D-Link®
Building Networks for People

MediaLounge
- PC Music
- Local Music
- Online Music
- Setup

D-Link

Manual
Version 1.0
DSM-120

Wireless Music Player

Table of Contents

Safety Information

For optimum performance, please read the following information carefully.
Safety Precautions

> ## CAUTION
> ### RISK OF ELECTRIC SHOCK
> ### DO NOT OPEN
>
> CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert users to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

> **CAUTION!**
> THE POWER ADAPTER IS USED AS THE MAIN DISCONNECT DEVICE. ENSURE THAT THE SOCKET-OUTLET IS LOCATED/INSTALLED NEAR THE EQUIPMENT AND IS EASILY ACCESSIBLE.

> **CAUTION!**
> TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR PRODUCT DAMAGE, DO NOT EXPOSE THE UNIT TO RAIN, MOISTURE, DRIPPING, OR SPLASHING. DO NOT PLACE OBJECTS FILLED WITH LIQUIDS UPON THE UNIT.

CAUTION!

- DO NOT INSTALL OR PLACE THIS UNIT IN A BOOKCASE, BUILT-IN CABINET OR IN ANOTHER CONFINED SPACE. ENSURE THE UNIT IS WELL VENTILATED. TO PREVENT RISK OF ELECTRIC SHOCK OR FIRE HAZARD DUE TO OVERHEATING, ENSURE THAT CURTAINS AND ANY OTHER MATERIALS DO NOT OBSTRUCT THE VENTILATION VENTS.
- DO NOT OBSTRUCT THE UNIT'S VENTILATION OPENINGS WITH NEWSPAPERS, TABLECLOTHS, CURTAINS, AND SIMILAR ITEMS.
- DO NOT PLACE SOURCES OF NAKED FLAMES, SUCH AS LIGHTED CANDLES, ON THE UNIT.
- DISPOSE OF BATTERIES IN AN ENVIRONMENTALLY-FRIENDLY MANNER.

CAUTION!

TO PREVENT ELECTRIC SHOCK, MATCH THE WIDE BLADE OF THE PLUG TO THE WIDE SLOT OF THE ELECTRICAL OUTLET AND FULLY INSERT.

This device is designed and manufactured to assure personal safety. Improper use can result in electric shock or fire hazard. The safeguards incorporated in this unit will protect you if you observe the following procedures for installation, use, and servicing. This device does not contain any user serviceable parts.

- **Carefully read and follow the Manual and Quick Install Guide.**
- **Do not place the product near heat sources such as radiators, heat registers, stoves, or other products that produce heat.**
- **Do not use this product near water.**
- **Unplug the unit from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.**
- **Power Adapter cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them.**
- **Do not overload wall outlets.**
- **Do not use this product during a storm. Unplug the unit from the wall outlet. If the product is to be left unattended for a long period of time. This will prevent damage to the product due to lightning and power-line surges.**
- **Do not attempt to service this product yourself. Opening the cover may expose you to dangerous voltage or other hazards. For service, please contact a qualified service technician.**

Radio and TV Interference:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- **Reorient or relocate the receiving antenna.**
- **Increase the separation between the equipment and receiver.**
- **Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.**
- **Consult the dealer or an experienced radio/TV technician for help.**

Any unauthorized changes or modifications to this equipment would void the user's authority to operate this device. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Introduction

D-Link® introduces the latest addition to its multimedia family of products: the **_D-Link®_** **_MediaLounge™ DSM-120 Wireless Music Player_**. The DSM-120 integrates personal computers and home entertainment centers, so that your digital music can be enjoyed anywhere throughout the house. The DSM-120 connects easily to a wired or wireless network. The DSM-120 features 802.11g wireless technology for transfer speeds of up to 54Mbps on a wireless network and can connect to a wired network at speeds up to 100Mbps. These options provide you with the maximum throughput for sharing and transferring digital media.

Simple to setup with a sleek design that makes it a natural addition to any home entertainment center. The Audio jacks on the back panel of the DSM-120 allow for direct connection to a pair of PC speakers or to your stereo. Use the included remote control to access media content stored on your PC or optional local storage. The DSM-120 lets you browse music files and access online music content through an existing broadband Internet connection.

With support for Windows® Connect Now, configuring the wireless settings is easier than ever before. Windows Connect Now allows you to run the Wireless Network Setup Wizard from Windows® XP and transfer the wireless settings to the DSM-120 using a USB thumbdrive.

D-Link® MediaLounge™ File Manager allows you to transfer music files to your Hard Drive via the network. The File Manager software allows you to point to the folders on your PC's hard drive that contain the music files you want to copy. The D-Link® MediaLounge™ File Manager software then copies the information to the optional Hard Drive on your DSM-120 via your wired/wireless network connection.

The DSM-120 adheres to the Universal Plug-&-Play AV specification, allowing it to communicate with other UPnP AV media devices.

You can stream MP3 and WMA files from your computer to the DSM-120 and enjoy them on your home stereo system.

Local Hard Drive playback and USB direct playback is available on the DSM-120. Simply insert a 2.5" Hard Drive into the DSM-120, or insert your USB thumbdrive for local music playback, no network or PC is needed!

A Mini-USB connection for direct transfer of music files to and from a PC.

Experience digital media like never before with the MediaLounge™ DSM-120 Wireless Music Player. The DSM-120 includes everything you need to instantly access and play music using your home entertainment center.

Package Contents

- **D-Link DSM-120 Wireless Music Player**
- Printed Install Guide
- CD-ROM with Manual (Contains D-Link Media Server Software, File Manager Software, Install Guide, and Manual)
- Ethernet (CAT5-UTP/Straight-Through) Cable
- Standard Composite RCA Audio Cable
- Remote Control with Batteries
- Back Stand
- Mini-USB Cable
- Energy Star certified Power Adapter

System Requirements

- A wireless (802.11g or 802.11b) or Ethernet network.
- Minimum to run the Media Server software: PC with 500MHz processor, 128MB RAM and 50MB of available hard disk space.
- Windows® XP/2000.
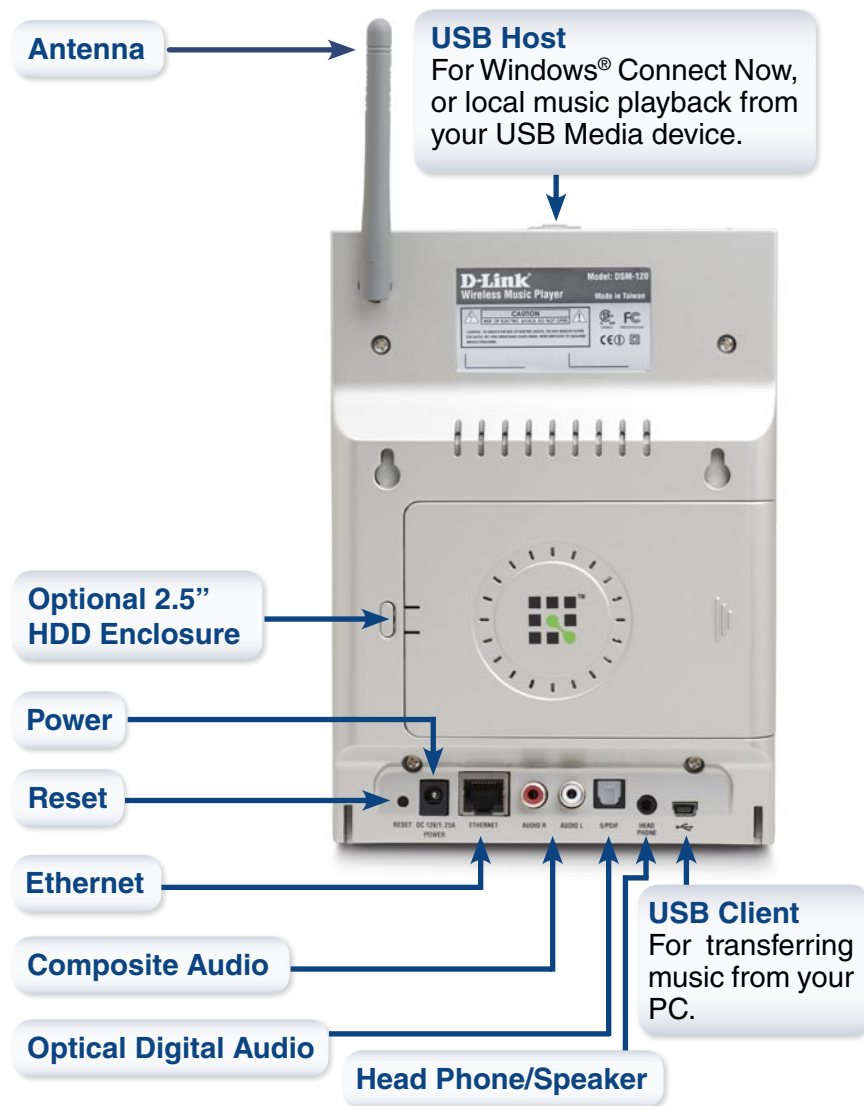- A CD-ROM drive.

Features and Benefits

- Stream music from a PC or D-Link Network Attached Storage to your entertainment center.

- Listen to digital music on your stereo system.

- Support for Windows® Connect Now for easy wireless setup.

- Easily connect to your wireless network using 802.11g at up to 54Mbps. 802.11b compatible at 11Mbps.

- Connect using an Ethernet network cable at up to 100Mbps.

- UPnP AV and INMPR compliant for maximum compatibility.

- Support for most popular digital music formats.

- Sleek design complements your existing audio equipment.

- 64- or 128-bit WEP security.

- Convenient one-touch access to copy music.

- Supports DHCP for easy connection to your home network.

- Easy setup wizard.

- Direct playback from external USB media.

- 2.5" HDD Enclosure for local playback without a computer.

- Set the alarm to wake/sleep to your selected music track.

- Built-in clock.

- Transfer music through a USB connection or Network.

- High-Fidelity Audio via optical S/PDIF

Hardware Overview

Front Panel

Built-in display

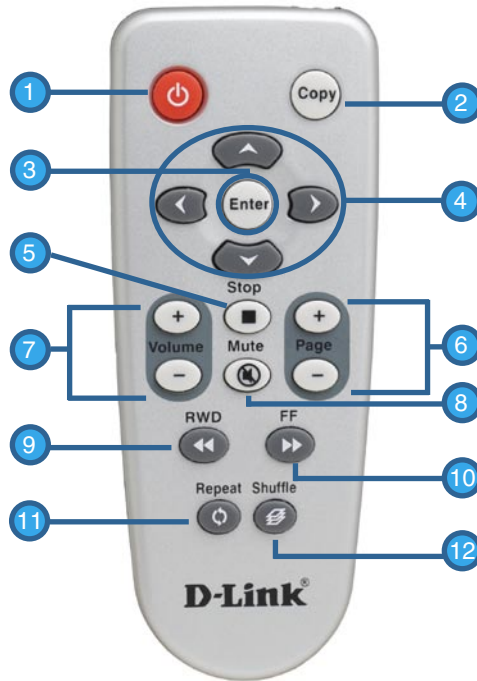**Power Button**

Navigation
To navigate through the menu press the arrow buttons.

Enter
Press Enter to make selections.

Volume Control
Press to adjust the volume output on the DSM-120.

Back Panel Connections

Antenna

USB Host
For Windows® Connect Now,
or local music playback from
your USB Media device.

**Optional 2.5"
HDD Enclosure**

Power

Reset

Ethernet

USB Client
For transferring
music from your
PC.

Composite Audio

Optical Digital Audio

Head Phone/Speaker

Getting Started

To begin using the DSM-120 Wireless Music Player, you will need:

■   An existing home network (including a wireless 802.11b or 802.11g router or a router/ hub with an available Ethernet port).

■   The DSM-120 Media Server software installed on the PC you will be sharing files from. This computer will collect music content from local sources and from the Internet (downloaded MP3 music).

■   The DSM-120 Wireless Music Player connected to your standard PC speakers or audio system.

■   Optional: The 2.5" HDD can be used to play local music, but it must be partitioned in order to work with the DSM-120 (see page 62).
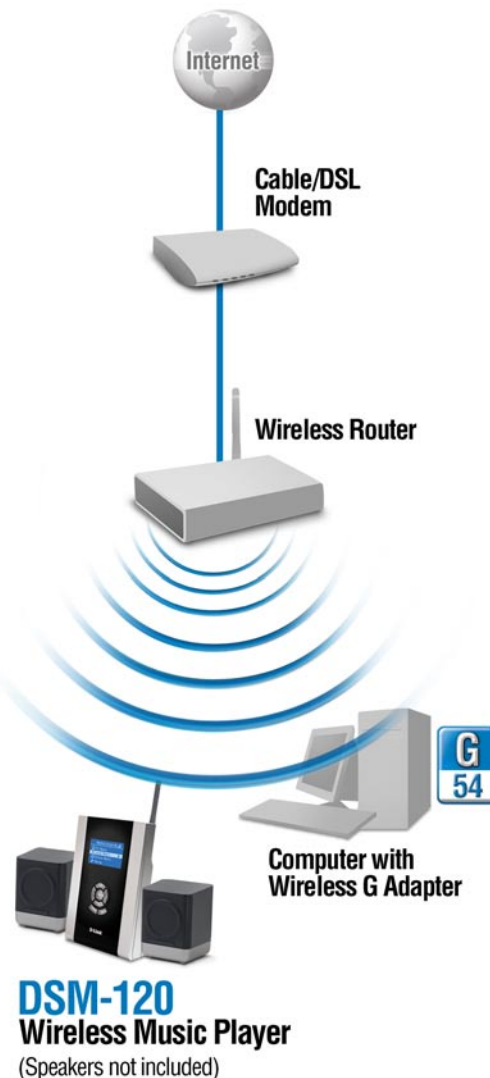
Using the Remote Control

1. Power
2. Copy
3. Enter & Play/Pause
4. Navigation Buttons
   up arrow = Previous
   down arrow = Next
5. Stop
6. PAGE + & -
7. VOLUME + & -
8. Mute
9. RWD
10. FF
11. Repeat
12. Shuffle

You may be required to enter alphanumeric characters. To edit information on a screen, press the **Enter** button. To enter letters and/or numbers, use the navigation buttons (see below):

Toggle **Up** & **Down** allows you to view all alphanumeric characters.

Toggle **Right** creates a new instance of an alphanumeric character.

Toggle **Left** deletes an alphanumeric character.

The recommended range for remote control usage is within 15 feet from the unit, with the remote angled at no more than 45 degrees.

Power	Turn the DSM-120 **ON** or **OFF.**
Copy	Copy files from an optional attached USB drive to an optional Hard Drive inserted into the DSM-120.
Enter and Play/Pause	Submit entries and Play/Pause music files.
Navigation Buttons	Navigate through the DSM-120 menu. While playing music, the **up arrow** returns to the previous track and the **down arrow** continues to the next track.
Stop	Stop a music file that is playing.
PAGE UP/DOWN	Page Up to scroll up a page, and Page Down to scroll down a page.
VOLUME +	Increase the volume.
VOLUME -	Decrease the volume.
Mute	Mute the volume of the music file.
RWD	Rewind through a music file that is playing.
FF	Fast Forward through a music file that is playing.
Repeat	Repeat a music file or playlist.
Shuffle	Shuffle through a playlist.

Installing the D-Link® Media Server Software

To share audio files from your computer, it is necessary to install the D-Link® Media Server software on the PC that contains the files you want to share. The D-Link® Media Server software allows you to point to the folders on your PC's hard drive that contain the audio files you want to share. The D-Link® Media Server software then streams the information to your DSM-120 via your wired/wireless network connection.

Currently the DSM-120 only connects to one Media Server at a time. If more than one PC contains files you want to share, you can select one of the following options:

1. Copy all of the files to one computer designated to run the D-Link® Media Server Software.

2. Map network drives from the computer with the D-Link® Media Server software to additional computers that contain files you want to share. This method also allows you to share files from computers that cannot run the D-Link® Media Server software such as Macintosh systems. The computer running the D-Link® Media Server software must always be on when streaming content from any computer.

3. Install the D-Link® Media Server software on each computer. You can only connect to one server at a time. To connect to another server, you must go into the **Setup** and change the Default Server.

To install the D-Link® Media Server software, follow the steps on the following pages.

> **Note:** If you have a version of the D-Link® Media Server already installed on your system, please uninstall the software and restart your system before installing a newer version of the software.

Insert the DSM-120 CD-ROM into the CD-ROM drive and the following screen will appear.

Click on **Install D-Link® Media Server**

If the screen on the right does not appear, go to **My Computer** and double-click on the **CD-ROM** drive. The DSM-120 Autorun will execute.

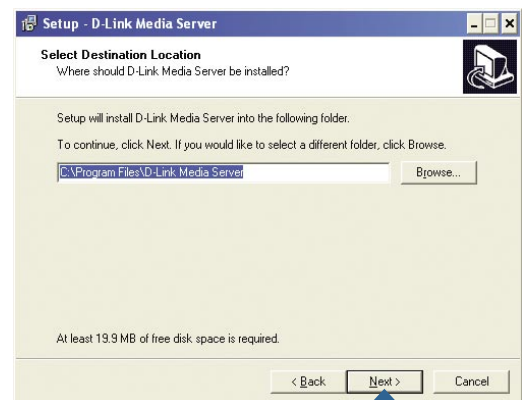The D-Link® Media Server Setup Wizard will appear.

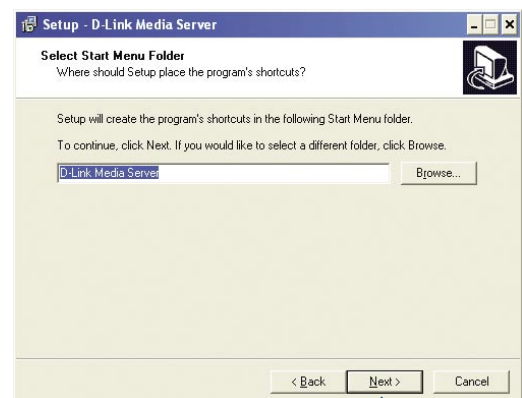Click **Next**

The D-Link license agreement screen appears.

Click **Next**

Choose a Destination location or accept the default location. This is where the D-Link Media Server software will be copied to on your system.

Click **Next**

Choose a Start Menu folder or accept the default location.

Click **Next**

Select the icons you want created.

Select **Create a desktop icon** to access the program from your desktop.

Select **Create a Quick Launch icon** to access the program from your taskbar.

Select **Create a startup icon** so the program launches on startup.
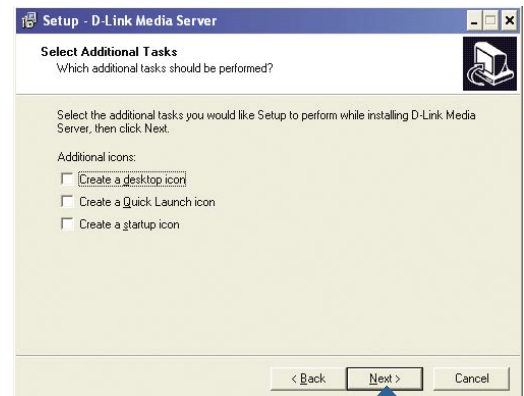
Click **Next**

The necessary software will be copied to the specified locations on your computer.

Click **Install**

Check **Launch D-Link Media Server**
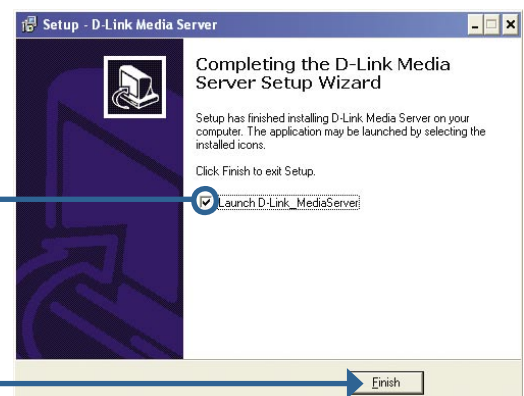
Click **Finish**

The D-Link® Media Server software installation has been completed!

Choosing Music Files to Share

The D-Link® Media Server software enables you to share the files from your computer with the DSM-120. By sharing the files, there is no need to copy the files from your computer to the unit before they can play. The data is streamed directly from the files on your computer over the network to your DSM-120. Follow the steps on the following pages to choose the music files to share.

If you chose to create a desktop or Quick Launch icon during the software installation, click on the icon to launch the D-Link Media Server software application.

D-Link Media Server desktop icon

D-Link Media Server Quick Launch icon

If you chose not to create a desktop or Quick Launch icon during the software installation, then you can launch the application by going to your Start Menu, selecting All Programs, and then clicking on D-Link Media Server icon within the D-Link Media Server folder.
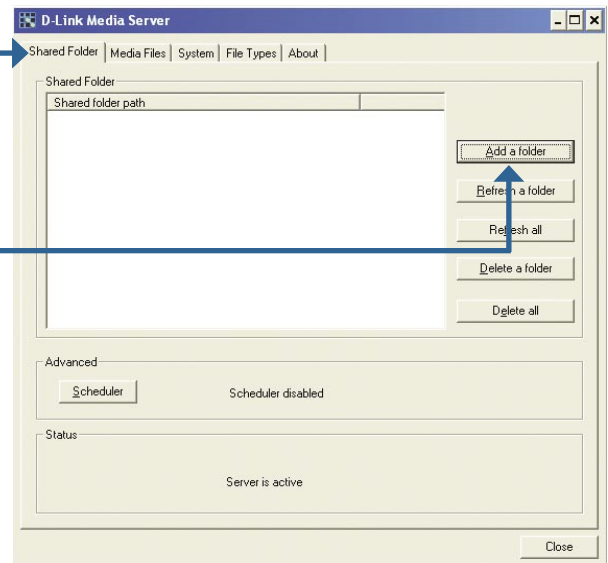
The **File Types** tab is where you select the types of audio files that you want to share.

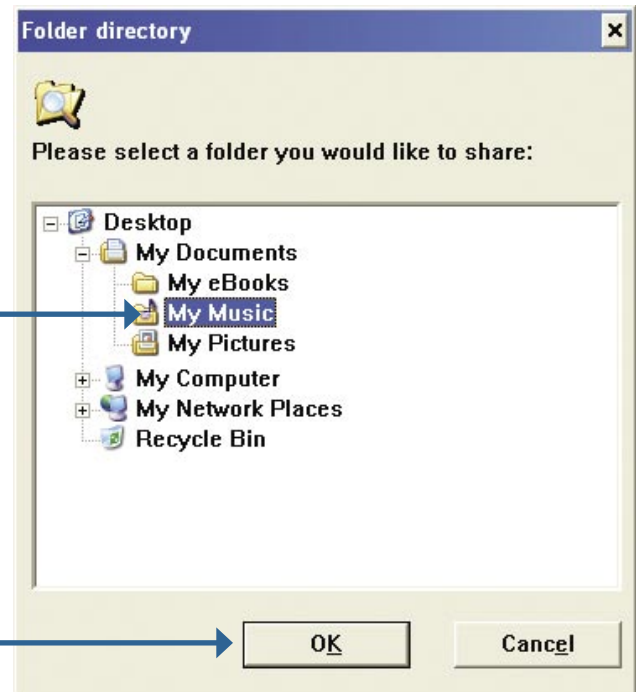*Note:* The DSM-120 only supports MP3 and WMA file types.
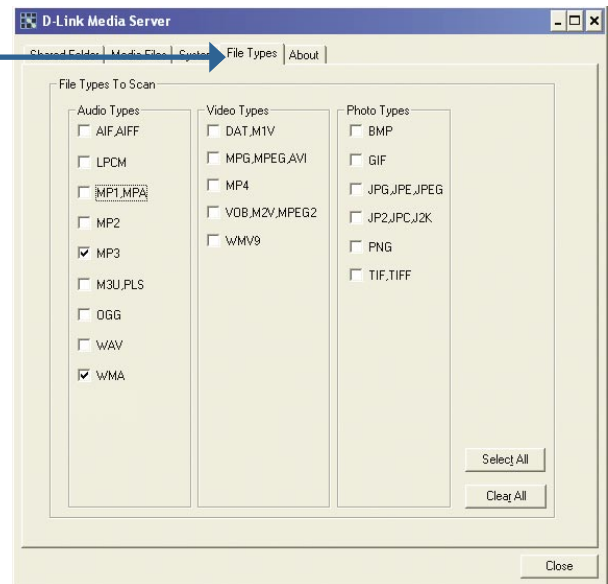
The **Shared Folder** tab is where you select the folders that contain your audio files.
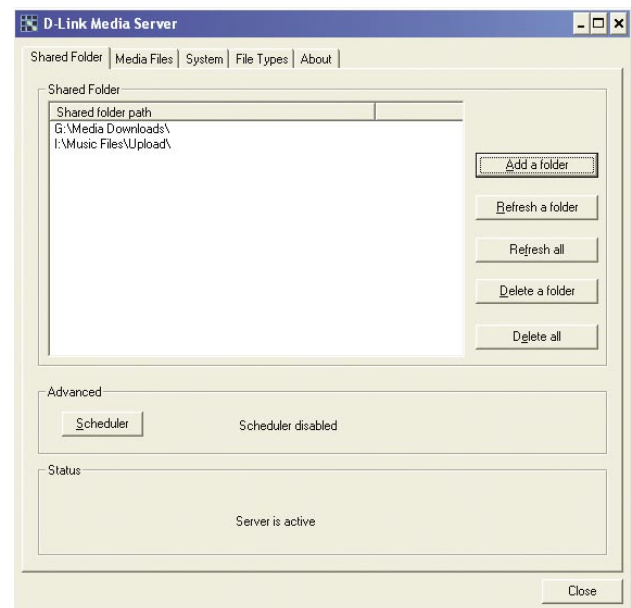
Click **Add a folder**

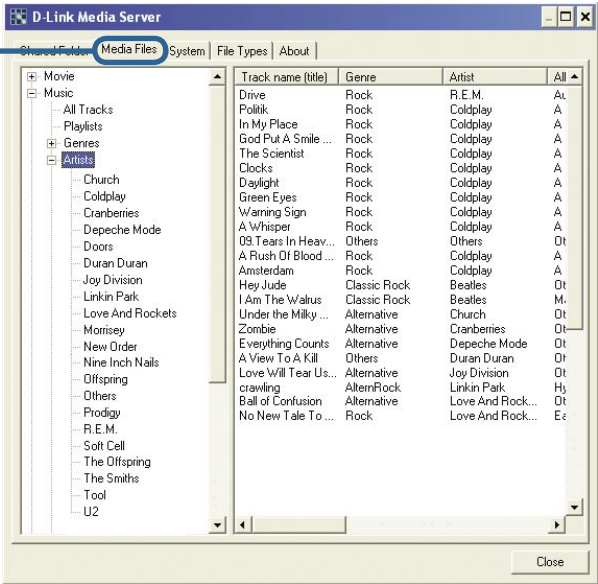Select the folder containing the files you wish to share.

Click **OK**

Repeat the steps until all of the folders containing audio you want to share have been added.

The **Media Files** tab will show all your audio files as well as display important file information.

The D-Link® Media Server software configuration is complete!

Using the D-Link® Media Server Software

Accessing the Media on your PCs

Before you can access the media from a PC, you must install the D-Link® Media Server software (See page 15). Simply install the included software on each PC where music is stored.

If you selected the option to **Create a startup icon** during the Media Server software installation (See page 18), the D-Link® Media Server software will automatically start whenever you power on your PC.

Whenever you close the Media Server configuration window, you can return to the Media Server configuration window by clicking on the Media Server icon in your system tray.

DSM-120 System Tray Icon

Sharing Media Content in Folders

The D-Link Media Server will share media content from selected directory folders. All subfolders within a shared folder are shared as well.

The Shared Folders tab displays the list of shared folders.

Add folders where your music is stored, or remove folders you no longer wish to share. Depending on the number of files in your folders, there may be a slight delay before the path appears in the window.
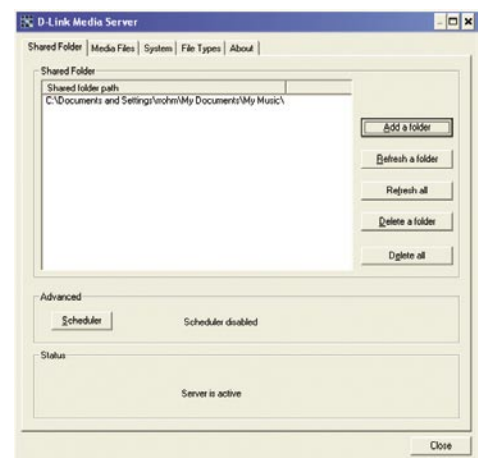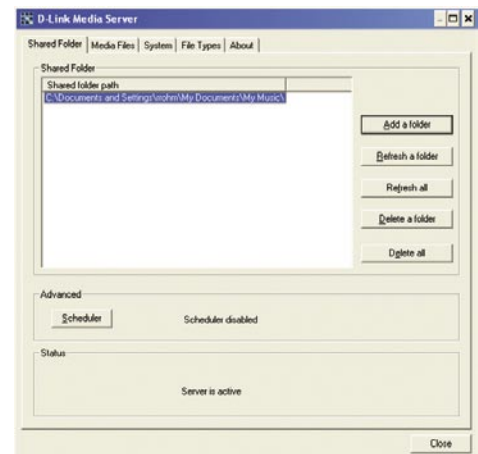
Refreshing Folder Content

The D-Link Media Server software scans the folders you share when you initially **Add a folder**. If you copy additional files into these folders, they will be seen by the DSM-120 when you refresh the folder contents.

Refresh a folder: To refresh a folder's contents, select a folder and then click the **Refresh a folder** button.

Refresh multiple folders: Multiple folders can be selected if you hold down the **Ctrl** key while clicking on each folder. Click on the **Refresh a folder** button after you've selected all the folders to refresh.

Refresh all folders: All folders can be refreshed by clicking on the **Refresh all** button.
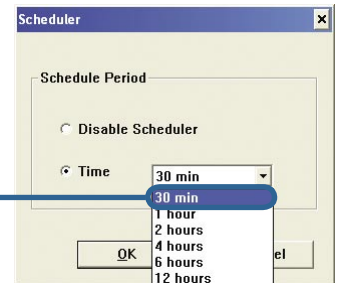
Scheduler: You can schedule the D-Link Media Server software to automatically refresh the contents of all of your folders.

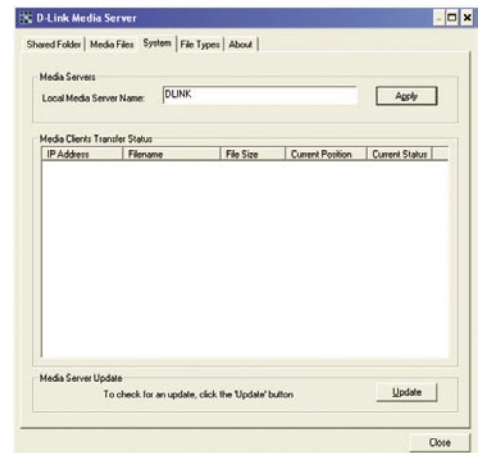Click **Scheduler** if you want to setup an automatic refresh interval.
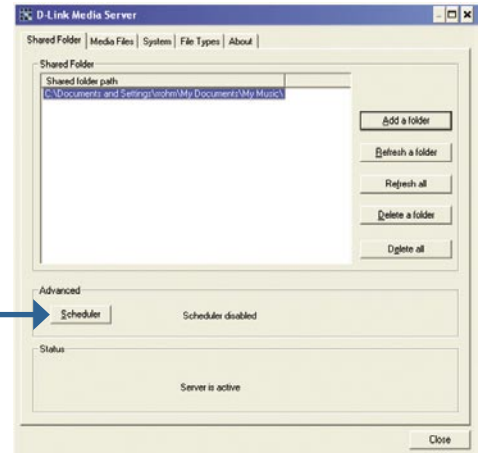
Click **Time** and select a time period. This is how often the server will refresh the folder contents.

Naming the Media Server

The Media Server name is entered here. This is the server name that is displayed when searching for available media servers in the DSM-120 interface.

Stopping the D-Link Media Server

To stop the D-Link® Media Server (and stop sharing your music on your PC), right-click on the server icon and select **Exit** from the server menu.

Note: *The music files stored on your computer will be available to your DSM-120 only if the D-Link® Media Server is running. Online Music content that does not require PC-based software (such as Live365) can still be accessed from the DSM-120 without running the D-Link® Media Server software.*
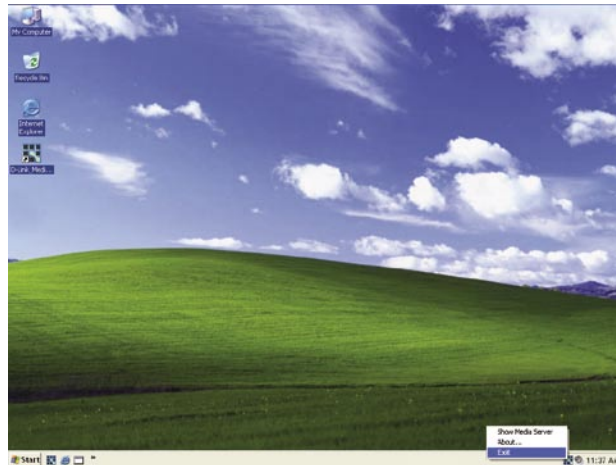
D-Link Media Server Menu

To open the D-Link Media Server menu, **right click** on the system tray icon. The server menu will then be displayed.

Using Windows® Media Connect Software

Windows® XP users with Service Pack 2 can utilize the Windows® Media Connect software in addition to or instead of using the D-Link Media Server software. The Windows® Media Connect software allows the DSM-120 to playback DRM (Digital Rights Management) protected files. The Windows® Media Connect software is available via Windows Update if you are using Windows® XP with Service Pack 2.
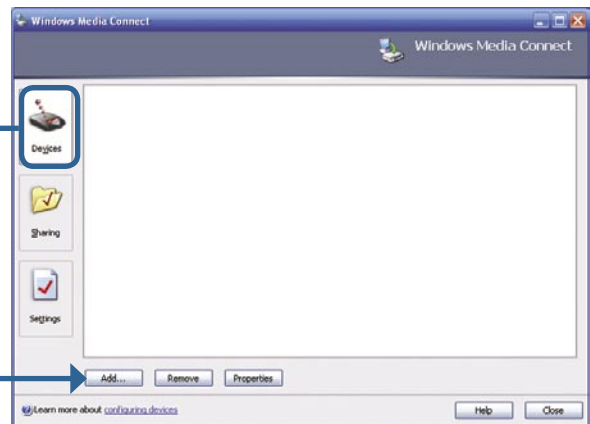
Configuring Windows® Media Connect

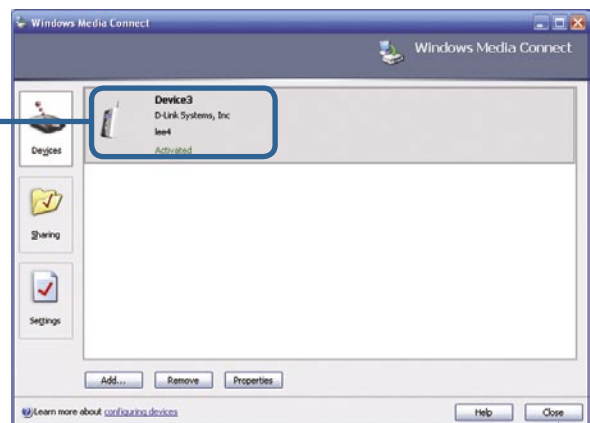Launch the Windows® Media Connect software and the window below will appear:

The **Devices** tab is where you add the DSM-120 to the list of devices that interact with Windows Media Connect.
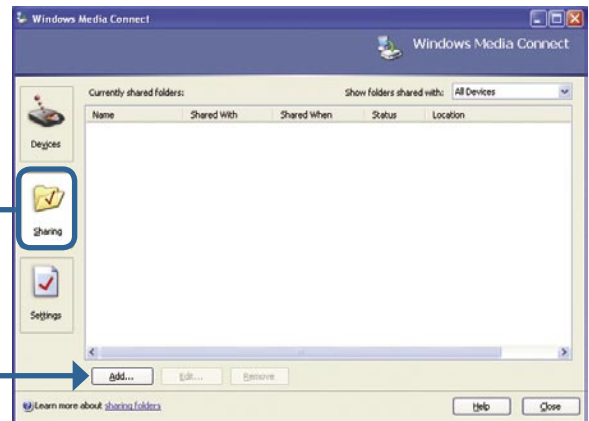
Click **Add**

Select your **Media Player** from the list.
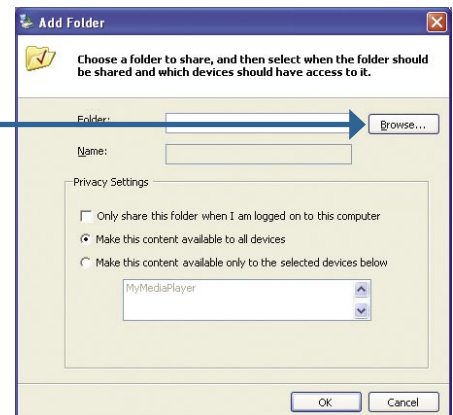
Click **Close**

The **Sharing** tab is where you configure the folders that you want to share with your DSM-120.
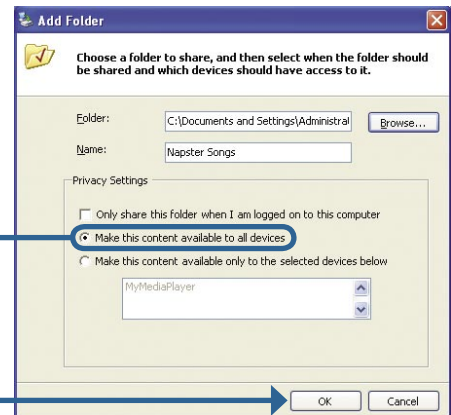
Click **Add**

Click **Browse**

Select the folder that you want to share

Click **OK**

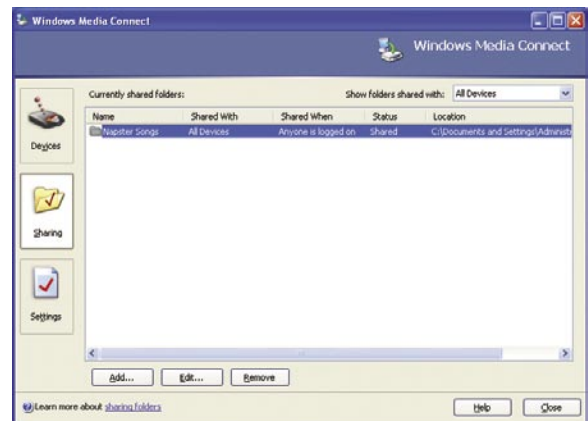Click **Make this content available to all devices**

Click **OK**

The Shared Folders will appear in the window. Repeat the steps until you've shared all of the folders that you want the DSM-120 to access.

Click **Automatically start folder sharing when Windows starts**

The **Settings** tab allows you to automatically start folder sharing when Windows starts. You can also Stop/Start sharing.

Click **Close**
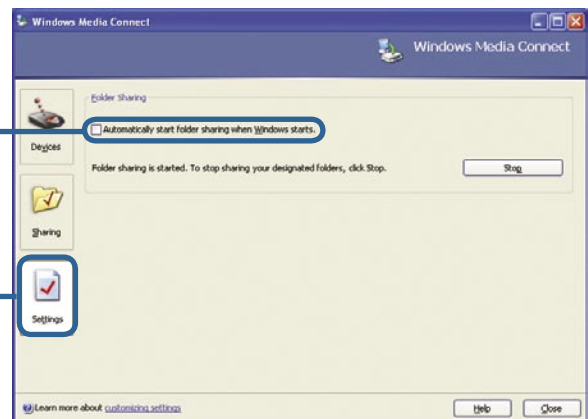
The DSM-120 supports additional file types that are not supported by the Windows® Media Connect software. The file types shown below are supported by both Windows® Media Connect and the DSM-120.

File Type	File Extension	Details
Audio		
Windows Media Audio	.wma	Does not support WMA lossless, WMA Pro
MP3	.mp3	Up to 320kbps
Playlists		
M3U	.m3u, .pls	MPEG Playlist File

Be sure to select the Windows® Media Connect server as the default server in the DSM-120 System Setup if you want to access the Windows® Media Connect software. To do so, select **Setup** on the Home screen and navigate to **System** by using the **down arrow** and then pressing **Enter**. Navigate to **Music Server** and press **Enter** to view a list of available servers.

Note: *Windows® Media Connect currently does not support Fast Forward and Rewind with protected files.*
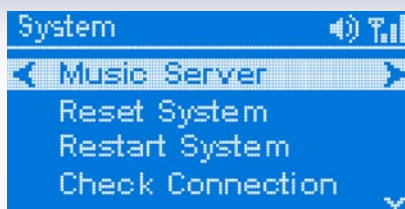
Installing the File Manager Software

In order to transfer music files from a personal computer to the DSM-120's optional 2.5" Hard Drive (a 2.5" hard drive must be installed prior to transferring music files, see page 61), it is necessary to install the D-Link® MediaLounge™ File Manager software on the PC containing the files you want to transfer. The File Manager software allows you to point to folders on your personal computer's hard drive that contains music files, and then allows you to copy the files to the DSM-120's optional 2.5" Hard Drive via a wired/wireless network connection.

Insert the DSM-120 CD-ROM into the CD-ROM drive and the following screen will appear.

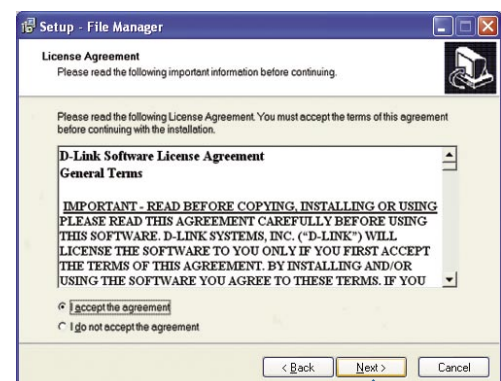Click on **Install D-Link® File Manager**

The D-Link® MediaLounge™ File Manager Setup Wizard will appear.
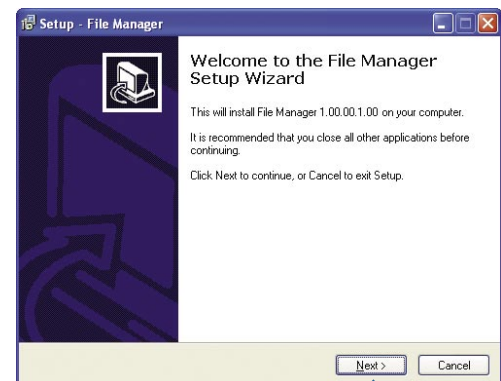
Click **Next**

If you accept the terms of the License Agreement, select the option **I accept the agreement**. Click **Next** to continue with the installation.

Click **Next**

Choose a Destination location or accept the default location. This is where the File Manager software will be copied to on your system.
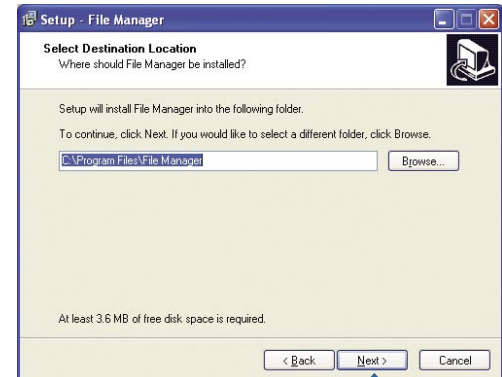
Click **Next**

Choose a Start Menu folder or accept the default location.
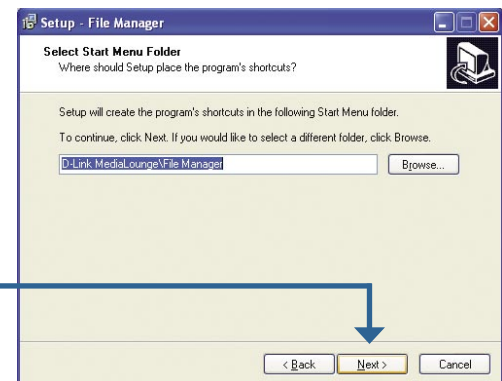
Click **Next**

Select **Create a desktop icon** to access the program from your desktop.

Click **Next**

Click **Install**

The File Manager software will be copied to the specified locations on your computer.

Check **Launch File Manager**

Click **Finish**

To use the D-Link® MediaLounge™ File Manager, see page 64.

Transferring Music with Mini-USB

The DSM-120 can easily transfer music files from your PC to your enclosed 2.5" Hard Drive via the supplied Mini-USB cable. Simply insert the Mini-USB cable into it's proper port on the backside of the DSM-120 (see the section 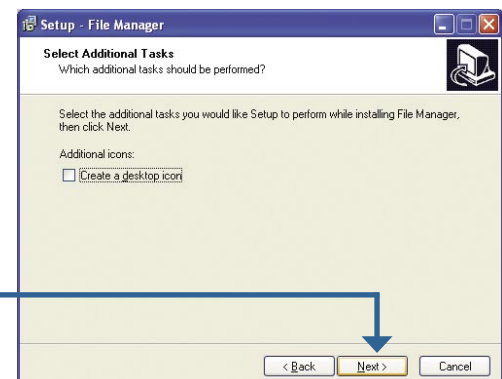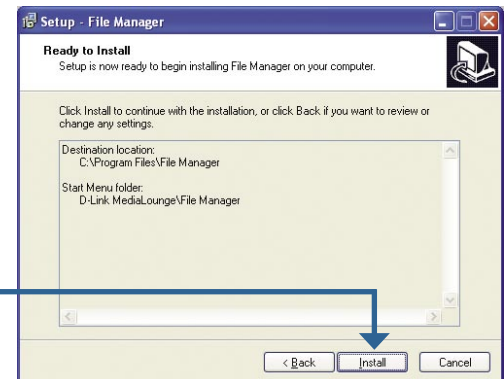on "Mini-USB Connection" on page 39), and insert the opposite end into a USB port on your PC. While connected, the DSM-120 will be unable to play music. The image below will continue to show on your DSM-120 until you decide to disconnect the Mini-USB cable.

WARNING: You must choose to safely remove the USB storage device on your PC before disconnecting your Mini-USB cable, or you may damage your Hard Drive (see "Disconnecting the Mini-USB cable" on page 35).

After the DSM-120 has detected your Mini-USB connection, the image on the right will be shown, and you will be unable to play music.

After your PC has detected your Mini-USB connection and the DSM-120 2.5" Hard Drive, simply drag and drop music files from your PC over to the DSM-120.
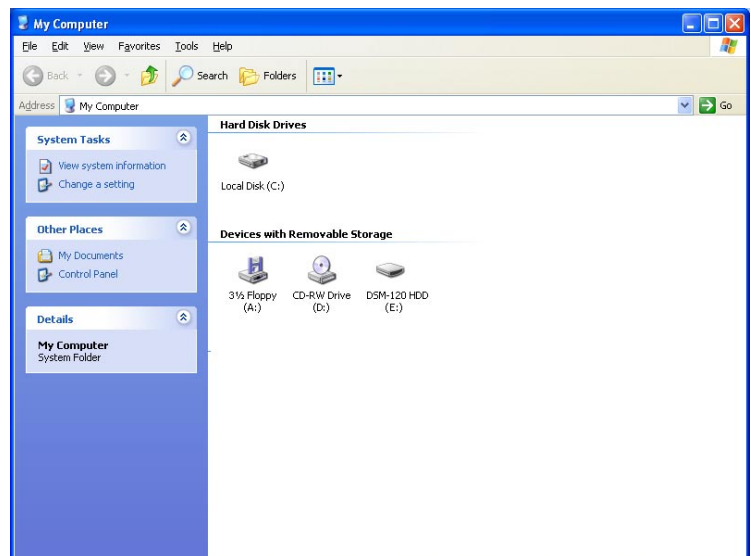
Note: Please remember to plug in the power adapter if you wish to transfer content via the Mini-USB port..

Disconnecting the Mini-USB cable

Before you disconnect the Mini-USB cable from your PC and the DSM-120, pay close attention to the system tray near the right corner of your monitor. There should be an icon that allows you to **Safely Remove Hardware**.

Mouse over the icon and you should see the functionality title as **Safely Remove Hardware**.

After double-clicking the **Safely Remove Hardware** icon, you should see the Safely Remove Hardware screen. At this point you can click the **Stop** button, or you can continue to verify which USB storage device you would like to stop by checking the **Display device components** checkbox. This will provide you with a hierarchy of attached USB devices in which you can stop.

Check the **Display device components** checkbox, and you should see the DSM-120 USB Device.
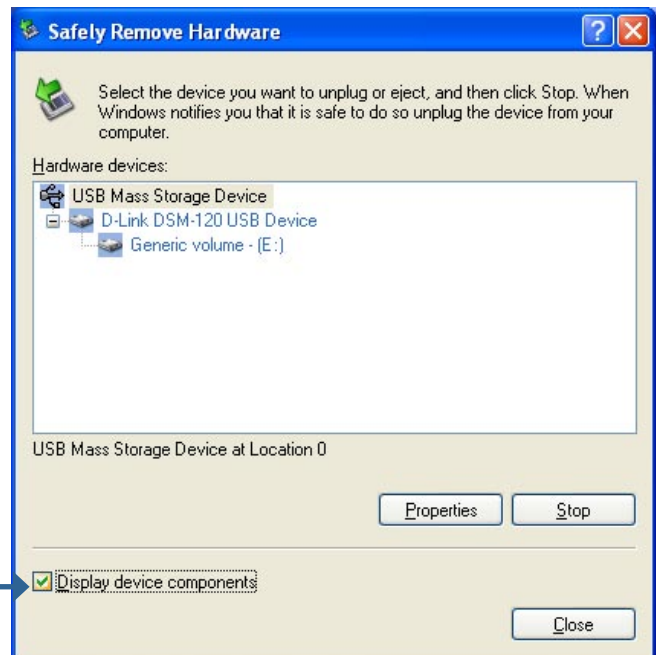
Disconnecting the Mini-USB cable *(continued)*

After clicking **Stop**, the Stop a Hardware Device screen will appear to confirm your request to stop the DSM-120. Click **OK**.

Click **OK**

After you click **OK**, the Safely Remove Hardware screen will appear again and the USB Mass Storage device that was shown initially will eventually disappear. Also, the Safely Remove Hardware icon will inform you that it is now safe to remove the DSM-120. Click **Close** on the Safely Remove Hardware screen and disconnect the Mini-USB cable.

Click **Close**
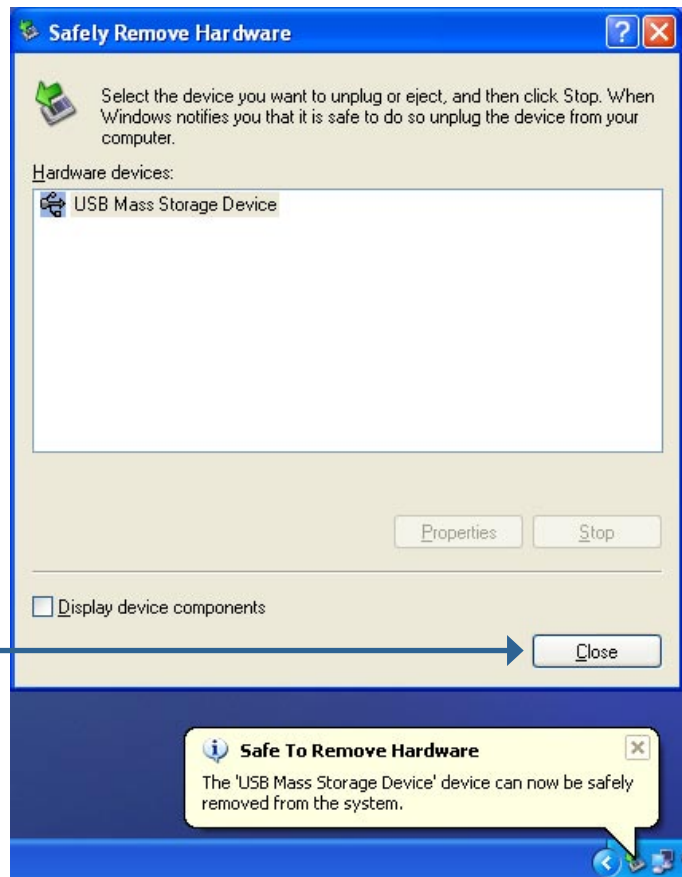
Connecting the DSM-120

Audio Connections

Select one of three ways to connect audio to your DSM-120:

- ### Composite Audio

  Plug the supplied red and white connectors into the AUDIO R and AUDIO L (color-coded matching) jacks on the DSM-120.

  Plug the opposite ends to the matching jacks on your audio system.

- ### Optical Digital Audio

  Connect an optical audio connector into the S/PDIF connector on the DSM-120, and connect the matching opposite end of the cable to the audio input of your audio system.

  Note: *This cable is not supplied.*

- ### Head Phone

  Plug a standard mini-plug head phone jack into the HEAD PHONE connector on the DSM-120.

  You can also connect standard PC speakers to the head phone jack.

  Note: *Head Phones and Speakers*

Network Connections

Select one of two ways to connect your DSM-120 to your network:

• Wireless Connection

If you are connecting wireless using the built-in antenna, then you do not need to connect the supplied Ethernet cable.

For an optimal wireless connection, place the antenna at a 90º angle as shown in the image to the right.

• RJ-45 Ethernet Connector

If you are connecting wired, insert the supplied Ethernet cable into the Ethernet network cable connector. Attach the other end to a router or hub on your network.

**Note:** *You may have an Ethernet cable plugged into the unit and also connect wirelessly. Neither will interfere with the other, but only one network can be accessed at a time (wired or wireless). The network connection type is selected in the Setup Wizard and can also be changed by going to the Setup Menu. To access the Setup Menu, select* **Setup** *on the menu and press* **Enter** *on the remote control.*

USB Connections

Select one of two ways to connect your DSM-120 with USB:

• **USB Connection**

Connect a USB drive for local playback of music and to easily configure wireless network settings by using Windows Connect Now.
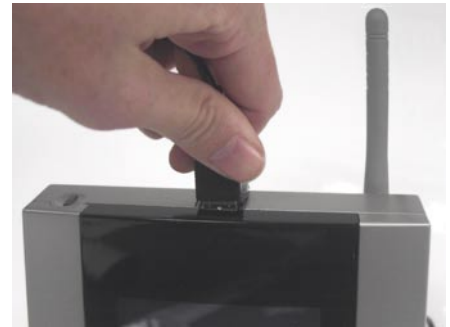
• **Mini-USB Connection**

You can directly transfer music files from your PC to the DSM-120 using the included Mini-USB cable to connect the DSM-120 to the USB port on the PC. You can also directly transfer music files from your DSM-120 to your PC.


Connect to USB on Computer

In order to use the Mini-USB connection, you must have a standard IDE 2.5" Hard Drive installed in your DSM-120. Please see the section on **Installing an optional 2.5" Hard Drive** on page 61.

The DSM-120 Setup Wizard

The DSM-120 Setup Wizard is navigated using the **navigation arrows** and the **Enter** button on the remote control. To toggle between the configuration options, use the **up** and **down arrows** on the remote control. To toggle between the Back, Next, and Rescan buttons, use the **left** and **right arrows** on the remote control. Press **Enter** to select a field or confirm a selection.

Welcome Screen

During the initial startup, the DSM-120 displays the Setup Wizard Welcome screen. Press the **right arrow** on the remote control to proceed to the next screen.

Welcome ◀) 📶
Press Enter to edit,
Left to go back, Right
to proceed.
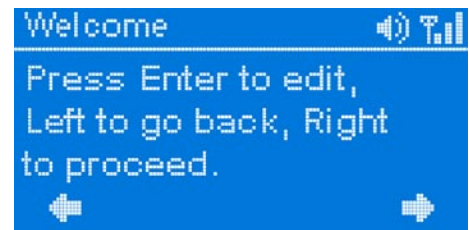
To skip the Setup Wizard, select **No**. Select **Yes** to continue.

Note: *You do not have to setup your device if you simply want to playback local music content from your USB drive or hard disk drive.*

Setup Network ◀) 📶
Yes
No
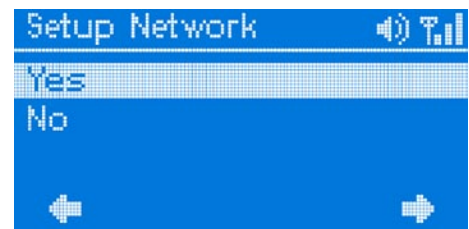
To enter a **Device Name** press **Enter**. To enter alphanumeric characters, please see page 13.

Device Name ◀) 📶
My Music Player
Press Enter To Edit

Select your network **Connection Type**.

Connection Type ◀) 📶
Wired
Wireless
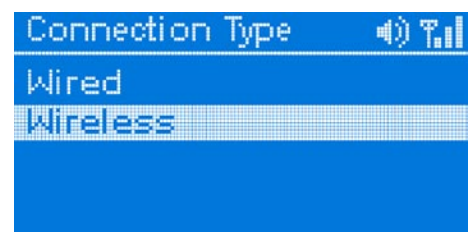
Select **Site Survey** or **Manually Enter SSID**.

Wireless Setup ◀) 📶
Site Survey
Manually Enter SSID
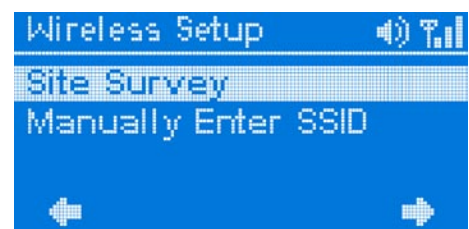
For the wireless network connection, please select the SSID of the network.
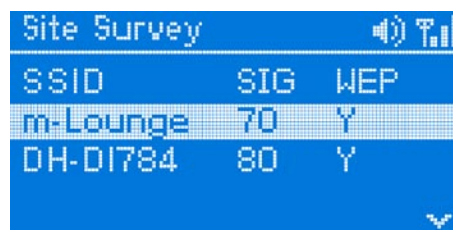
Select your **Wireless Mode**. Your options are either **Ad-Hoc** or **Infrastructure**.

Select your encryption setting. Your options are **Disable, 64BitHEX, 128BitHEX, 64BitASCII,** and **128BitASCII**.
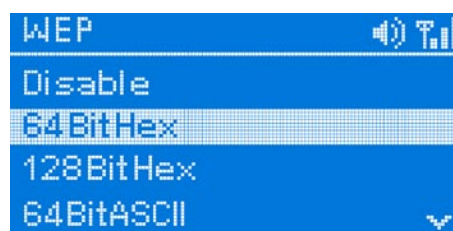
Encryption	64-bit		128-bit	
	Character Length	Example	Character Length	Example
HEX	10	12345678FA	26	456FBCDF123400122225271730
ASCII	5	DMODE	13	2005PIECAKES1

Select your **Index Key.** You can select numbers between **1** and **4**.
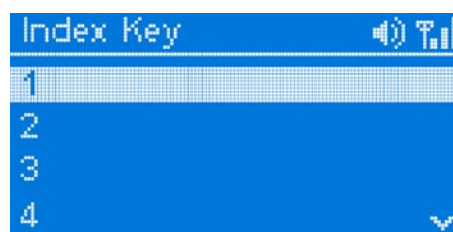
Provide a **WEP key.** The key you enter here must match the key of the wireless network exactly.
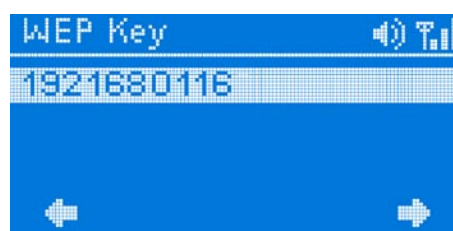
*Note: This screen is only available if you do not select **Disable** at the WEP screen.*

Connection Mode

*A DHCP-enabled router automatically assigns IP addresses to devices on your network. If you have a DHCP-enabled router, select **DHCP**.*

> If selecting **DHCP,** skip to page 43.

Provide an **IP Address** if you selected **Static IP.**

Provide a **Subnet Mask** if you selected **Static IP.**

Provide a **Gateway** if you selected **Static IP.**

Provide a **DNS** if you selected **Static IP.**
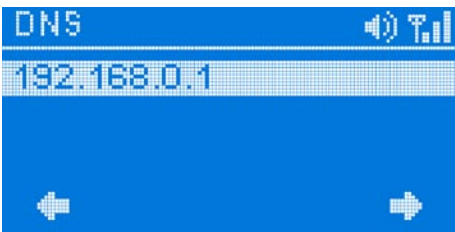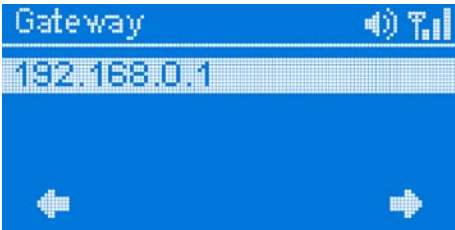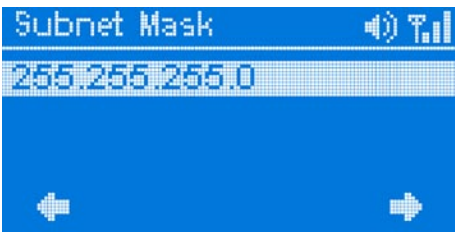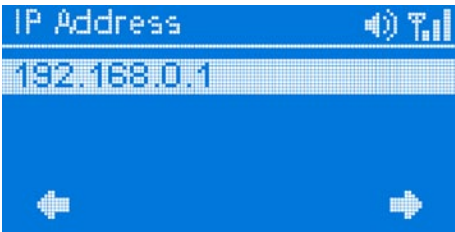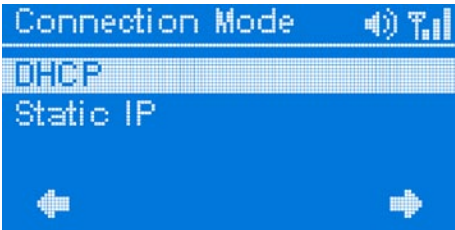
Your MediaLounge™ DSM-120 is now ready to stream music content for enjoyment on your home entertainment center.

Windows® Connect Now Configuration

If you already have wireless settings configured on your PC, instead of using the setup wizard, you can use Windows® Connect Now to configure the wireless settings on your DSM-120.

Note: Windows Connect Now is only available on PCs running Windows® XP with Service Pack 2 installed.

In the menu bar, go to **Start > All Programs > Accessories > Communications** and click **Wireless Network Setup Wizard**.
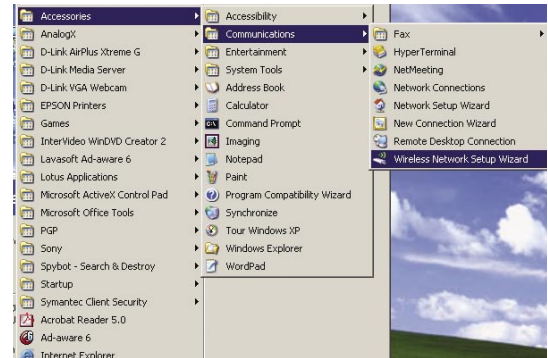
Your system will display the Setup Wizard Welcome screen. Click **Next** to continue.

Select to add a new device to your existing wireless network and click **Next** to continue.
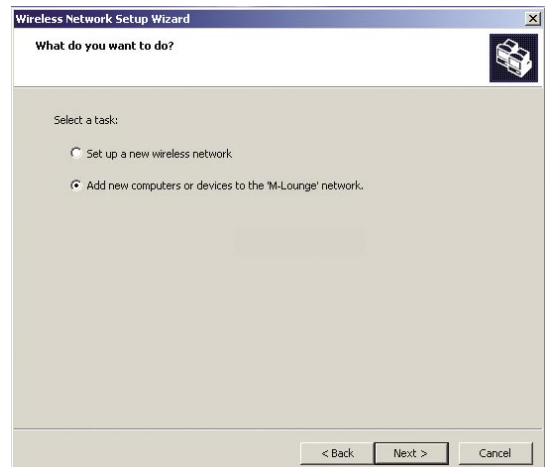
The wizard provides two methods for setting up a wireless network. Using a USB flash drive is recommended. Select to use a USB flash drive to save your wireless network settings and click **Next** to continue.

Plug your flash drive into a USB port on this computer. The drive letter will appear in the pull down menu. You can choose to use this drive or select another drive. Click **Next** to save your wireless settings to the USB flash drive. This may take a few seconds.

This screen will appear when the wireless settings have been saved to the USB flash drive.
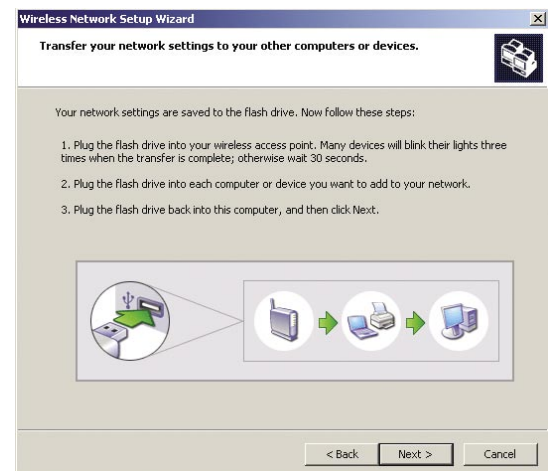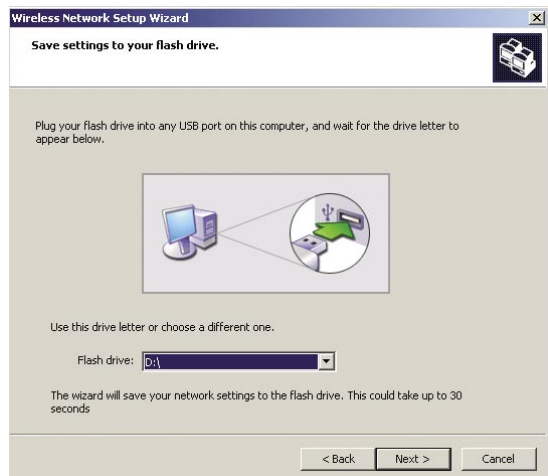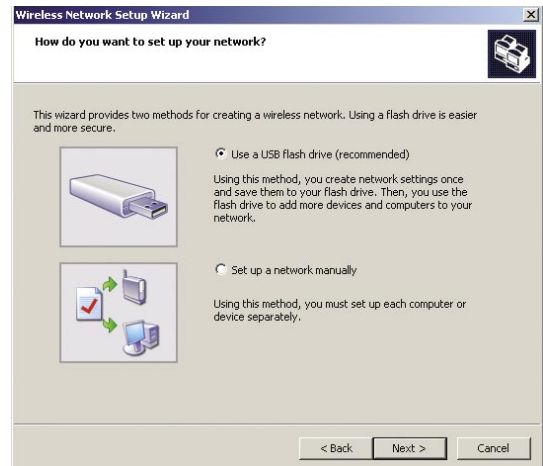
Next, remove the USB Flash Drive from your PC and insert into the USB port on top of the DSM-120.
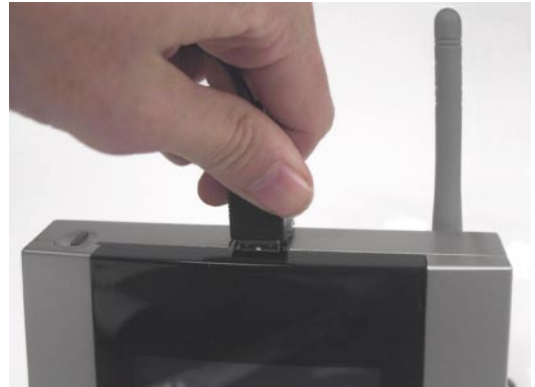
The following screen will appear, prompting you to apply your wireless settings. Click **OK** to continue.
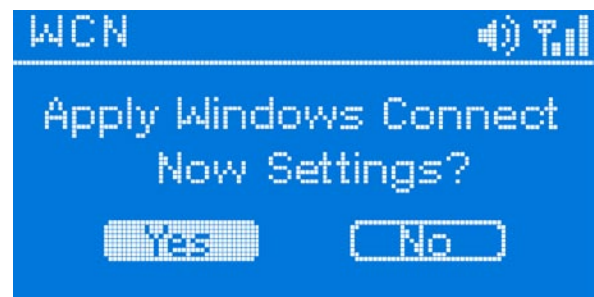
The following screen confirms that your wireless settings have been applied. Click **OK**.
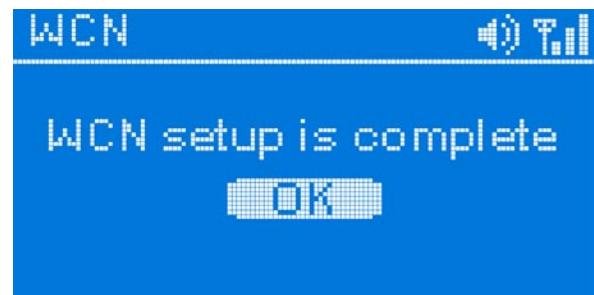
Next, remove the USB Flash Drive from the DSM-120 and insert it back into the USB port on your PC. Click **Next** to continue.
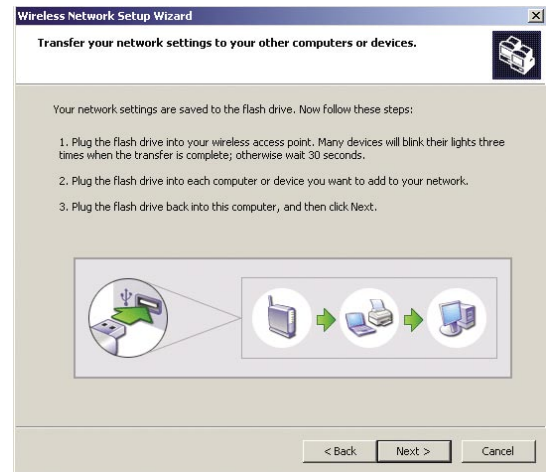
Wireless configuration using Windows Connect Now is now complete. The setup wizard will display the devices that have been setup with your wireless network. Click **Finish**.

DSM-120 Menu

Menu Basics

The DSM-120 uses an on-screen menu interface. As you move through the menus, you will use the **navigation buttons** on the remote control to move up, down, right and left. The highlight bar moves from item to item as you press the navigation buttons. In some instances you can press **Enter** on the remote control to access the menu within an item. You may see arrows running along the right side of the screen pointing up or down. These arrows allow you to uncover more information. For example, a down arrow hints that more items are available if you move the **down arrow** button. To move to the next menu screen, use the **right arrow**. Similarly, use the **left arrow** to move to the previous screen. See page 13 for more information on navigation arrows on the remote control.

Menu Home

From this home screen, you can access **PC Music, Local Music, Online Music,** or **Setup**. The DSM-120 Home screen is the top level menu.

MediaLounge

    PC Music
    Local Music   >
    Online Music
    Setup

Now Playing

If you are playing a music track and decide to return to the main menu, the music track will continue to play in the background and a fifth menu option will appear. Scroll down the main menu and you should see the **Now Playing** option. After selecting **Now Playing** the user will be returned to the playback screen that displays the title of the music track that is currently playing.

MediaLounge

    Local Music   ^
    Online Music   >
    Setup
    Now Playing

*Note: The **Now Playing** option will only appear during playback of a music track.*

PC Music

Music Quality

Your music listening experience on the media player depends upon the quality of your digital music files. Avoid quality settings below 48kbps as they are unsupported. For CD quality music, rip your MP3s at 128kbps or higher, with a sample rate of 44.1kHz.

Supported Music Formats

The following music file formats are supported:

- **MP3** (up to 320 kbps)
  MPEG-1, Layer 3 Audio file -The standard Internet music file format. This is the most commonly used audio format.

- **WMA** (Does not support WMA lossless, WMA Pro)
  Windows Media Audio file - Supported by the Microsoft Windows Media player and some music jukebox programs. Also supports WMDRM protected WMA files when using Windows Media Connect.

Organizing Music Files

Music files are located on your PC and can be contained in one directory folder, or organized in several subfolders.
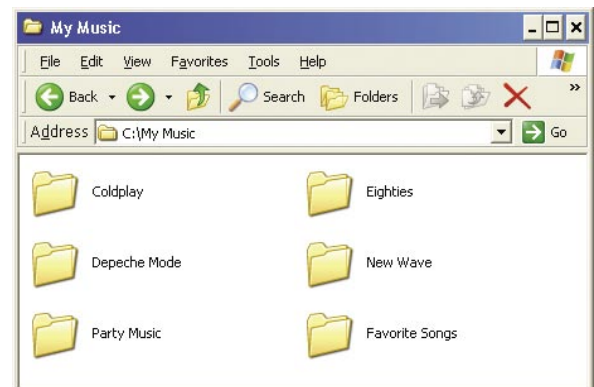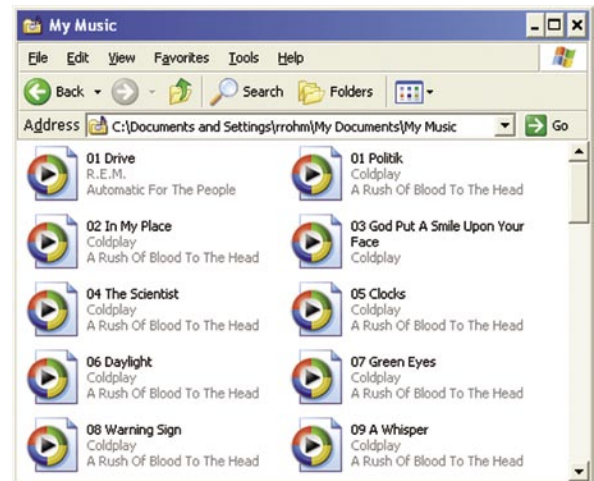
The DSM-120 automatically organizes your music files by genres, artists, albums, and tracks. This information is obtained from the ID3 tags in each of your music files. The ID3 tag is created for you when you rip (copy) your music from your CD. However, if your music files have incorrect or incomplete tags, the tracks may not appear where they should in your music categories.

Playing a Track

Once you enter the **PC Music** menu, there are several ways that you can view tracks:

◼ **All Tracks**

◼ **Playlist**

◼ **Genres**

◼ **Artists**

◼ **Albums**

◼ **Folders**

Use the **navigation arrows** to navigate to the track you wish to play. Once you have located the appropriate track, highlight it and press **Enter** on the remote control. The track will begin playing on your stereo speakers.

To play a track starting from the main home screen:

1. Select the **PC Music** category from the Home screen.

2. Select a viewing category. Use the **down arrow** and **up arrow** on the remote control to navigate to a viewing category (by **All Tracks**, **Playlist**, **Genres**, **Artists**, **Albums**, or **Folders**). Select the option by clicking **Enter** or the **right arrow** on the remote control.

Music Server 100 ◀)) ▮▮
◀ All Tracks ▶
Playlist
Genres
Artists
⌄

3. Select a Track. Use the **up arrow** and **down arrow** buttons to navigate one track at a time. The **PAGE UP** and **PAGE DOWN** buttons can be used to navigate through the track list one page at a time.

All Tracks ◀)) ▮▮
◀ Bad Girls ▶
Do Ya Think I'm
Don't Bring Me
Fire
⌄

Artist   Current Time   Total Time

4. After the appropriate track is highlighted, press **Enter** on the remote control. You should hear your selected music track playing.

stan getz ◀)) ▮▮
00:05/11:00
▶
Girl of My Dreams

Title
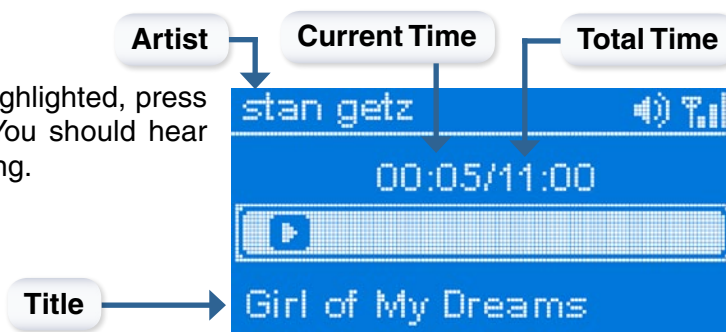
Shuffle and Repeat

When you are playing or repeating a group of tracks, you can randomize the play order by pressing the **Shuffle** button on the remote control.

Pressing **Shuffle** will allow you to toggle between OFF and ON.

When **Shuffle** is selected you should see this image.
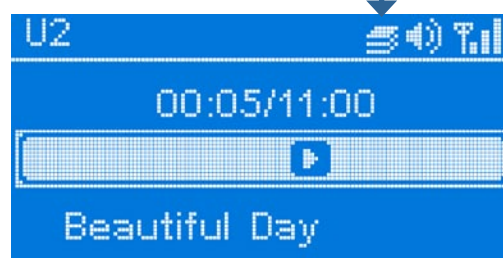
To repeat a track or a group of tracks, click **Repeat** on the remote control. When the icon with the text **REPEAT ONE** appears, this will repeat the music track that is currently playing. When the icon with the text **REPEAT ALL** appears, this will repeat all of the tracks within your currently selected folder or playlist.

When **Repeat One** is selected you should see this image.
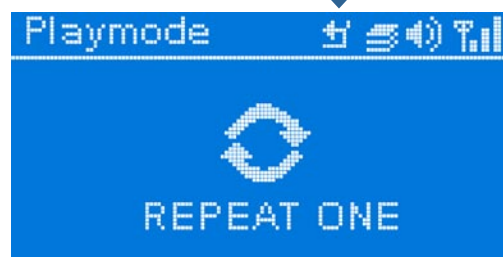
When **Repeat All** is selected you should see this image.

Local Music

If you have a 2.5" hard drive connected in your DSM-120 (see page 61), you may select **Local Music**. After selecting **Local Music**, you should see **Hard Drive** as the option available.

If you have a USB thumbdrive connected in your DSM-120, you may select **Local Music**. After selecting **Local Music**, you should see **USB** as the option available to you.

After selecting **Hard Drive** or **USB**, you should see all of your music files. In this example, **USB** was selected from **Local Music**.
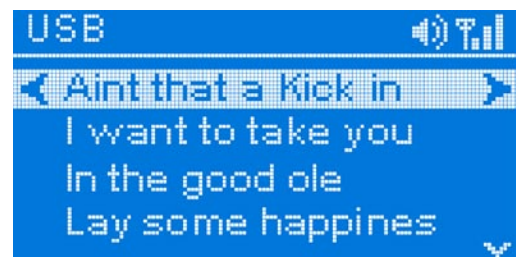
Press the **Enter** or **right arrow** button to start the playback of your selected music file.

Note: You must partition your 2.5" Hard Drive before you can use it in your DSM-120. Please see page 62 for instructions on partitioning the Hard Drive.

Note: The DSM-120 only supports a 2.5" Hard Drive with a FAT or FAT32 file system.

Note: Please set your 2.5" Hard Drive in "Master" mode. If you leave the settings in "Cable Select" or "Slave" mode, the DSM-120 will be unable to detect your hard drive..

*Note: Playlists are not supported when playing music files from **Local Music**.*

Online Music

Currently the DSM-120 supports Live365™ online services.

New services will be added in the future and made available via firmware upgrades. If your DSM-120 is configured to perform firmware upgrades automatically (see **Version** on page 59 for details), then you will see new options as soon as they become available.

To access the Online Music section, select **Online Music** from the Home screen.

Live365™

Live365™ is an Internet radio service that provides unlimited on-demand access to thousands of radio stations. The audio is streamed directly over the Internet. Live365™ allows you to select your own preset stations and provides custom station recommendations.

Select **Online Music** from the Home screen. Press **Enter** on the remote control to select Live365™.
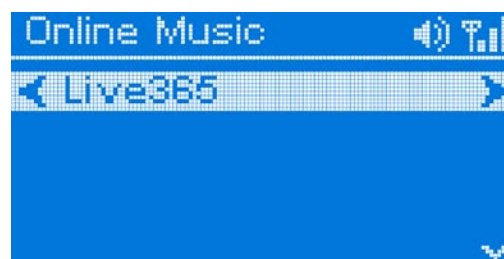
Use the **up** and **down arrows** on the remote control to navigate through the options. Press the **Enter** or the **right arrow** button on the remote control to make a selection.

ALL Broadcasts: Displays all available internet radio stations.

My Presets: Displays your preset stations.

Recommendations: Lists recommended stations based on your preset stations.

Editor's Station Picks: Lists recommended stations based on your preset stations.

Genres: Lists stations according to genre.
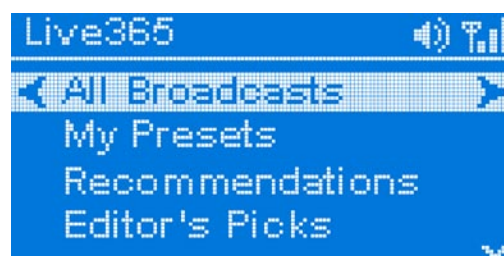
Live365™ (continued)

Before you are able to search and play for music files, you will need to login to Live365™. Use the **down arrow** to navigate towards the bottom of the list and select **Setup.** After you select **Setup**, you should see the option **Login**. After you login to Live365™ you will be able to play music

Click **Login** to enter in your Login information. If you do not have a Live365 account, use you PC to sign up for one.
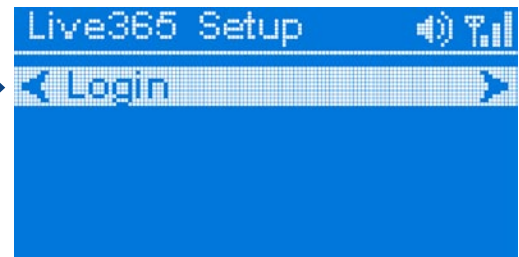
Enter in your **Name** (username) and **Pswd** (password), and select **OK**.
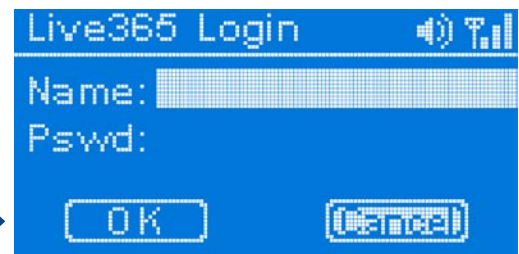
Setup

If you want to change the configuration of your setup you can select **Setup** from the Home screen.

For an explanation of the terminology used in the Setup functions, please see the Glossary.

Using the **up arrow** and **down arrow** buttons on your remote control, scroll down the list to highlight your selection then press **Enter** or the **right arrow** to select your choice.
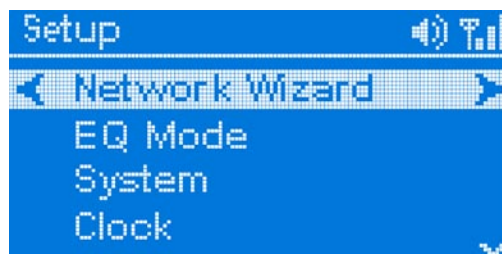
Navigating the menus

Use the **up** and **down arrow** buttons on the remote control to navigate between the options. Press **Enter** on the remote to select the highlighted item. Use the **up** and **down arrows** to toggle through the settings. Press **Enter** to make a selection.

Network Wizard

Press the **right arrow** to begin the Network Wizard.

To setup the Network, please see page 40 of this manual.
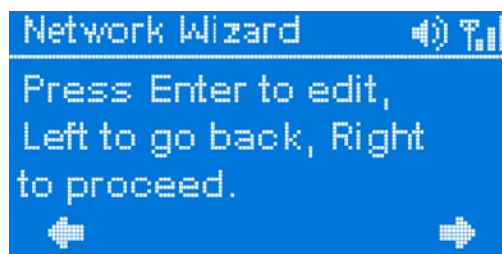
EQ Mode

Use the **up** and **down arrow** buttons on the remote control to navigate between the following options:

- **Normal**

- **Rock**

- **Pop**

- **Jazz**

- **Full Bass**

- **Full Treble**

- **Full Bass/Treble**
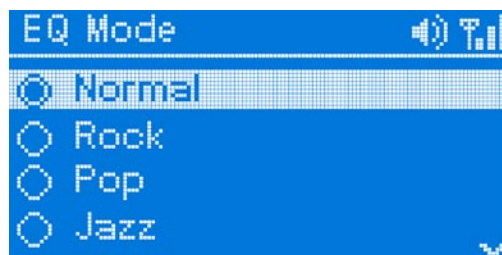
System

Use the **up** and **down arrow** buttons on the remote control to navigate between the following options:

Music Server: Displays all available music servers and allows the user to change servers.

Reset System: Resets to system defaults.

Restart System: Restarts your music player.

Check Connection: Select this option to check the validity of your network connection.
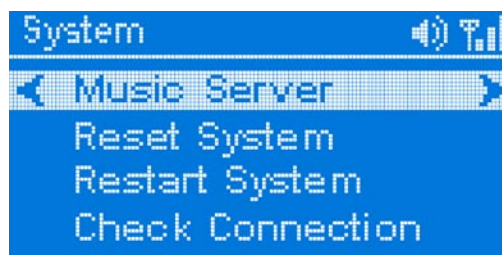
Some firmware updates may display an informational message telling you to upgrade your version of the D-Link Media Server software. Your current version of the software should still work, but to utilize all of the latest firmware features you should upgrade your Media Server software.

Please visit **http://support.dlink.com** for the latest version of the Media Server software.

Note: *If you have a version of the D-Link Media Server already installed on your system, please uninstall the software and restart your system before installing a newer version of the D-Link Media Server software.*

Clock

Use the **up** and **down arrow** buttons on the remote control to navigate between the following options:

"Current Time": Set the DSM-120 to the current time.

After clicking the **right arrow** or the **Enter** button on the remote control, you can begin to change the date and time.

Note: *the date and time are displayed on the DSM-120 when the unit is powered off.*

Time Zone: Displays all available time zones.

Sleep Timer: The options are **OFF, 5 Min, 10 Min, 15 Min, 20 Min, 25 Min, 30 Min, 40 Min, 50 Min, 60 Min, 70 Min, 80 Min,** and **90 Min.**

Alarm Clock: The DSM-120 is equipped with an alarm clock feature. To set the alarm clock, please do the following:

1. Select **Set Alarm Clock.** Use the navigation buttons on the remote control to enter a time that you would like the alarm to start.

2. Select **Enable/Disable,** this will give you the choice to turn the alarm clock on or off. To turn the alarm clock on, select **Enable**.

3. Before selecting **Set Alarm Music**, play a music file from **Local Music** first. When the song is playing, return to this menu and select **Set Alarm Music**.

Note: *Alarm music only works with music files from **Local Music**.*
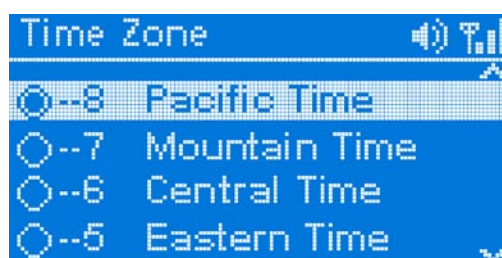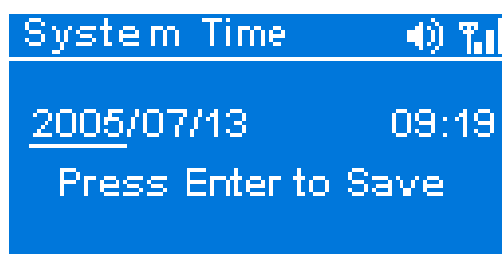
Version

Use the **up** and **down arrow** buttons on the remote control to navigate between the following options:

Device Info: Displays information about your connection and DSM-120 firmware.

Auto Update: You can Enable or Disable DSM-120 to automatically look for updates.

**Update Version:** Selecting this option allows you to manually update your DSM-120.
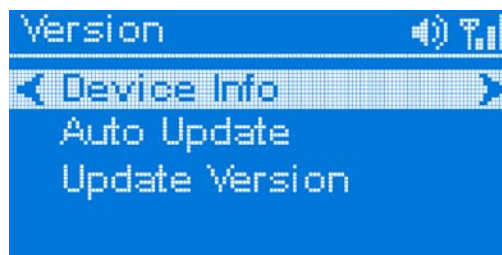
Hard Disk

Use the **up** and **down arrow** buttons on the remote control to navigate between the following options:

Selecting this option will provide information on the attached hard drive.

Use the **right-arrow** or press **Enter** to check the Hard Drive Capacity.

The information on your Hard Drive will be displayed here.
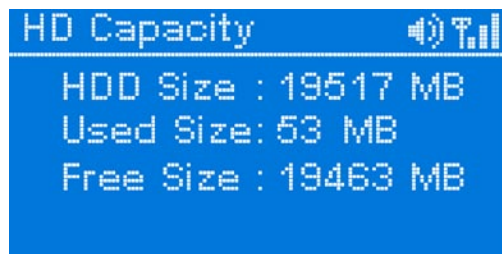
LCD Logo Displays

The DSM-120 contains several logos that are displayed in the upper right hand corner of the DSM-120.

Mute

Volume
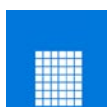
Stop

Pause

WLAN (wireless signal)

Wired (ethernet cable)

No Network

Shuffle

Repeat All

Repeat One

2.5" Hard Drive

Installing an optional 2.5" Hard Drive

In order to use the **Local Music** option, you must have a standard IDE 2.5" Hard Drive installed in your DSM-120. The Hard Drive Enclosure is located on the back of your DSM-120, simply depress the locking tab and slide the cover off. Insert your 2.5" Hard Drive as shown in the picture below, and close the cover. Your DSM-120 should be ready to play music from your installed 2.5" Hard Drive.

Note: Hard Drive is not included with the DSM-120.

WARNING: You must unplug the power from the DSM-120 before inserting the Hard Drive.

Note: You must partition your 2.5" Hard Drive before you can use it in your DSM-120. Please see page 62 for instructions on partitioning the Hard Drive.

Note: The DSM-120 only supports a 2.5" Hard Drive with a FAT or FAT32 file system.

Note: Please set your 2.5" Hard Drive in "Master" mode. If you leave the settings in "Cable Select" or "Slave" mode, the DSM-120 will be unable to detect your hard drive..

Partition your 2.5" Hard Drive

For Windows XP/2000 computers:

1. Right-click on "My Computer" and choose Manage.
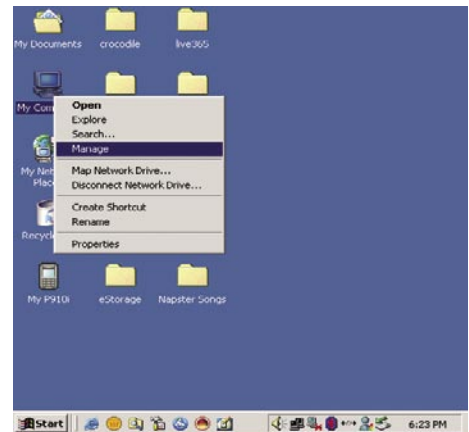
2. Under "Storage" on the Left pane, select Disk Management.
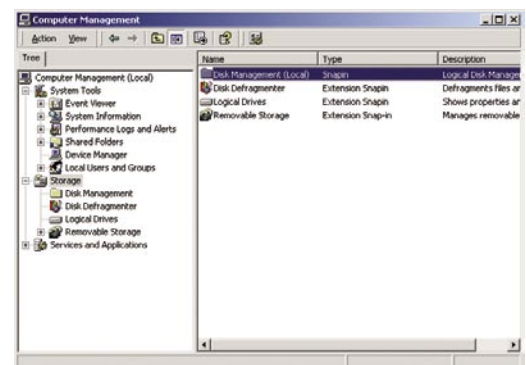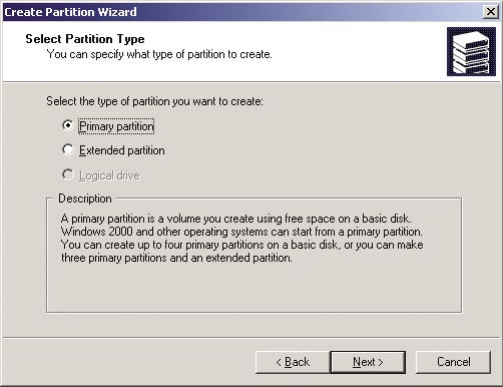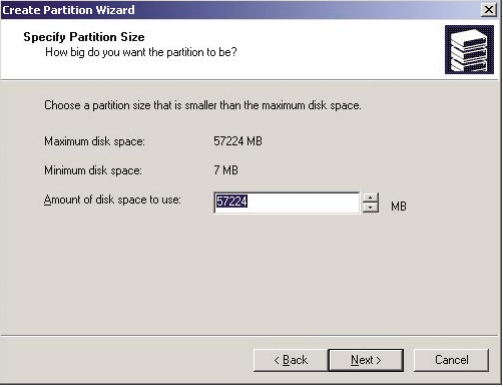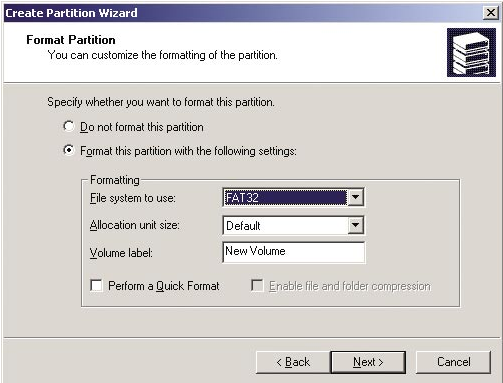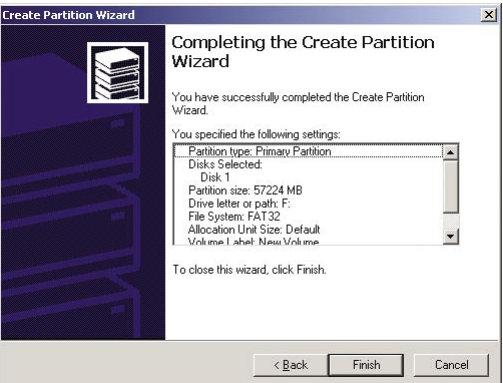
3. Windows should now give you the option to initialize the disk. If not, locate the new drive, right-click on the new disk (where it reads "Disk#") and choose Initialize. (This step may not be required for some hard drives.)

4. Go through the wizard.

5. Once complete, locate your hard drive in the bottom-right pane. Right-click on the area with a status bar (to the right of the "Disk#") and choose New Partition.
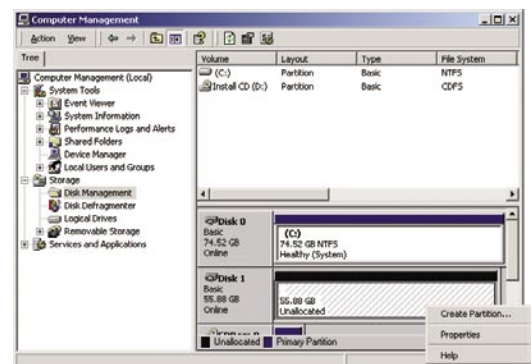
6. Follow the directions of the partition wizard. The recommended partition type is "primary" and the recommended file system is "FAT32". Please note that Windows XP/2000 limits FAT32 partitions to 32GB.

1.

2.

3.

4.

5.

6.

7. Once you've finished with the wizard, you should now be able to see the drive in Windows Explorer.

Note: *Your DSM-120 only works with FAT or FAT32 file systems. You cannot create a partition larger than 32GB in size with the FAT32 file system by using the Format tool in Windows® 2000/XP (see page 64).*

Create a Partition Larger than 32GB

To create a partition larger than 32GB for a DSM-120, there are three options:

1. There are tools that you may purchase or download from the Internet to partition the hard drive in FAT32 beyond 32GB.

2. Often a hard drive vendor includes partition software in the package for you to partition the hard drive.

3. Start from a Microsoft Windows 98/ME Startup disk and use the Fdisk tool included on the disk to partition your hard drive. For additional information about how to use a Microsoft Windows 98/ME Startup disk to format a hard disk, you can fnd an article in the Microsoft Knowledge Base, "How to Use Fdisk and Format to Partition/Repartition a Hard Disk".

Note: *The DSM-120 does not support multiple partitions.*

Using the File Manager

After clicking **Finish**, and only if you selected **Launch File Manager** at the end of the Setup Wizard, the File Manager program will automatically open.

To manually open the File Manager Program, select **Start** > **All Programs** > **D-Link MediaLounge** > **File Manager** > **File Manager**.

To establish a connection with your DSM-120, browse and double-click the device listed here.
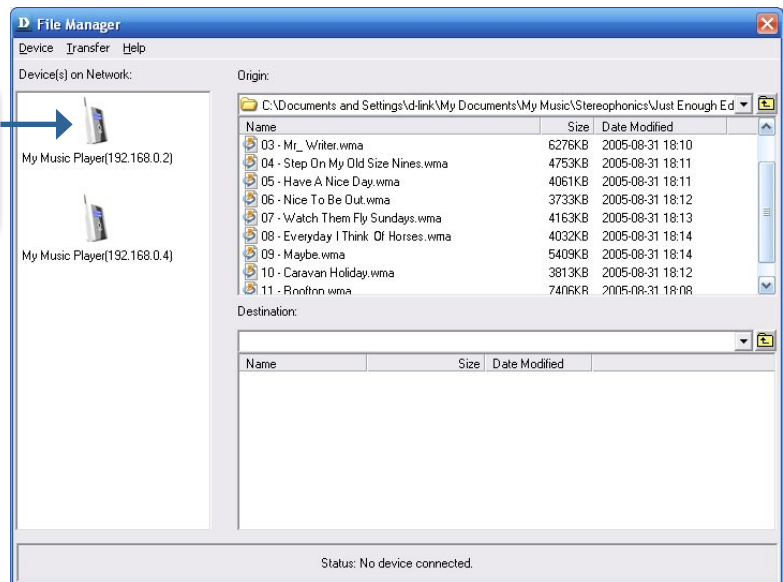
After double-clicking your DSM-120 device, represented on the left window pane of the File Manager, the next screen will verify if you would like to connect to your DSM-120 Wireless Music Player.
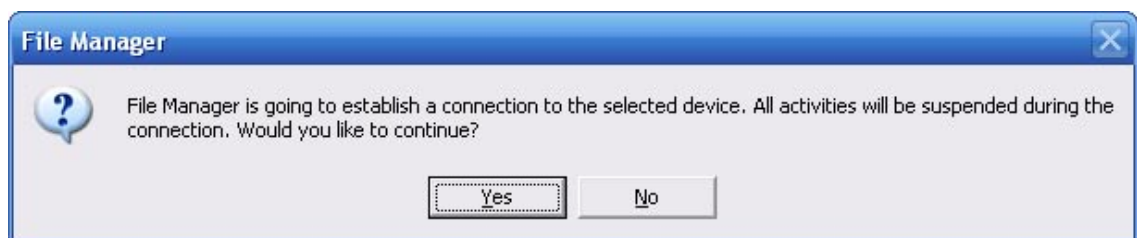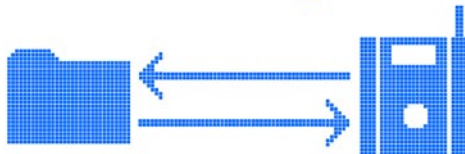
*Note: After selecting **Yes**, the screen to your left will be displayed on your DSM-120. Once you've completed transferring files, the DSM-120 will be able to playback music again.*

After a connection has been established to your DSM-120, browse through your **Destination** area, the bottom window pane of the File Manager, and select a folder location. In the **Origin** area, the top window pane of the File Manager, browse through your computer's folders and select a music file. On the File Manager's menu bar, click **Transfer** and select **Upload**.

Select **Upload** from the **Transfer** menu, to upload a music file to the DSM-120.
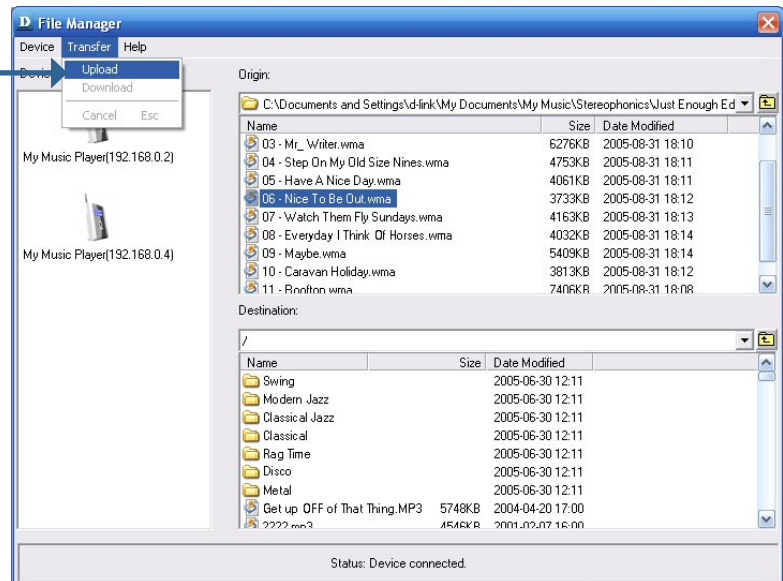
Note: You can also transfer music from the DSM-120 to your computer by selecting a music track from the **Destination** area, and then selecting **Download** from the **Transfer** menu.

After the file has completely copied over, you should notice the music file appears in the Destination area of the File Manager. Also, pay close attention to the Status message located near the bottom of the File Manager.
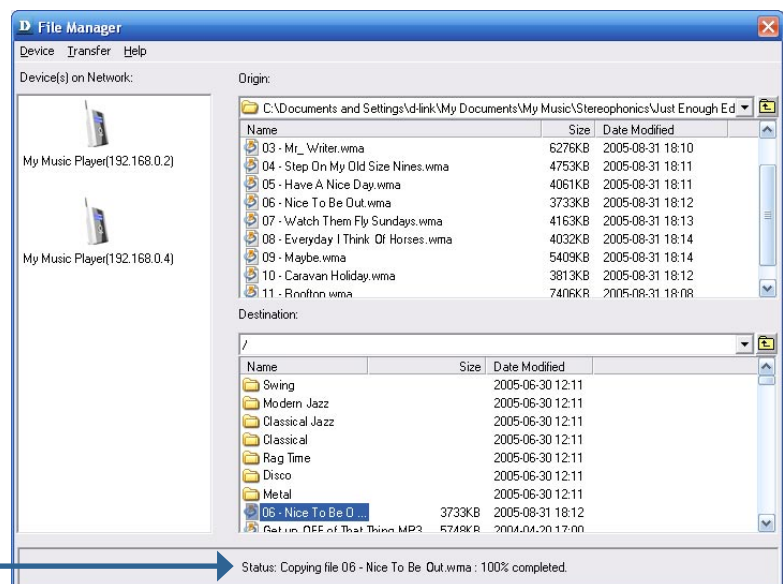
Status displays the current action of the File Manager.

If you need to disconnect or connect to your device, simply select **Connect** or **Disconnect** from the Device menu. Select **Refresh** to refresh the lists.
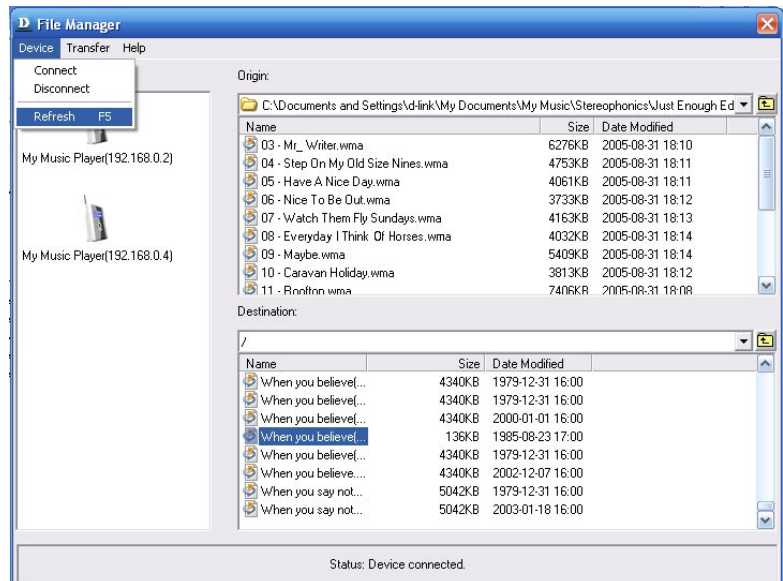
To delete a music file, simply right-click on the music file and you should see a sub-menu. The options of the sub-menu are **Download**, **Delete**, **Rename**, and **New Folder**. Selecting **Delete** will remove the file permanently from the DSM-120.

Right-click the music file to delete.
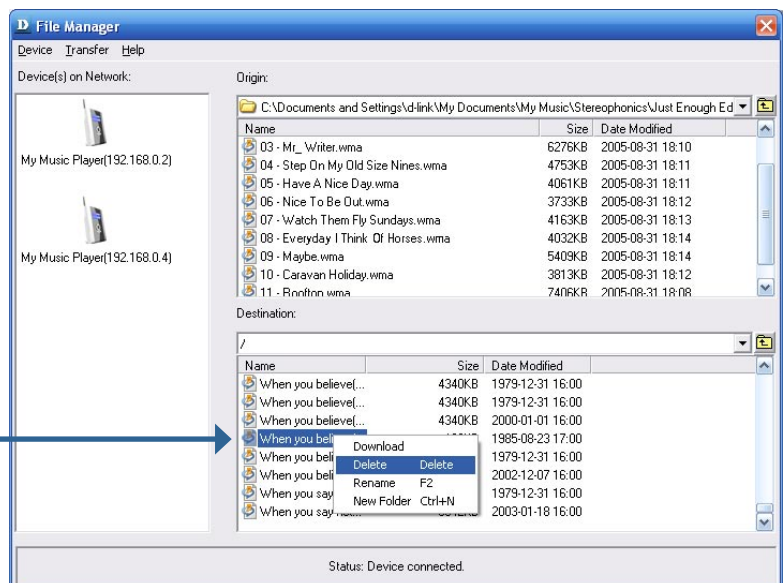
Note: Deleting a file from the DSM-120 will not delete it from the PC!

Volume

Press the **Volume (+)** and **Volume (-)** buttons on the remote control to higher and lower the volume respectively on the DSM-120. When pressing the **Volume** buttons, the DSM-120 screen should change to a Set Volume screen (see image below) that displays a decibel output level.
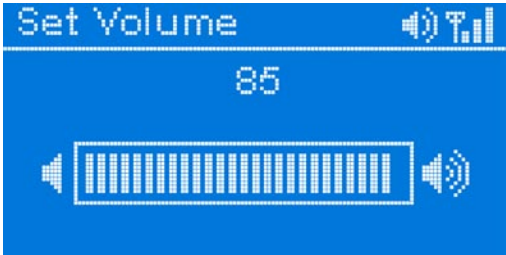
Pressing the **Mute** button on the remote control will mute the sound from the DSM-120 (see image below).

Copy

Use the **Copy** button on the remote control to copy music files from your USB thumbdrive over to the attached optional 2.5" Hard Drive on the DSM-120.

Press **Copy** to copy files from your USB thumbdrive to your attached Hard Drive.

After you have selected your file and pressed the **Copy** button on the remote control, you will see the following screen on your DSM-120.

Copying

File Name:
Lay some happiness

14

As your file is being copied, the percentage of transfer should be displayed here.
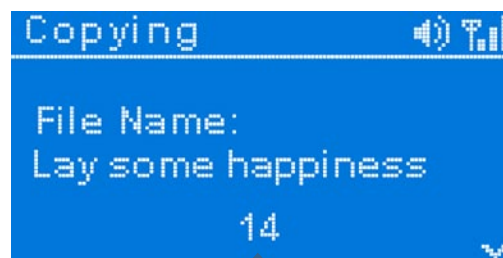
Note: Do not unplug the DSM-120 during the copy process. D-Link is not responsible for hardware failure caused by user error.

Frequently Asked Questions

What kind of files are supported by the DSM-120?

■ Audio - MP3 and WMA

What do I need to setup D-Link's DSM-120?

■ You must have a Microsoft Windows-based home network in place, with at least one PC running Microsoft Windows XP/2000.

Will any software need to be installed on my computer?

■ Yes, the D-Link Media Server Software, Windows® Media Connect, or any UPnP AV compliant media server software needs to be installed on a networked Windows-based PC.

What operating system do I need to run the server software?

■ Windows XP/2000

How does the D-Link DSM-120 get its files from my computer?

■ As soon as you have installed the D-Link® Media Server software on your PC, the server software will be launched, allowing you to add media files. You may then select folders that contain music that you want to play.

Can I access Live365 without the Media Server software running?

■ Yes, by selecting the **Online Music** option from the Home screen.

If I am running Windows® Media Connect, do I need to run the D-Link® Media Server software?

■ No, you may run both applications but it is not necessary to run both at the same time.

What about Copy Protection and DRM support?

■ The most common method of copy protection is WMA DRM (Digital Rights Management). The DSM-120 can play these types of files if you are using the Windows® Media Connect software. For instructions on configuring Windows® Media Connect, please see page 23.

Can I use my Universal remote control?

■ No, the DSM-120 is not compatible with a universal remote but you can use a remote with learning ability.

Can I connect the DSM-120 directly to a PC without using a router or a hub?

- Yes, please make note of the following:

  Wireless Users: Set the Mode to Ad-Hoc in the wireless settings.

  Wired Users: Connect an Ethernet cable directly from the DSM-120's Ethernet port to the Ethernet port on your PC. The DSM-120's Ethernet port is Auto MDI/MDI-X, so a special Ethernet cable is not required.

  All Users: If DHCP software isn't running on your computer, you will need to assign a static IP address to the DSM-120.

  Note: *Online Music and firmware upgrades are not available without an Internet connection.*

How do I change the bit rate of an audio file?

- There are various conversion programs available for download on the Internet.

How do I copy files from my PC?

- You can copy files from your PC by using the D-Link® MediaLounge File Manager Software, please see page 31. You can also copy files from your PC to your USB thumbdrive and then use the **Copy** button while your thumbdrive is connected to your DSM-120. Another alternative to copying files is using the Mini-USB cable to transfer files directly from your PC.

Can I transfer files to my DSM-120 via network connection?

- Yes you can transfer files to your DSM-120 by using the D-Link® MediaLounge File Manager Software, please see page 31.

Why is the volume not adjustable via digital optical output?

- The digital optical output is pass-through only. The volume is controlled by your receiver.

Troubleshooting

I cannot see the Setup Wizard when I turn on my DSM-120 player for the first time.

■ Make sure you have firmly attached the power adapter plug to the back of the player. Also, verify the power adapter is plugged into a working power outlet and that the outlet is not controlled by a light switch.

I've updated the firmware on my DSM-120 but all of the features do not work.

■ Be sure you've updated to the latest version of the D-Link Media Server software as well.

You can download the latest version at **http://support.dlink.com**

My remote control isn't working.

■ Make sure the batteries are inserted correctly.

■ Try removing the batteries and reinserting them without touching any buttons on the remote control.

■ Replace the batteries with new ones.

I can't use my HDD or USB device that I just installed.

■ Please make sure that it is a FAT or FAT32 File System. Reformatting your Hard Drive to this File System may be required.

Note: Reformatting your drive will wipe out everything.

How do I turn on the LCD backlight when the DSM-120 is turned off so that I may be able to read the time?

■ Press any key (other than the power key) on the remote, or on the device, to turn on the backlight. The backlight will stay lit for five seconds before turning off again.

I can't find any of my music.

■   Make sure your computer is powered on and that it has not entered standby mode. You may need to change your computer's power settings if you want your content to be available all the time.

■   Make sure the Media Server software is running on your computer. Look for the Media Server icon in your system tray. If necessary, start the Media Server software again.

■   Click on the Media Server icon and select Show Media Server to verify you are sharing the correct directories.

■   If using a wired network, verify the Ethernet cable is properly attached to your DSM-120 and to a network switch, hub or router. Verify that the switch, hub or router is powered on.

■   If you are using static IP addresses, verify the IP address and netmask are in the same range as other addresses on your network. Verify that the address is not already in use by another PC or device.

■   Make sure the files you are sharing use a supported file format and encoding scheme.

I can't hear any sound when I'm playing music.

■   Make sure the audio cables are properly connected.

■   If the audio cables are connected to your TV, the TV must be on to hear any music.

■   If the audio cables are connected to your stereo, make sure the stereo is on and you have the correct stereo input source selected. If you are having trouble selecting the correct audio source, refer to the instructions that came with your stereo.

Some of my MP3 and WMA files don't appear.

- The DSM-120 supports the most common music file formats. However, there are almost an infinite variety of bit rates and sample rates. If a file does not appear on the receiver, it most likely uses an unsupported rate.

- The files may be copy protected. To share your files, turn copy protection off when you rip them

   Note: *WMA DRM files can be played by using Windows® Media Connect Server software, see page 23 for details.*

- The following MP3 sample rates are supported:

   4, 8, 16, 22.05, 24, 32, 44.1, 48, 88.2 and 96 kHz.

- For best results, rip your MP3 files at 320 kbps or higher, with a sample rate of 44.1 kHz.

I am not able to play certain media files.

- The DSM-120 supports most industry standard file formats but even supported file formats can be encoded in ways that are not supported. Try exporting media with

Checking the bit and sample rates of a music file.

- To check the bit and sample rates of a music file:

1. Right-click on the file and select **Properties**.

2. Select the **Summary** tab and click the **Advanced** button. Scroll to the bottom of the list.

   The file to the right has a bit rate of 128 kbps and a sample rate of 44 kHz.

   In most cases, the sample rate does not matter unless you come across a file that will not play or appear on your player. Use the above procedure to check the file settings for supported rates.
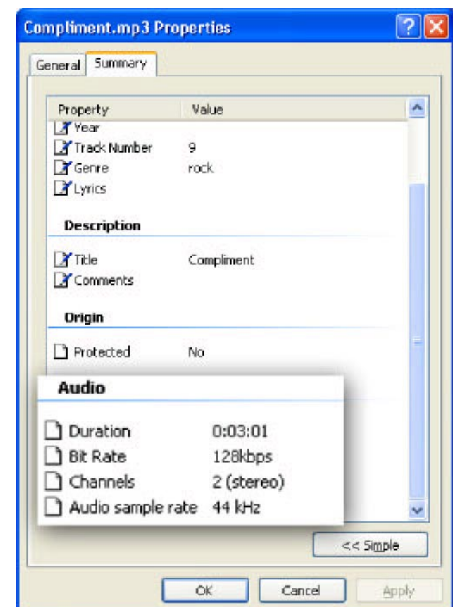
I created a playlist on my computer, but it doesn't appear on my music player.

- Make sure the playlist file is located in a folder shared by your music player. Copy the playlist to your shared music folder or click on the Media Server icon to add or change your folder options.

How do I reset my DSM-120?

- Under normal circumstances, you should not need to reset your music player. However, to fully reset the music player, lightly insert a paper clip into the reset opening on the unit's rear panel for ten seconds.

What version of firmware do I have?

- From the main home screen, select **Setup** and then select **Version**. Under the **Version** menu, select the option **Device Info**. The firmware version will be listed here.

I am unable to access Napster™ content.

- Make sure you have Windows® Media Connect running and that you are sharing the folder that contains the Napster™ audio files.

- Make sure you have validated the D-Link® player from within Windows® Media Connect.

I was able to browse and play content from my music player, but now I can no longer browse or play any content from my media server.

- This is a problem we have noticed with Norton Anti-Virus 2005. Your music player caches the available media server for 30 minutes. During this time, if the connection between your PC media server and the media player was disconnected, you will need to restart your PC to solve this issue.

When sharing files with the D-Link Media Server, my PC is very slow.

- If you are sharing gigabytes of content, please make sure that you are not running any other software that requires high CPU usage.

It takes a long time to share files with the D-Link Media Server.

- If you are sharing gigabytes of content with your media server software, it may take several minutes depending on the size of the content you are sharing.

The list of music tracks show up as either blank fields or strange characters.

- Make sure you have english only in your file's metadata. Unicode is not supported at this time.

What is the largest single file size that a DSM-120 can support from the local hard disk?

- The largest possible file for a FAT32 volume is 4GB.

Technical Specifications

Network*
- TCP/IP (DHCP or Static IP Address)
- 802.11g Wireless (Supports up to 54Mbps transfer rate)
- 802.11b Wireless (Supports up to 11Mbps transfer rate)
- Wired LAN: 10/100Mbps

Media Streaming Protocol
- HTTP

Supported Audio Formats:
- MP3 (up to 320 kbps)
- WMA (Does not support WMA lossless, WMA Pro)

Audio Playlist Formats:
- M3U
- PLS

Outputs:
- RCA Audio Jacks
- Optical Digital Audio
- Head Phones Jack

Antenna:
- Type: 2.4GHz swivel-type monopole antenna
- Frequency: 2.4GHz to 2.5GHz
- Impedance: 50 ohms
- Gain: 2dBi

Dimensions
- H x W x L: 1.5" x 11.25" x 16.75"
- Weight: 5.5 pounds

Security:
- Hardware based WEP (Wired Equivalent Privacy)
- Up to 128-bit encryption

Configuration:
- UPnP-AV 1.0 Enabled
- INMPR Compliant

* Maximum wireless signal rate derived from IEEE Standard 802.11a and 802.11g specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate.

** Environmental conditions may adversely affect wireless signal range.

PC System Requirements
- Connection to 802.11g wireless or Ethernet network
- Windows 2000 or XP
- 500MHz processor
- 128MB memory
- 20MB available hard disk space
- CD-ROM drive
- Broadband Internet Service *(For online music access and firmware updates)*

Power Source:
- 12V, 1.25A.

Environmental specification
- Operating temperature: 0°C to 45°C
- Storage temperature:-25°C to 55°C
- Operating relative humidity: 10% to 95% non-condensing

Warranty:
- 1 Year

Appendix

Setting Microsoft Windows Power Options

If you want access to your music all the time from your PC, make sure to configure your PC's power settings. Do not allow your computer to enter a standby power state, or you will have to "wake up" your PC to view music on your DSM-120. However, your monitor can be in a low power state or turned off.

To change your power settings on Windows XP:

> 1. Click on **Start.**
>
> 2. Select **Control Panel**.
>
> 3. Select **Performance and Maintenance.**
>
> 4. Select **Power Options**.
>
> 5. Change both **System standby** and **System hibernates** to **Never**.
>
> 6. Click **OK**.

To change your power settings on Windows 2000:

> 1. Click on **Start**.
>
> 2. Select **Settings**.
>
> 3. Select **Control Panel**.
>
> 4. Select **Power Options**.
>
> 5. Change both **System standby** and **System hibernates** to **Never**.
>
> 6. Click **OK**.

Wireless Installation Considerations

The D-Link® DSM-120 can be integrated into a wireless network from virtually anywhere within its operating range. However, the range can be limited by the number of walls, thickness of walls, and location of the walls that the wireless signal must pass through. Typical ranges vary depending on the types of materials and background RF (radio frequency) noise in your home or business. The key to maximizing wireless range is to follow these basic guidelines:

- Keep the number of walls and ceilings between the DSM-120 and other network devices to a minimum. Each wall or ceiling can reduce your DSM-120's range from 3-90 feet (1-30 meters).

- Be aware of the direct line between network devices. A wall that is 1.5 feet thick (.5 meters), at a 45-degree angle appears to be almost 3 feet (1 meter) thick. At a 2-degree angle it looks over 42 feet (14 meters) thick! Position devices so that the signal will travel straight through a wall or ceiling (instead of at an angle) for better reception.

- Building materials can impede the wireless signal. A solid metal door or aluminum studs may have a negative effect on the range. Try to position wireless devices and computers with wireless adapters so that the signal passes through drywall or open doorways and not other materials.

- Keep your product away (at least 3-6 feet or 1-2 meters) from electrical devices or appliances that generate RF noise.

- You can also add a directional antenna to help with range and sensitivity issues.

Partitioning a FAT32 Hard Drive

The 127.5 GB limit on FAT32 volumes imposed in Windows 98 no longer applies to Windows ME. In Windows ME, using a cluster size of 32 KB, a FAT32 volume can theoretically be about 8 terabytes. However, the 32-bit fields in the partition table (and in the FAT32 boot sector) limit the size of an individual volume (regardless of file system) on a basic MBR disk using a sector size of 512 bytes to approximately 2 terabytes.

FAT32 file system cluster sizes

Partition Size	Cluster Size
less than 260MB	512 Bytes
260MB through 8GB	4KB
8GB through 16GB	8KB
16GB through 32GB	16KB
32GB through 2TB	32KB

However, as Windows 2000 or Windows XP fully supports using a FAT32 partition over 32GB, and only does not permit formatting a FAT drive over 32GB, it is possible to use a Windows 98 or Windows Me boot diskette to get a larger FAT partition formatted. Just be extremely careful that the correct partition is formatted when booting from a diskette.

Glossary

Networking

802.11b: A wireless networking standard that supports data encryption and up to 11Mbps bandwidth.

802.11g: A wireless networking standard that supports data encryption and up to 54Mbps bandwidth.

Ad-Hoc: This wireless networking mode means that two PC's are communicating in a Peer-to-Peer network, without a router or an access point.

Bandwidth: A measure of the rate at which data can be sent and received through the network. This value is usually given in bits per second (bps) or Megabits per second (Mbps).

DHCP (Dynamic Host Configuration Protocol): A protocol that network devices use to obtain an IP address, subnet mask, gateway, and DNS addresses automatically. A DHCP server can be a router, ISP server, or PC running Internet Connection Sharing software. If you are using a DHCP-capable device in your network, you will <u>not</u> need to assign a static IP address to your DSM-120. However, if you do not have a DHCP-capable device in your network, you will need to assign a static IP address to your DSM-120.

DNS (Domain Name System): A system used to translate computer names into IP addresses. For example, a DNS server would translate www.dlink.com into 64.7.210.132

Ethernet: The most commonly used wired network technology. Standard Ethernet supports up to 10Mbps. Fast Ethernet supports up to 100Mbps.

Gateway: This is the IP address of the device that connects you to another network such as a router. A router would be the gateway between your local area network and the Internet.

Infrastructure: This wireless networking mode is used by wireless networks with a router or an access point.

IP Address (Internet Protocol Address): An IP address consists of four groups of digits separated by periods. Each group of digits contain an 8-bit value as a number ranging from 0 to 255. Each computer must have it's own unique IP address. The IP addresses on your network must be within the same range. For example, if one PC or device has an IP address of 192.168.0.2, the other devices should have IP addresses that are sequential, like 192.168.0.3 and 192.168.0.4.

ISP (Internet Service Provider): A commercial organization that provides subscribers with access to the Internet.

Key: Encryption keys allow you to easily change wireless encryption settings to maintain a secure network. The DSM-120 supports 64-bit and 128-bit keys.

Netmask: Commonly referred to as subnet mask, this is used to determine what subnet an IP address belongs to.

RJ-45: RJ-45 is the standard connector for Ethernet cabling. It looks like a phone cable connector, but is slightly larger. RJ-45 connectors have 8 pins, 4 of which are used for transmitting and receiving data.

SSID (Service Set Identifier): The name designated for a specific wireless local area network (WLAN). The SSID can be easily changed to connect to an existing wireless network.

Static IP: A static IP address is configured manually on the device that will be using it. A static IP address remains the same constantly and must be a unique address.

WEP (Wired Equivalent Privacy): A security protocol for wireless local area networks (WLAN) that is designed to provide the same level of security as a wired network. WEP provides security by encrypting the data sent over the WLAN. The DSM-120 supports 64-bit and 128-bit encryption.

Wired: Devices networked via Ethernet cabling.

Wireless: Devices networked using radio frequencies instead of physical cabling.

Music

M3U is a playlist format and is the default playlist format of WinAMP and most other media player software. It allows multiple files to be queued in a program in a specific format.

MP3 is the file extension for MPEG-1, audio layer 3. Layer 3 is one of three coding schemes (layer 1, layer 2 and layer 3) for the compression of audio signals. Layer 3 removes the redundant and irrelevant parts of a sound signal, which the human ear does not hear. It uses Modified Discrete Cosine Transform to implement a filter bank, increasing the frequency resolution 18 times higher than that of layer 2.

PLS is a proprietary playlist format used for playing Shoutcast and other audio streams.

WMA is short for Windows Media Audio and is an audio format that was created by Microsoft. It is similar to MP3, although WMA can compress at a higher rate than MP3.

Technical Support

Technical Support

You can find software updates and user documentation on the D-Link website.

D-Link provides free technical support for customers within the United States and within Canada for the duration of the warranty period on this product.

U.S. and Canadian customers can contact D-Link Technical Support through our website, or by phone.

Tech Support for customers within the United States:

D-Link Technical Support over the Telephone:
(877) 453-5465
24 hours a day, seven days a week.

D-Link Technical Support over the Internet:
http://support.dlink.com
e-mail:support@dlink.com

Tech Support for customers within Canada:

D-Link Technical Support over the Telephone:
(800) 361-5265
Monday to Friday 7:30am to 9:00pm EST

D-Link Technical Support over the Internet:
http://support.dlink.ca
e-mail:support@dlink.ca

Warranty

Subject to the terms and conditions set forth herein, D-Link Systems, Inc. ("D-Link") provides this Limited Warranty:

· Only to the person or entity that originally purchased the product from D-Link or its authorized reseller or distributor, and

· Only for products purchased and delivered within the fifty states of the United States, the District of Columbia, U.S. Possessions or Protectorates, U.S. Military Installations, or addresses with an APO or FPO.

Limited Warranty: D-Link warrants that the hardware portion of the D-Link product described below ("Hardware") will be free from material defects in workmanship and materials under normal use from the date of original retail purchase of the product, for the period set forth below ("Warranty Period"), except as otherwise stated herein.

· Hardware (excluding power supplies and fans): One (1) year

· Power supplies and fans: One (1) year

· Spare parts and spare kits: Ninety (90) days

The customer's sole and exclusive remedy and the entire liability of D-Link and its suppliers under this Limited Warranty will be, at D-Link's option, to repair or replace the defective Hardware during the Warranty Period at no charge to the original owner or to refund the actual purchase price paid. Any repair or replacement will be rendered by D-Link at an Authorized D-Link Service Office. The replacement hardware need not be new or have an identical make, model or part. D-Link may, at its option, replace the defective Hardware or any part thereof with any reconditioned product that D-Link reasonably determines is substantially equivalent (or superior) in all material respects to the defective Hardware. Repaired or replacement hardware will be warranted for the remainder of the original Warranty Period or ninety (90) days, whichever is longer, and is subject to the same limitations and exclusions. If a material defect is incapable of correction, or if D-Link determines that it is not practical to repair or replace the defective Hardware, the actual price paid by the original purchaser for the defective Hardware will be refunded by D-Link upon return to D-Link of the defective Hardware. All Hardware or part thereof that is replaced by D-Link, or for which the purchase price is refunded, shall become the property of D-Link upon replacement or refund.

Limited Software Warranty: D-Link warrants that the software portion of the product ("Software") will substantially conform to D-Link's then current functional specifications for the Software, as set forth in the applicable documentation, from the date of original retail purchase of the Software for a period of ninety (90) days ("Software Warranty Period"), provided that the Software is properly installed on approved hardware and operated as contemplated in its documentation. D-Link further warrants that, during the Software Warranty Period, the magnetic media on which D-Link delivers the Software will be free of physical defects. The customer's sole and exclusive remedy and the entire liability of D-Link and its suppliers under this Limited Warranty will be, at D-Link's option, to replace the non-conforming Software (or defective media) with software that substantially conforms to D-Link's functional specifications for the Software or to refund the portion of the actual purchase price paid that is attributable to the Software. Except as otherwise agreed by D-Link in writing, the replacement Software is provided only to the original licensee, and is subject to the terms and conditions of the license granted by D-Link for the Software. Replacement Software will be warranted for the remainder of the original Warranty Period and is subject to the same limitations and exclusions. If a material non-conformance is incapable of correction, or if D-Link determines in its sole discretion that it is not practical to replace the non-conforming Software, the price paid by the original licensee for the non-conforming Software will be refunded by D-Link; provided that the non-conforming Software (and all copies thereof) is first returned to D-Link. The license granted respecting any Software for which a refund is given automatically terminates.

Non-Applicability of Warranty: The Limited Warranty provided hereunder for Hardware and Software portions of D-Link's products will not be applied to and does not cover any refurbished product and any product purchased through the inventory clearance or liquidation sale or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product and in that case, the product is being sold "As-Is" without any warranty whatsoever including, without limitation, the Limited Warranty as described herein, notwithstanding anything stated herein to the contrary.

Submitting A Claim: The customer shall return the product to the original purchase point based on its return policy. In case the return policy period has expired and the product is within warranty, the customer shall submit a claim to D-Link as outlined below:

· The customer must submit with the product as part of the claim a written description of the Hardware defect or Software nonconformance in sufficient detail to allow D-Link to confirm the same, along with proof of purchase of the product (such as a copy of the dated purchase invoice for the product) if the product is not registered.

· The customer must obtain a Case ID Number from D-Link Technical Support at 1-877-453-5465, who will attempt to assist the customer in resolving any suspected defects with the product. If the product is considered defective, the customer must obtain a Return Material Authorization ("RMA") number by completing the RMA form and entering the assigned Case ID Number at https://rma.dlink.com/.

· After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package. Do not include any manuals or accessories in the shipping package. D-Link will only replace the defective portion of the product and will not ship back any accessories.

· The customer is responsible for all in-bound shipping charges to D-Link. No Cash on Delivery ("COD") is allowed. Products sent COD will either be rejected by D-Link or become the property of D-Link. Products shall be fully insured by the customer and shipped to D-Link Systems, Inc., 17595 Mt. Herrmann, Fountain Valley, CA 92708. D-Link will not be held responsible for any packages that are lost in transit to D-Link. The repaired or replaced packages will be shipped to the customer via UPS Ground or any common carrier selected by D-Link. Return shipping charges shall be prepaid by D-Link if you use an address in the United States, otherwise we will ship the product to you freight collect. Expedited shipping is available upon request and provided shipping charges are prepaid by the customer.

D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link's reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming.

What Is Not Covered: The Limited Warranty provided herein by D-Link does not cover: Products that, in D-Link's judgment, have been subjected to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty installation, lack of reasonable care, repair or service in any way that is not contemplated in the documentation for the product, or if the model or serial number has been altered, tampered with, defaced or removed; Initial installation, installation and removal of the product for repair, and shipping costs; Operational adjustments covered in the operating manual for the product, and normal maintenance; Damage that occurs in shipment, due to act of God, failures due to power surge, and cosmetic damage; Any hardware, software, firmware or other products or services provided by anyone other than D-Link; and Products that have been purchased from inventory clearance or liquidation sales or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product. While necessary maintenance or repairs on your Product can be performed by any company, we recommend that you use only an Authorized D-Link Service Office. Improper or incorrectly performed maintenance or repair voids this Limited Warranty.

Disclaimer of Other Warranties: EXCEPT FOR THE LIMITED WARRANTY SPECIFIED HEREIN, THE PRODUCT IS PROVIDED "AS-IS" WITHOUT ANY WARRANTY OF ANY KIND WHATSOEVER INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT. IF ANY IMPLIED WARRANTY CANNOT BE DISCLAIMED IN ANY TERRITORY WHERE A PRODUCT IS SOLD, THE DURATION OF SUCH IMPLIED WARRANTY SHALL BE LIMITED TO THE DURATION OF THE APPLICABLE WARRANTY PERIOD SET FORTH ABOVE. EXCEPT AS EXPRESSLY COVERED UNDER THE LIMITED WARRANTY PROVIDED HEREIN, THE ENTIRE RISK AS TO THE QUALITY, SELECTION AND PERFORMANCE OF THE PRODUCT IS WITH THE PURCHASER OF THE PRODUCT.

Limitation of Liability: TO THE MAXIMUM EXTENT PERMITTED BY LAW, D-LINK IS NOT LIABLE UNDER ANY CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHER LEGAL OR EQUITABLE THEORY FOR ANY LOSS OF USE OF THE PRODUCT, INCONVENIENCE OR DAMAGES OF ANY CHARACTER, WHETHER DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL (INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF GOODWILL, LOSS OF REVENUE OR PROFIT, WORK STOPPAGE, COMPUTER FAILURE OR MALFUNCTION, FAILURE OF OTHER EQUIPMENT OR COMPUTER PROGRAMS TO WHICH D-LINK'S PRODUCT IS CONNECTED WITH, LOSS OF INFORMATION OR DATA CONTAINED IN, STORED ON, OR INTEGRATED WITH ANY PRODUCT RETURNED TO D-LINK FOR WARRANTY SERVICE) RESULTING FROM THE USE OF THE PRODUCT, RELATING TO WARRANTY SERVICE, OR ARISING OUT OF ANY BREACH OF THIS LIMITED WARRANTY, EVEN IF D-LINK HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE SOLE REMEDY FOR A BREACH OF THE FOREGOING LIMITED WARRANTY IS REPAIR, REPLACEMENT OR REFUND OF THE DEFECTIVE OR NON-CONFORMING PRODUCT. THE MAXIMUM LIABILITY OF D-LINK UNDER THIS WARRANTY IS LIMITED TO THE PURCHASE PRICE OF THE PRODUCT COVERED BY THE WARRANTY. THE FOREGOING EXPRESS WRITTEN WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ANY OTHER WARRANTIES OR REMEDIES, EXPRESS, IMPLIED OR STATUTORY.

Governing Law: This Limited Warranty shall be governed by the laws of the State of California. Some states do not allow exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the foregoing limitations and exclusions may not apply. This Limited Warranty provides specific legal rights and you may also have other rights which vary from state to state.

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CE Mark Warning: This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

FCC Statement: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
·   Reorient or relocate the receiving antenna.
·   Increase the separation between the equipment and receiver.
·   Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
·   Consult the dealer or an experienced radio/TV technician for help.

For detailed warranty information applicable to products purchased outside the United States, please contact the corresponding local D-Link office.

Registration

Register your product online at:
http://support.dlink.com/register

Product registration is entirely voluntary and failure to complete or return this form will not diminish your warranty rights.

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