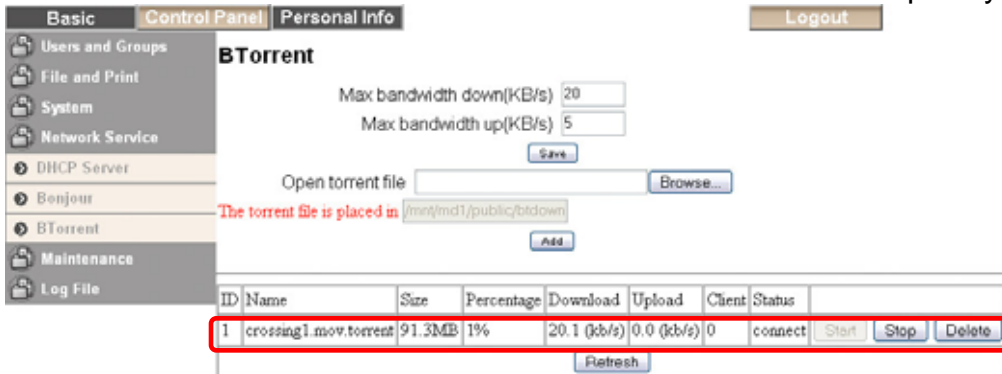
1. Browse the internet for the media files you would like to download and store the torrent files on your local drive.
2. Login to the web interface and go to “BTorrent” in the “Network Service” menu.
3. Press the “Browse” button and locate your previously downloaded torrent file. Once selected, press the “Add” button to add the file to the download queue.



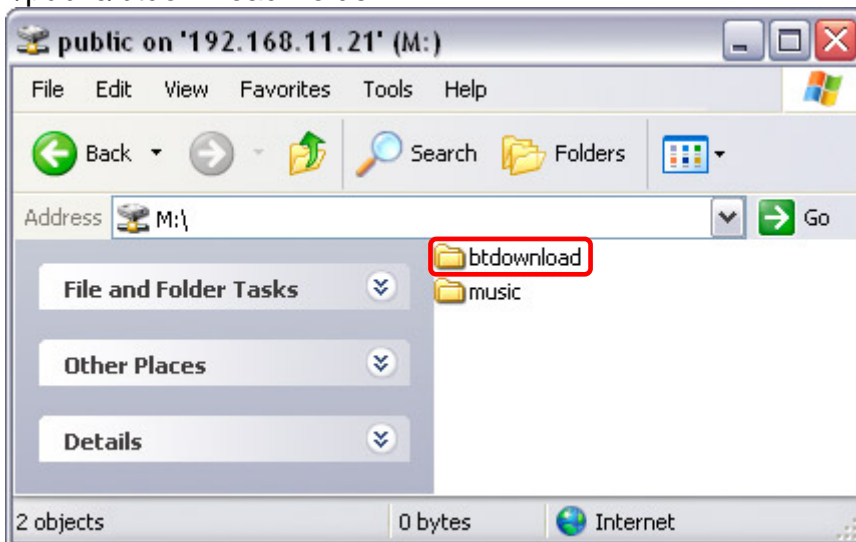
4. To start the download process, press the “Start” button.



5. The file is now being downloaded and if you like, you can turn off your computer. Remember to start the download process again if the Pleiades Giga LAN has been turned off or rebooted before the file has been downloaded completely.



6. Once the file has been downloaded, you can delete it from the download list and access the media file on your Pleiades Giga LAN. All files will be stored in the “/public/btdownload” folder.



*Note: If after pressing the “Add” button the new file does not appear on the list, refresh the page or click on “BTorrent” in the “Network Service” area.*



## 6 Appendix

### 6.1 Specifications

<b>Application</b>	<ul style="list-style-type: none"> <li>• One 3.5" SATA-I or SATA-II HDD (20GB -1TB)</li> <li>• EXT2, EXT3, NTFS or FAT32</li> </ul>
<b>Interfaces</b>	<ul style="list-style-type: none"> <li>• 1 USB 2.0 High Speed host port (upstream)</li> <li>• 1 USB 2.0 High Speed device port (downstream)</li> <li>• 1 RJ-45 Ethernet port 10/100/1000Mbps Base-TX</li> </ul>
<b>Supported USB devices</b>	Mass Storage class drives (FAT32 or NTFS) and USB printers
<b>UPnP</b>	Supports UPnP v1.0
<b>Power Supply</b>	External Power Adapter universal auto-switching Input: AC 100-240V Output: DC +12V/2A

### 6.2 Technical Terms

Description for terms and abbreviations used in this manual.

#### BitTorrent™

BitTorrent is the name of a peer-to-peer (P2P) file distribution client application and also of its related file sharing protocol, both of which were created by programmer Bram Cohen. BitTorrent is designed to distribute large amounts of data widely without incurring the corresponding consumption in costly server and bandwidth resources. For more details, please refer to [www.bittorrent.com](http://www.bittorrent.com).

#### Torrent™

A torrent can mean either a .torrent metadata file or all files described by it, depending on context. The torrent file contains metadata about all the files it makes downloadable, including their names and sizes and checksums of all pieces in the torrent. It also contains the address of a tracker that coordinates communication between the peers in the swarm.

#### EXT2

The ext2 or second extended file system is a file system mostly found on Linux Operating Systems. This is the recommended file system for the Pleiades Giga LAN network drive.

#### EXT3

The ext3 or third extended file system is a journalled file system mostly found on Linux Operating Systems.

#### FAT32

File Allocation Table (FAT) is a file system developed by Microsoft for MS-DOS. The FAT file system is considered relatively uncomplicated, and is consequently supported by virtually all existing operating systems for personal computers. The maximum size of a single file is limited to 4GB.



**NTFS**

NTFS or New Technology File System is the standard file system of Windows NT and its descendants. NTFS has several improvements over FAT but is not compatible with other Operating Systems except Windows or most like only accessible in read only mode.

**LAN**

A Local Area Network (LAN) is a computer network covering a small local area, like a home, office, or small group of buildings such as a home, office, or college.

**FTP**

FTP or file transfer protocol is a commonly used protocol for exchanging files over any network that supports the TCP/IP protocol (such as the Internet or an intranet). There are two computers involved in an FTP transfer: a server (Pleiades Giga LAN) and a client (user's computer).

**SMB**

Server Message Block (SMB) is a network application-level protocol mainly applied to share files, printers, serial ports, and miscellaneous communications between nodes on a network.

## 6.3 FAQ

**Q: Some of the functions and menus are not available!**

**A:** The functions of the Pleiades Giga LAN require a hard drive to be installed. Make sure you have a hard drive installed and that it is formatted, preferable using EXT2.

**Q: I lost my password, what do I do?**

**A:** Press the reset button and hold it for 5 seconds to reset the device to its default settings. The default login is admin/admin. Be aware that resetting the device will erase all user and group accounts plus some other settings.

**Q: I can not access the web configuration interface, what's the correct IP?**

**A:** See Chapter 2 about how to login. If none of these instructions help, turn on your device and wait for it to boot, then press and hold the reset button for 5 seconds to reset its IP address and server name.

**Q: FTP access on my Mac doesn't work properly!**

**A:** The FTP utility on the Mac will be able to read the data on the network storage but you can not write new data to the drive. To upload files, you will need to install a dedicated FTP application.

**Q: I want to restart or turn off the server but it doesn't work!**

**A:** Make sure that there are no current file transfers in process or any other disk activity. Close any other applications that might still be accessing the Pleiades Giga LAN and then try again.

**Q: What port is the BitTorrent client on the Pleiades Giga LAN using?**

**A:** The BitTorrent client is using the TCP protocol and the ports 6881-6889.

**Q: How many files can the BitTorrent client download at the same time?**

**A:** It can download 5 files at a time with another 40 in the queue.

**Q: Does the Pleiades Giga LAN support SSH or Telnet access?**

**A:** No, the Pleiades Giga LAN does not support SSH, Telnet or TFTP access.

**Q: Why does the torrent file not show up on the list after pressing the “Add” button?**

**A:** If the new file does not show up or the page stays blank, refresh the page or click on the “BTorrent” link in the “Network Service” area to reload the page.

**Q: Can I use the Pleiades Giga LAN as USB and network drive at the same time?**

**A:** No, it can only be used either as a USB drive or as a network drive but not both at the same time. When both cables are connected, the USB connection will have priority.

**Q: Which file system do you recommend for the internal hard drive?**

**A:** If the device is mainly used as network drive, we recommend using the EXT2 file system. When the drive is also often used as a USB drive, the most suitable file system will depend on the Operating System. NTFS is most suitable for Windows and FAT32 offers the best compatibility.

**Q: I’ve connected the USB cable but it does not show up on my computer!**

**A:** If the device is currently used as a network drive, it has to be restarted first. Depending on the file system of the internal hard drive, your Operating System might not natively support it and you need to either install an additional application to mount the drive or re-format it using a different file system.

## 6.4 About this Manual

This manual was written using the Pleiades Giga LAN model PD-LN2U2SS and the v2.6.3 firmware revision. Images and descriptions may therefore slightly vary between this manual and the actual product you have.

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