II FREECOM

USER'S GUIDE



NETWORK DRIVE

EXTERNAL NETWORK HARD DRIVE / 3.5" / LAN / USB 2.0 WIN & MAC

Dear user,

Thankyou for choosing the **Freecom Network Drive**. To ensure you get the best performance and ease of operation, please read this manual carefully before using the Freecom Network Drive with your Personal Computer or Ethernet Network.

Freecom Technologies GmbH • Germany www.freecom.com

Package Contents

Please check the contents of the box to ensure it contains the following items:

- Freecom Network Drive
- Power adapter
- I AN connection cable
- USB connection cable
- CD with manual and application software
- Ouick Install Guide

Attention!

All rights reserved. The product names contained in this user's guide only are only used for identification purposes and may be trademarks or registered trademarks of those companies. This device is designed for office and home use.

Caution! This is an EN 55022 Class B device.

Freecomshall assume no liability for damages of any kind, for loss of data or any consequential claims resulting therefrom (including, and without restriction, claims relating to the business losses, business interruptions, loss of business data or other financial claims) that result from the use of this Freecom product or improper operation of this Freecom product. This shall also apply in cases where Freecom has been notified that such claims may exist.

Subject to change as technical advances dictate.

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General Information

Your system needs to meet the following hardware and software requirements for the device to function properly.

System requirements

To use the Freecom Network Drive, you will require the following components:

PC:

- Intel Pentium III / AMD Duron 900 MHz or higher
- 256 MB RAM (Vista: 512 MB RAM) or higher
- · CD ROM drive for installing the software
- Free USB 2.0 or USB 1.1. port* or
- LAN (100Base-T full duplex connection for Ethernet mode)
- Internet connection for registering warranty online and downloading software updates.
- Operating system: Windows 2000, Windows XP, Windows Vista

Mac:

- PowerPC G3/G4/G5, Power Book G3/G4 or Intel Mac
- 256 MB RAM or higher
- CD ROM drive for installing the software
- Free USB 2.0 or USB 1.1. port* or
- LAN (100Base-T full duplex connection for Ethernet mode)
- Internet connection for registering warranty online and downloading software updates.
- Operating system: Mac OS X v10.3 or higher

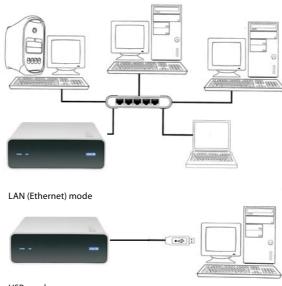
^{*} USB 2.0 is backwards compatible with USB 1.1.

Precautionary measures

To ensure that your Freecom Network Drive functions properly, please take note of the following precautions. If these are not followed, you may void your warranty and damage the Freecom Network Drive.

- Safely remove the Freecom Network Drive via your operating system (the "unplug or eject hardware" option in the Windows taskbar) before disconnecting the USB cable or power cable and before switching off the device. Failing to do so may result in data loss.
- Do not drop the Freecom Network Drive or expose it to other kinds of sudden mechanical shocks as this may result in data loss and damage to the Network Drive.
- Do not use the Freecom Network Drive when the ambient temperature is below 10°C or above 30°C.
- If the Freecom Network Drive is moved from a cool environment to a warmer environment, please allow the drive to acclimatize to the ambient temperature before operating the device. Failing to do so may lead to condensation within the drive enclosure, which in turn may cause the drive to malfunction.
- Do not place liquids or drinks on the Freecom Network Drive. When liquids are spilled and get in contact with the electronics within the drive enclosure, it will damage the drive and will cause the drive to malfunction.
- Do not use the Freecom Network Drive in a dusty environment. Dust inside the enclosure may damage the internal electronics and result in drive malfunction.
- Only use the power adapter that was supplied with the Freecom Network Drive.
- Opening the Freecom Network Drive will void the warranty.
- Since USB 2.0 is backwards compatible with USB 1.1, the Freecom Network Drive
 can be connected to all USB ports. When connected to a USB 1.1 port, however, the
 performance (data transfer rate) of the Freecom Network Drive will be much lower
 than when the drive is connected to a USB 2.0 port.

Freecom Network Drive Setup Overview



Chapter 1: Hardware Installation

WARNING! Only connect the Network Drive via the USB or LAN Port. Never use both ports at the same time!



 Plug the cable (USB or LAN) into the Freecom Network Drive.



2. Insert the power cord into the Freecom Network Drive and plug the power supply into the socket.



Plug the cable into the port (USB or LAN) on your computer.

Because USB 2.0 is backwards compatible with USB 1.1, you can connect the Freecom Network Drive to any USB port. Please note however that USB 2.0 ports support significantly higher data transfer speeds than USB 1.1.

Driver Installation: Your computer will not require a special Freecom driver if you are using Windows 2000 / XP / Vista or MacOS X. The required driver is automatically installed by the operating system when the cable is plugged into your computer.

1

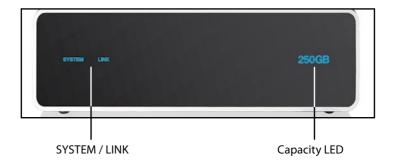
1.1 LED Description

SYSTEM: SYSTEM LED is on when the system is ready

LINK: LINK LED is on when a LAN connection is available

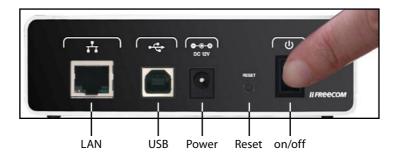
Capacity LED: The Capacity LED is a power and activity display. The LED is always

on when the drive is powered and flickers during drive activity.



1.2 Power switch

Please turn the Freecom Network Drive off when it is not in use. This conserves electricity and extends the life of the hard drive. The power switch is located on the rear of the Freecom Network Drive.



1.3 Reset button

Press the "Reset" button and power on device while pressing the "Reset" button. Keep "Reset" button pressed for 15 seconds to restore factory defaults.

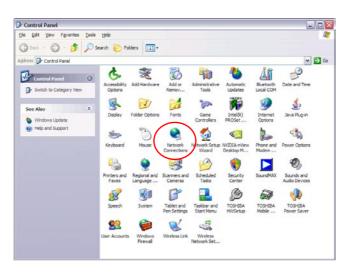
WARNING! Before turning off the Freecom Network Drive manually, please make sure to first "unplug or eject hardware". This option is found in the Windows taskbar. Failure to do so may result in the loss of data.

ΕN

Chapter 2: Using the LAN Mode

2.1 Check TCP/IP Settings in Windows 2000/XP

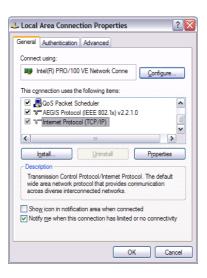
1. Open "Start" -> "Settings" -> "Control Panel".



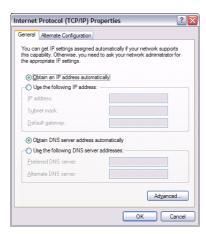
2. Double-click on "Network Connections".



- 3. Right-click on your "Local Area Connection" and select "Properties".
- 4. The following screen will appear. Select "Internet Protocol (TCP/IP)" and click on the "Properties" button.



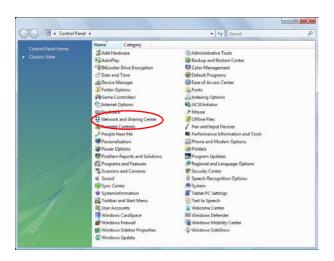
5. In the "General" tab, select "Obtain an IP address automatically" and "Obtain DNS server address automatically".



ΕN

2.2 Check TCP/IP Settings in Windows Vista

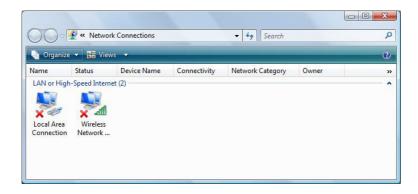
1. Open "Control Panel" -> "Network and Sharing Center".



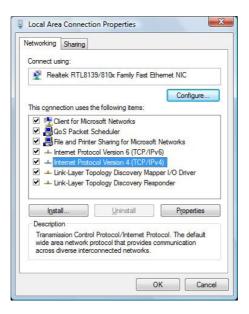
2. Click on "Manage Network Connections".



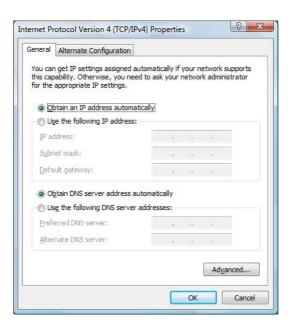
3. Right-click on "Local Area Connection" and select "Properties".



4. In the "Networking" tab, select "Internet Protocol Version 4 (TCP/IPv4)" and click on "Properties".



In the "General" tab, select "Obtain an IP address automatically" and "Obtain DNS server address automatically".



2.3 Check TCP/IP Settings in Mac OS X

1. Open "System Preferences" -> "Network".



2. In the "TCP/IP" tab, select "Using DHCP" in the "Configure IPv4" settings.



Chapter 3: Software Installation

3.1 Installation of the Freecom Network Storage Assistant Software (PC)

The Freecom Network Storage Assistant quickly detects and performs the basic set-up of your Network Drive. When you start it, it displays all Network Drives available in your network and helps you create network folders.

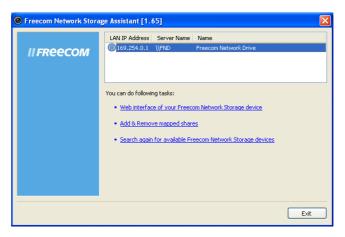
 Insert the Freecom Network Drive software & Manual CD into your CD drive. The Freecom start menu opens:



In case the software does not open automatically, please click on "Start.exe" in the main directory of the CD.

Click on "Software Installation" -> "FNS Assistant". The installation starts now. Follow the instructions on the screen.

- 3. Start the Freecom Network Storage Assistant.
- 4. Check the Freecom Network Storage Assistant whether your Network Drive was detected. This may take some time. If your Network Drive is not immediately detected, click "Search again for available Freecom Network Storage devices" to repeat the search.



5. For a detailed functional description on the Freecom Network Storage Assistant, please refer to chapter 4.

3.2 Installation of the Freecom Network Storage Assistant Software (Mac)

The Freecom Network Storage Assistant quickly detects and performs the basic set-up of your Network Drive. When you start it, it displays all Network Drives available in your network and helps you create network folders.

- Insert the Freecom Network Drive software & Manual CD into your CD drive.
 Please click on "Start" in the main directory of the CD.
- 2. Click on "Software Installation" -> "FNS Assistant". The installation starts now. Follow the instructions on the screen.
- 3. Start the Freecom Network Storage Assistant.
- 4. Check the Freecom Network Storage Assistant whether your Network Drive was detected. This may take some time. If your Network Drive is not immediately detected, click "Search again for available Freecom Network Storage devices" to repeat the search.
- 5. For a detailed functional description on the Freecom Network Storage Assistant, please refer to chapter 4.

3.3 Installation of the NTI Software (PC / Mac)

1. Insert the Freecom Network Drive software & Manual CD into your CD drive. The Freecom start menu opens:

PC

2a. In case the software does not open automatically, please click on "Start.exe" in the main directory of the CD. Click on "Software Installation -> NTI Shadow" or "NTI Ripper". The installation starts now. Follow the instructions on the screen.

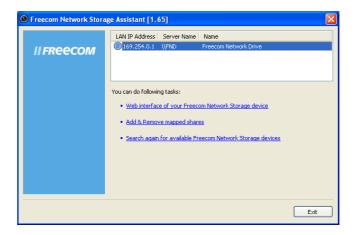
Mac

2b. Please click on "Start" in the main directory of the CD. Click on "Install NTI Shadow" The installation starts now. Follow the instructions on the screen.

Chapter 4: The Freecom Network Storage Assistant (PC/Mac)

4.1 Features of the Freecom Network Storage Assistant (PC)

The Freecom Network Storage Assistant helps you to locate each Network Drive in your network. When started, it displays all Network Drives available in your network and helps you to create network folders. You may also perform any of the functions of the Freecom Network Storage Assistant manually.



The preset password and login name for the Network Drive are:

Login Name: admin

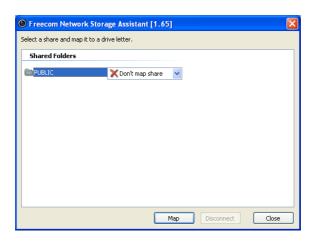
Password: admin

4.1.1 Accessing your Network Drive web interface

When you click this menu item, the web interface for your Network Drive opens in your default browser.

4.1.2 Adding and removing network drives

You can assign a drive letter to shared folders on your Network Drive. This allows you to access to the files in Windows more quickly.

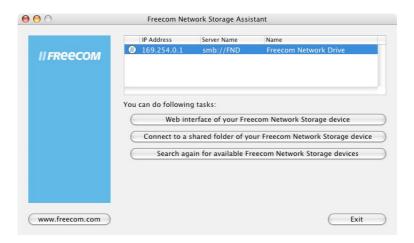


4.1.3 Repeat search for available Freecom Network Drive

Click here to repeat the search for your Network Drive if it was not detected during the first search. Please make sure that your network is configured as described above in this manual and that all cables are properly attached.

4.2 Features of the Freecom Network Storage Assistant (Mac)

The Freecom Network Storage Assistant helps you to locate each Network Drive in your network. When started, it displays all Network Drives available in your network and helps you configure the Network Drive and that create network folders. You may also perform any of the functions of the Freecom Network Storage Assistant manually.



The preset password and login name for the Network Drive are:

Login Name: admin
Password: admin

4.2.1 Web interface of your Freecom Network Storage device

When you click this menu item, the web interface for your Network Drive opens in your default browser.

4.2.2 Connect to a shared folder of your Freecom Network Storage device

This window allows you to mount any folder of your Network Drive on your Mac. This allows fast accesses to this folders.



4.2.3 Search again for available Freecom Network Storage device

Click here to repeat the search for your Network Drive if it was not detected during the first search. Please make sure that your network is configured as described above in this manual and that all cables are properly attached.

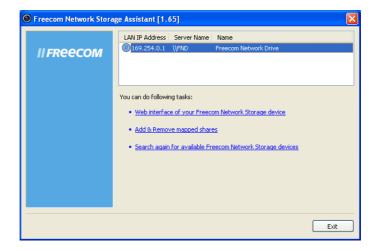
Chapter 5: Configuration of the Freecom Network Drive

For easier access we recommend using the PC configured as DHCP Client as described in the previous chapter.

As default, the DHCP Server of the Freecom Network Drive is switched on. This can be changed in the "Status" section of the web configuration.

5.1 The Freecom Network Storage Assistant

You can use the "Freecom Network Storage Assistant" to configure the Freecom Network Drive. This tool offers the following functions:

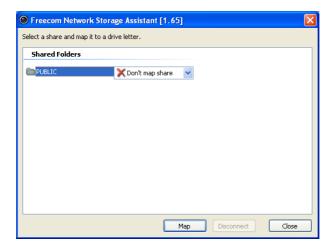


Accessing your Network Drive web interface

When you click this menu item, the web interface for your Freecom Network Drive opens in your default browser.

Adding and removing shared folders

You can assign a drive letter to shared folders on your Freecom Network Drive. This allows you to access to the files more quickly.

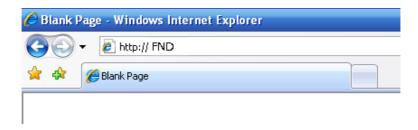


Repeat search for available Freecom Network Drives

Click here to repeat the search for your Freecom Network Drive if it was not detected during the first search. Please make sure that your network is configured as described in this manual and that all cables are properly attached.

5.2 Using the Freecom Network Drive web interface

1. Open your web browser, type "type "http://FND" into the URL address box and press "Enter".



2. The login dialog box will appear. Please use the following username and password for the initial login:

Username: admin Password: admin



EN —

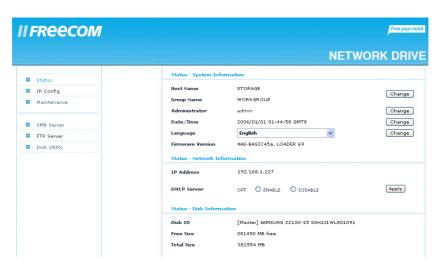
5

3. The start screen of the Freecom Network Drive web interface will open. Now you can continue configuring your Freecom Network Drive.



5.3 Basic Settings (Status) of the Freecom Network Drive

In the web interface, click on "Status" to change the basic settings of the Freecom Network Drive:



5.3.1 Status - System Information

Setting up host and group name

Click on the "Change" button next to the "Host Name" field.



Enter the desired host and group names and click on "OK" to apply your settings.

Setting up the administrator password

Click on the "Change" button next to the "Administrator" field.



Enter your new administrator password and repeat entry in the second field for verification. Click on "OK" to apply your new password.

Configuring the time settings

You can setup date and time of your Freecom Network Drive either manually or automatically.



Manual Configuration

Enter date and time and select the "Disable" button in the "SNTP" section to disable the usage of a time server.

Select your "Time Zone" and choose whether to use "Daylight Saving Time" or not.

Click on "Apply" to save your settings.

Automatic Configuration

Select the "Auto" button in the SNTP" section to enable using a time server for your time settings.

In the "Time Server" section, you can either select a time server from the pull-down list or you can use a time server that is not listed in the pull-down list by manually adding the NTP address in the field below the pull-down list.

Select your "Time Zone" and choose whether to use "Daylight Saving Time" or not.

Click on "Apply" to save your settings.

Setting up the language

If the web interface is not displayed correctly, you can select the correct region code page here. Select the correct code page from the pull-down list and click on "Change" to apply your setting.

Note: You have to restart your PC to apply the settings! The web interface language will always be English, this cannot be changed!

Firmware Version

In the "Firmware Version" section you can find information which firmware version is used in your device. Please have this information available for the Freecom Support if you have problems with your Freecom Network Drive.

5.3.2 Status - Network Information

DHCP Server Configuration

In this section you can select whether to use the Freecom Network Drive as DHCP Server or not.



To enable the DHCP Server, select the "Enable" button and click on "Apply". If the DHCP Server is already enabled and you want to disable it, select the "Disable" button and click on "Apply".

Note: The current status of the DHCP Server is displayed to the left of the "Enable" button.

5.3.3 Status - Disk Information

In this section, the status of the hard disk is displayed. You can find the following information:

Disk ID: Displays information about the hard disk

Free Size: Shows the available free space of the hard disk

Total Size: Shows the total size of the hard disk

5.4 IP Config

In the "IP Config" section of the web interface it can be configured whether the Freecom Network Drive has a static IP address or gets an automatic IP address assigned by another DHCP Server in the network.

ATTENTION: Do not use "Automatic IP" if the DHCP Server is already switched on on the "Status" page!

"Automatic IP" is not available when the DHCP Server of the Freecom Network Drive is already running.



5.5 Maintenance

In this section you can

- update the firmware of your Freecom Network Drive. New firmware usually fixes bugs or adds new features to your Freecom Network Drive.
- make a system reboot or
- reset the Freecom Network Drive settings to factory default.



5.6 Windows File Sharing Configuration (SMB Server)

Click on "SMB Server" in the web interface to open the SMB server configuration:



5.6.1 Administration of shared folders

In the left section ("Folder List"), shared folders can be administrated. In this list, all available folders on the Freecom Network Drive will be listed:

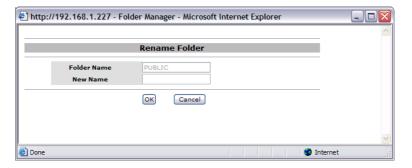
Create

Opens the menu to create a new shared folder



Rename

Opens the menu to rename an existing shared folder



Delete

Opens the menu to delete an existing shared folder

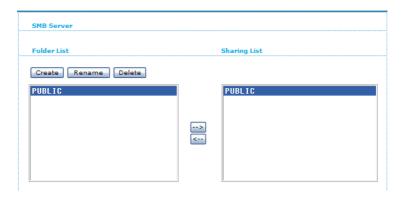


Note: for all changes you have to login with your administrator password!

5.6.2 Sharing folders

Adding a shared folder

To add a folder to the Sharing List, select a folder in the "Folder List" and click on the "->" button. The folder will now appear in the "Sharing List".



5.6.3 Mounting shared folders

PC

Windows users can use the Freecom Network Storage Assistant to map shared folders with a drive letter.

- Start the Freecom Network Storage Assistant
- Click on "Add&Remove mapped shares"
- Select a shared folder and map it to a drive letter.

Mac OS X

Select 'Go To' -> 'Connect with Server...'from the menu bar. The Freecom Network Drive address is:

smb://169.254.0.1 or else

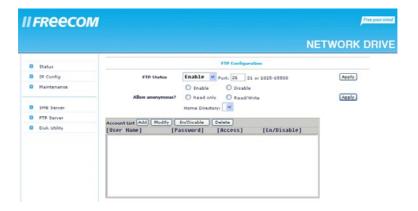
smb://NETWORKDRIVE_NAME (factory default is smb://FND).

Click 'Connect'. You now need to select a shared folder on the next screen. Press OK to continue.

Enter the workgroup, your username and password for accessing the Freecom Network Drive. User name to login always has to be "admin"!

5.7 FTP Server Configuration

In this section you can set FTP functions, status and FTP user administration:



FTP Status

Enable/disable FTP function and port setting for FTP. The standard port for FTP is 21. After making your changes, click on "Apply".

NOTE: If you are using the Freecom Network Drive in a network and you want to have FTP access on the Freecom Network Drive from the outside (Internet), you have to forward the selected FTP port (e.g. 21) to the IP address of your Freecom Network Drive!

Please consult the user manual of your router for further information how to setup port forwardings!

Allow anonymous

Anonymous login allows the user to login as

User: anonymous Password: user's e-mail address

Anonymous users will have access to only one folder on the Freecom Network Drive.

Enable/Disable Enable/disable anonymous user access.

Read only / Read/Write Specify if anonymous user has read-only or

read/write access.

Home Directory Specify the folder for the anonymous user, this

folder will be accessed by anonymous login.

Please click on "Apply" to save your settings.

User Account List

In the "Account List", you can add or delete users and modify their access rights.

Add

Click on "Add" to add a new user. Enter a user name and a password and click on "Apply".

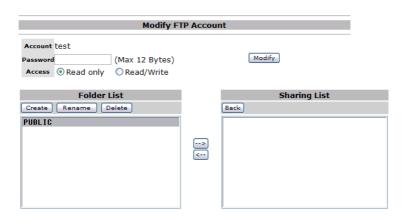


Modify

Click on "Modify" to change the user access rights. You can

- set or change the user password
- give the user read-only or read/write access
- select folder the user is allowed to access

After changing the settings, click on "Modify" to apply settings.



En/Disable

Click on "En/Disable" to enable or disable the user access for the selected user.

Delete

Click on "Delete" to delete a user from the list. Confirm with "OK" to delete the user.



5.7.1 Internal FTP access

Use any FTP client software (e.g. WS_FTP, SmartFTP or CuteFTP) or open your browser and enter

ftp://USERNAME:USERPASSWORD@<IP ADDRESS> or ftp://USERNAME:USERPASSWORD@<HOST NAME>

- <USERNAME> = user name
- <USERPASSWORD> = password of user
- <IP ADDRESS> = IP address of your Freecom Network Drive
- <HOST NAME> = Host name of the Freecom Network Drive as specified in the settings

5.7.2 External FTP access (via Internet)

To access the Freecom Network Drive via FTP from the Internet, make sure that the FTP port specified in the Network Drive settings is forwarded to the Network Drive IP address in the port forwarding settings of your router!

Please consult the user manual of your router for further information how to setup port forwardings!

Use any FTP client software (e.g. WS_FTP, SmartFTP or CuteFTP) or open your browser and enter

ftp://USERNAME:USERPASSWORD@YOUR_INTERNET_IP

or

ftp://username:userpassword@your dyndns host

- <USERNAME> = user name
- <USERPASSWORD> = password of user
- < YOUR INTERNET IP > = your WAN IP address
- < YOUR_DYNDNS_HOST > = your Dynamic DNS host name (if supported by your router)

Note: Not all browsers can upload data via FTP. Those that can are e.g. Internet Explorer and Konqueror. We recommend using FTP client software such as WS FTP, SmartFTP or CuteFTP.

5.8 Disk Utility

In this section you can

- choose to format the hard disk,
- specify after how many minutes of inactivity the hard disk will go to sleep mode and
- perform a Scan Disk on the hard disk



Chapter 6: LAN Connection Types of the Freecom Network Drive

6.1 Direct connection to a PC

Once the PC/Mac is setup as DHCP client as described in the chapter "Check TCP/IP Settings on PC/Mac" the user has to configure SMB Server and/or the FTP Server to work with the device via network connection.

We recommend using the USB connection when connecting the Freecom Network Drive to a single PC as the USB connection offers faster data transfer rates and easier access to the Freecom Network Drive.

6.2 Connection to an existing network

Make sure the DHCP Server of your router is enabled. For more information on this topic, please refer to your router's manual.

- Connect the Freecom Network Drive directly to a PC/Mac and open the web configuration.
- 2. Open the "Status" page.



- 3. Disable the DHCP Server. Click on "Apply" to save your changes.
- 4. Open the "IP Config" page.



- 5. Select "Automatic IP" and click on "Apply" to save your changes.
- 6. Disconnect the Freecom Network Drive from your PC and connect it to your router.
- 7. Your Freecom Network Drive will now get an IP address assigned by the DHCP Server of your router. Every PC/Mac connected to your network can now access your Freecom Network Drive.

You can now use the Freecom Network Storage Assistant for an easy access to your Freecom Network Drive. This tool helps you to access the web interface or to map shared folders with a drive letter.

WARRANTY

(valid in Europe/Turkey only)

We thank you for purchasing this Freecom product and hope you will enjoy using it. In order to avoid unnecessary inconvenience on your part, we suggest reading the quick install guide, instruction manual and any additional electronic and or printed manuals. When problems occur we have a database with Frequently Asked Questions (FAQ) on our Freecom website (www.freecom.com), please check this site before you contact the helpdesk.

Your Guarantee

All Freecom products come with unlimited technical phone and web support. By this Guarantee, Freecom warrants their products to be free from defects in material and workmanship for a period listed below from the date of its original purchase. If during this period of guarantee the product proves defective due to improper materials or workmanship, Freecom will, without charge for labour or parts, at its sole discretion, repair or replace the product or its defective parts upon the terms and conditions set out below.

Conditions

This guarantee will be granted only when the original invoice or sales receipt (indicating the date of purchase, product and serial number) is presented together with the defective product and a Freecom RMA number received from the Freecom Website or given by a Freecom Service Center. Freecom reserves the right to refuse the free-of-charge guarantee services when the date of purchase of the product cannot be proven. This guarantee will not apply if the RMA number is missing, the serial number on the product has been altered, removed or made illegible.

This guarantee covers only the hardware components packaged with the product. This guarantee covers none of the following: (a) any consumable supplied with the product, such as media or batteries; (b) damage to or loss of any software programs, data or removable storage media; (c) any damage resulting from adaptations, changes or adjustments, which may have been made to the product, without the prior written consent of Freecom; (d) attempted repair by any party other than authorized by Freecom and (e) accidents, lightning, water, fire or any other such cause beyond the reasonable control of Freecom.

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Repair parts and replacement products will be provided on an exchange basis and will be either new, equivalent to new or reconditioned. All replaced parts and products become the property of Freecom The period of guarantee for any product or part repaired or replaced in warranty shall be the balance of the original guarantee. Repairs or replacements on product or parts out of warranty carry 6 (six) months guarantee.

