meDIALOUNGE™
Entertainment Network

D-Link® DSM-320RD
Wireless Media Player with DVD and Card Reader

Manual
v.1.0

D-Link®
Building Networks for People

playsforsure
Windows Media®
Audio™

Patent Pending

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!
THIS PRODUCT UTILIZES A LASER. USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE. DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL. VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCK DEFEATED. DO NOT STARE INTO BEAM. THE BEAN IS LOCATED INSIDE NEAR THE DECK MECHANISM.

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

WARNING!
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.

Safety (continued)

> **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 Installation 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-supply 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.**

6

Safety (continued)

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 condition: (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-320RD Wireless Media Player with DVD and Card Reader_**. The DSM-320RD integrates home computer systems and home entertainment centers. Movies, music, and photos can be enjoyed from the comfort of the living room. The DSM-320RD connects easily to a wired or wireless network. The DSM-320RD 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 AV jacks on the back panel of the DSM-320RD allow for direct connection to your television. Use the included remote control to access media content stored on your PC. Browse music files, watch videos, and display photos, all on your television! In addition, the DSM-320RD lets you access online media content on your television through an existing broadband Internet connection.

The DSM-320RD features a Progressive Scan DVD player that allows you to enjoy your favorite DVDs with superior picture quality. In addition to DVDs, this DVD Player will also play SVCD, CD-R, CD-RW, CD, DVD-R, DVD-RW, and MP3 discs.

The DSM-320RD also features a built-in 5-in-1 card reader, which provides a fast and convenient way to view and share digital photos, music, and videos stored on a memory card. Insert the memory card into the card reader and your media content becomes just a click away. Popular memory cards, including SD, Memory Stick, MultiMediaCard, and Compact Flash (Type I and II) are supported.

With support for Windows® Connect Now (WCN), configuring the wireless settings is easier than ever before. WCN allows you to run the Wireless Network Setup Wizard from Windows XP and transfer the wireless settings to the DSM-320RD using a USB thumbdrive.

The DSM-320RD adheres to the Universal Plug-&-Play AV specification and allows it to communicate with other UPnP AV media devices. The DSM-320RD is part of Microsoft's PlaysforSure logo program that ensures the compatibility of the device with Windows Media Protected Audio files.

The DSM-320RD supports the majority of audio, video, and image file formats and streams them directly from your PC. You can stream MP3, WMA, WAV, OGG

8

Introduction (continued)

Vorbis, and AIFF files from your computer and enjoy them on your home stereo system. Watch stored videos in MPEG1/2/4, AVI, or Xvid format on your television. Enjoy slideshows of your favorite photos in JPEG, JPEG2000, TIFF, GIF, BMP or PNG formats. Better yet, it's easy to access the files through the television interface using the remote control included with the DSM-320RD.

Experience digital media like never before with the MediaLounge DSM-320RD Wireless Media Player. The DSM-320RD includes everything you need to instantly access and play music, videos, and photos using your home entertainment center.

Package Contents

- **D-Link DSM-320RD Wireless Media Player with DVD and Card Reader**
- Printed Quick Installation Guide
- CD-ROM with Manual (Contains D-Link Media Server Software, Quick Installation Guide, and Manual)
- 2dBi Wireless Antenna
- Ethernet (CAT5-UTP/Straight-Through) Cable
- Standard Composite RCA Audio/Video Cable
- S-Video Cable
- Remote Control with Batteries

System Requirements

- Television with composite, S-Video, or component video inputs and an audio device with composite, coaxial digital or optical digital audio inputs.
- A wireless (802.11g or 802.11b) or Ethernet network.
- Minimum to run the Media Server software: PC with 500MHz processor, 128MB RAM and 20MB of hard disk space.
- Windows XP/2000.
- A CD-ROM drive.

Features & Benefits

- Stream media content from a PC or D-Link Central Home Drive to your entertainment center.

- Listen to digital music on your stereo system.

- View digital photos, slideshows, and videos on TV.

- Progressive Scan DVD player provides superior picture quality.

- Built-in 5-in-1 card reader provides instant access to music, photos, and Videos on Memory Cards.

- Support for Windows® Connect Now (WCN) 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.

- PlaysForSure™ Audio logo certified. WMDRM content can be streamed to the unit using Windows® Media Connect software.

- Support for most popular digital media formats.

- Remote controlled TV interface for quick access to your media content.

- Sleek design complements your existing audio/video equipment.

- Optical and coaxial digital audio output.

- Component video output.

- 64- or 128-bit WEP security and WPA-PSK support.

- Convenient one-touch access to preset music.

- Supports DHCP for easy connection to your home network.

- Color coded one-touch shortcut buttons on the remote, for quick access to music, photos, videos, DVDs, memory cards and online media content.

- Built-in screensaver.

- Easy setup wizard.

11

Hardware Overview

Front Panel

LAN LED - Blinks to indicate activity on the network.

Wireless LED - Blinks to indicate wireless activity.

Power Button

SD, Memory Stick, MultiMediaCard Reader

Pause/Play Button

Compact Flash Reader

Eject Button

Stop Button

Previous Button

Next Button

Rear Panel

Antenna Connector

Composite Video Connector

Optical Digital Audio Connector

Composite Audio Connectors

Windows® Connect Now USB Port

Reset Button

S-Video Connector

RJ-45 Ethernet Connector

Coaxial Digital Audio Connector

Component Video Connectors[1]

[1]For European customers, a SCART interface will replace the Component Video Connectors.

12

Getting Started

To begin using the DSM-320RD Wireless Media 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-320RD Media Server software installed on the PC you will be sharing files from. This computer will collect music, photo and video content from local sources (a digital camera for example) and from the Internet (downloaded MP3 music, digital photos, or video files).

- The DSM-320RD Wireless Media Player connected to your television and audio system.

Using the Remote Control

The remote control is used to configure and control the DSM-320RD.

Information for the Setup Wizard is entered by using the remote control. The remote is used to enter numbers, letters, special characters and to make selections from an on-screen keyboard. The on-screen keyboard is activated by pressing **Enter** on the remote control whenever the on-screen cursor is located in a field where text is required.

The following page details the remote control and shows the function of each button.

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

13

Using the Remote Control (continued)

1. Power
2. Eject DVD
3. Numeric Keys
4. "." (period or dot)
5. Clear
6. Setup
7. Display
8. Return
9. Mute
10. Enter
11. Navigation Buttons
12. Page Up & Down
13. Volume + & -
14. Home
15. Color-Coded Shortcut Keys
16. Step
17. Slow Motion
18. Play/Pause
19. Fast Forward
20. Previous
21. Rewind
22. Next
23. Stop
24. Zoom
25. Rotate
26. Angle
27. Search
28. Menu
29. Subtitle
30. Title
31. Repeat
32. Language
33. Shuffle
34. A-B Video Replay
35. Progressive/Interlaced
36. Audio Out
37. Left/Right Audio Channel
38. Video Out

14

Using the Remote Control (continued)

Power	Turn the DSM-320RD **ON** or **OFF.**
Eject	Open and close the DVD tray.
Number Keys	Enter numbers where needed, or use the onscreen keyboard to input text. Number keys 1-9 can be defined as **Music presets.** To define a preset, highlight the desired music selection onscreen, and press down on the desired number (from 1-9) on the remote control until the preset icon appears. Press the assigned number to play the selection.
"."	(a period, also known as a dot.)
Clear	Delete text.
Return	Return to the previous page.
Setup	Access the Setup Menu.
Display	Display information about a file. For instance, view the type of photo and the name, date and other information about the photo.
Mute	Turn OFF the audio.
Page Up/Down	Press Up to scroll up a page, and press Down to scroll down.
Arrow keys	Move the onscreen cursor, navigate through media file names, and use for primary navigation through the interface. Right is forward, left is back.
Enter	Make a selection.
Volume +	Increase the volume.
Volume -	Decrease the volume.
Home	Navigate to the DSM-320RD's home screen.
Music	Access the Music mode.
Photo	Access the Photo mode.
Video	Access the Video mode.
DVD	Access the DVD mode.
Memory Card	Access the Memory Card mode.
Online Media	Access the Online Media mode.
Slow Motion	Play video in slow motion in DVD.
Step	Pauses video and advances the video by one frame in DVD.
Play Functions	While viewing and listening to your media, you can use these keys to **Stop**, **Play/Pause**, **Rewind**, **Fast Forward**, go back (**Prev**), or go to the next item (**Next**).
Rotate	Rotate the photo.

Using the Remote Control (continued)

Search	Enter the Search function to find your media file on your PC or search video timeframe.
Zoom	Zoom in/out on the photo or video.
Menu	Access the current menu.
Title	Displays the DVD's title.
Subtitle	Displays DVD subtitles.
Angle	If the DVD has multiple angle support, you can toggle between different camera angles.
Repeat	Repeat the current Music, Video, Photo Slideshow, DVD, CD, or VCD selection.
Shuffle	Shuffle music tracks in a playlist or photos during a slideshow.
A-B	Select a start point (A) and an end point (B) of video to replay.
Language	Select the audio language in DVD.
PS/IS	Toggle between Progressive Scan and Interlaced Scan.
L/R	Toggle between Left or Right audio channels.
Video Out	Used to select different video output. Default is composite/S-Video.
Audio Out	Used to select different audio output. Default is composite.

Installing the D-Link® Media Server Software

To share audio, video, and photo 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, video, and photo files you want to share. The D-Link® Media Server software then streams the information to your DSM-320RD via your wired/wireless network connection.

Currently the DSM-320RD 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.

17

Installing the D-Link® Media Server Software (continued)

Click on **D-Link Media Server Installer**

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

The D-Link Media Server Setup Wizard will appear.

Click Next

18
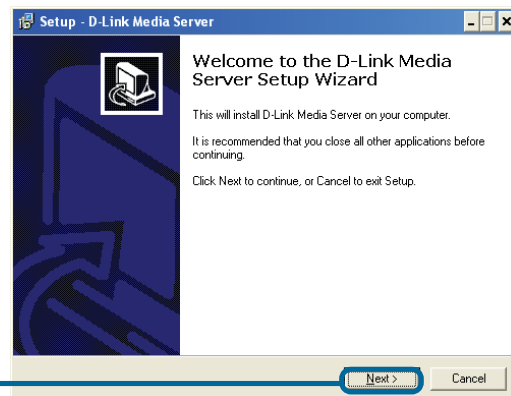
Installing the D-Link® Media Server Software (continued)

The D-Link license agreement screen appears.

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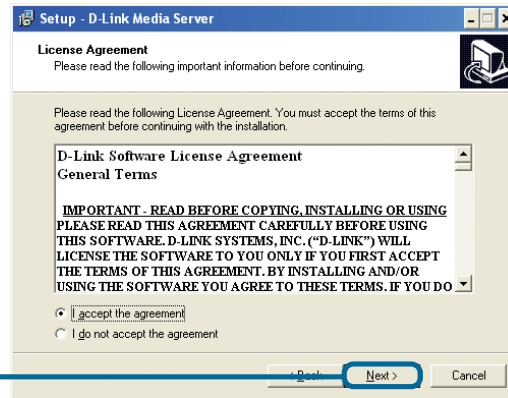
Choose a Destination location or accept the default location. This is where the D-Link Media Server software will be copied to on your system.

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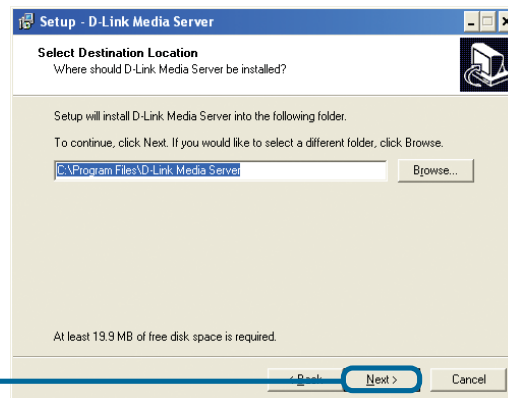
Choose a Start Menu folder or accept the default location.

Click Next

19
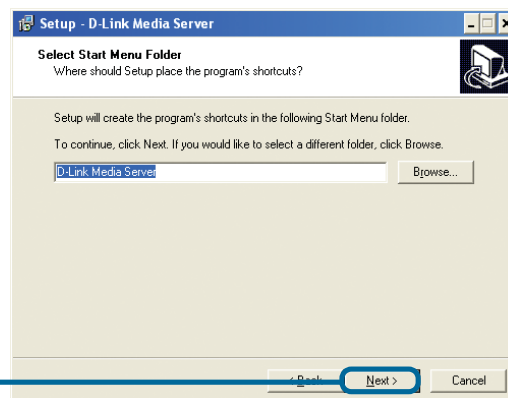
Installing the D-Link® Media Server Software (continued)

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 Install
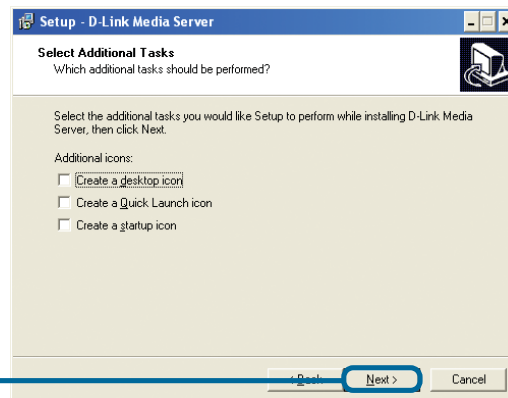
The necessary software will be copied to the specified locations on your computer.
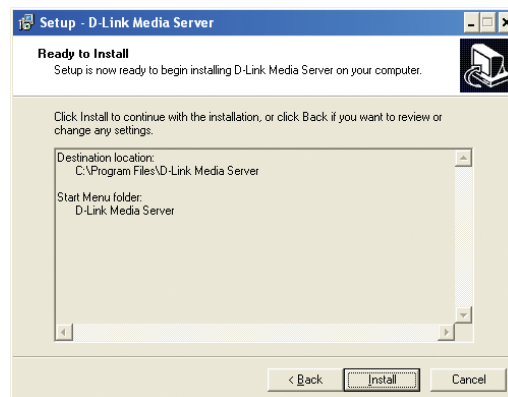
Check Launch D-Link Media Server

Click Finish

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

20

Choosing Music, Photo, and Video Files to Share

The D-Link® Media Server software enables you to share the files from your computer with the DSM-320RD. 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-320RD. Follow the steps on the following pages to choose the music, photo, and video files to share.

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

D-Link Media Server desktop icon

D-Link Media Server Quick Launch icon
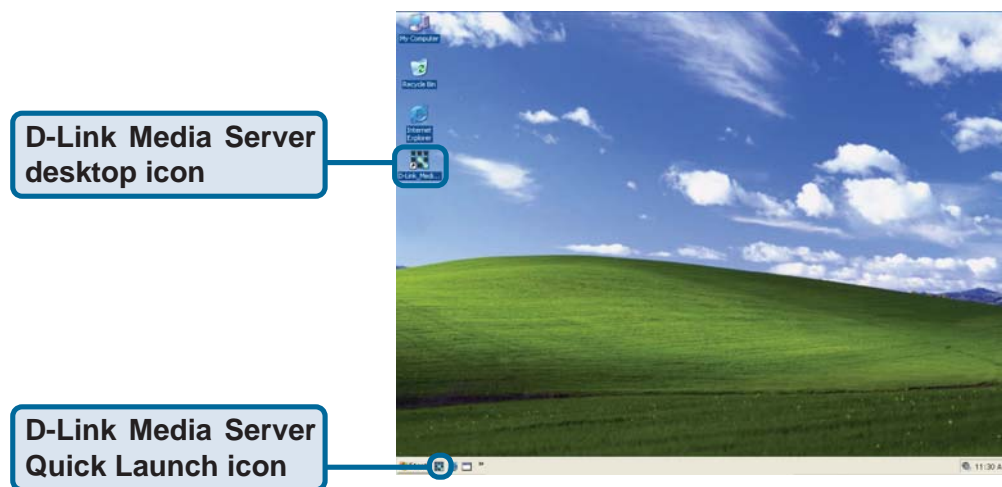
If you chose not to create a desktop or Quick Launch icon during the software installation, then you can launch the application by going to your Start Menu, selecting All Programs, and then clicking on D-Link Media Server icon within the D-Link Media Server folder.

21
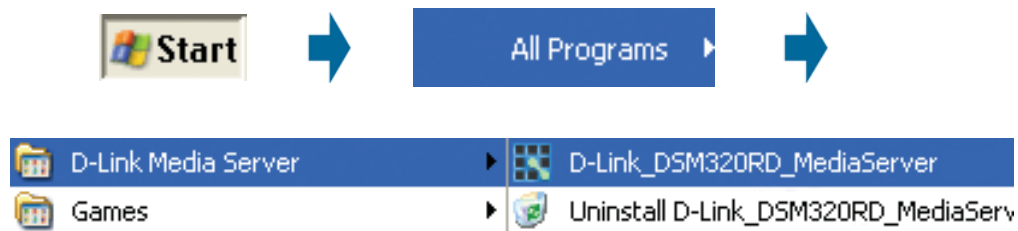
Choosing Music, Photo, and Video Files to Share (continued)

The **File Types** tab is where you select the types of audio, video, and photo files that you want to share.
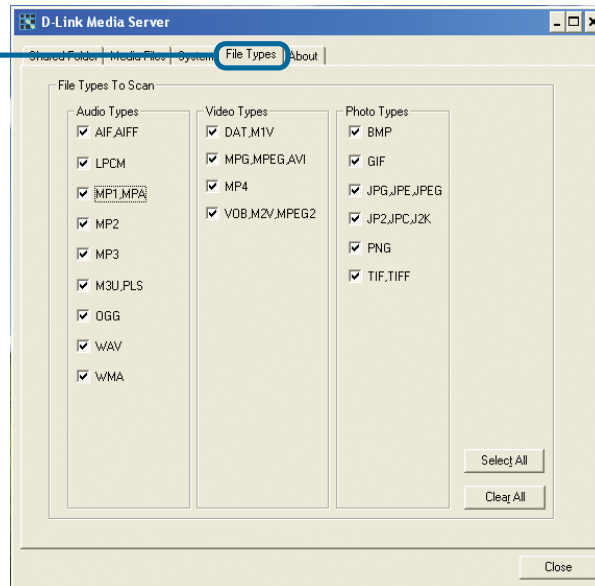
The **Shared Folder** tab is where you select the folders that contain your audio, video, and photo files.

Click Add a folder

22
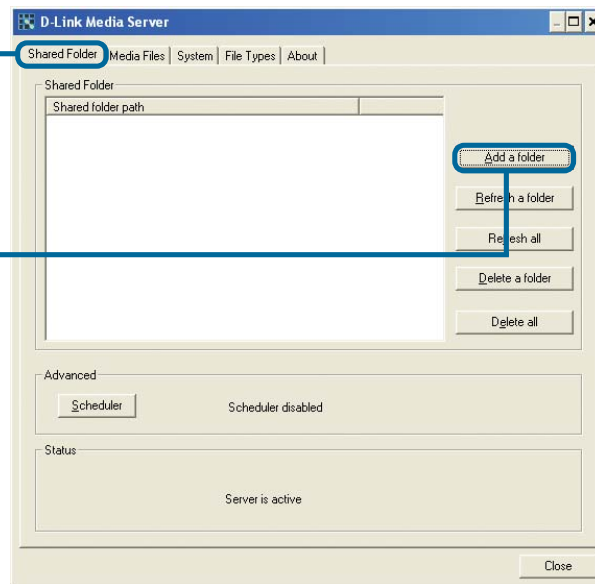
Choosing Music, Photo, and Video Files to Share (continued)

Select the folder containing the files you wish to share.

Click OK
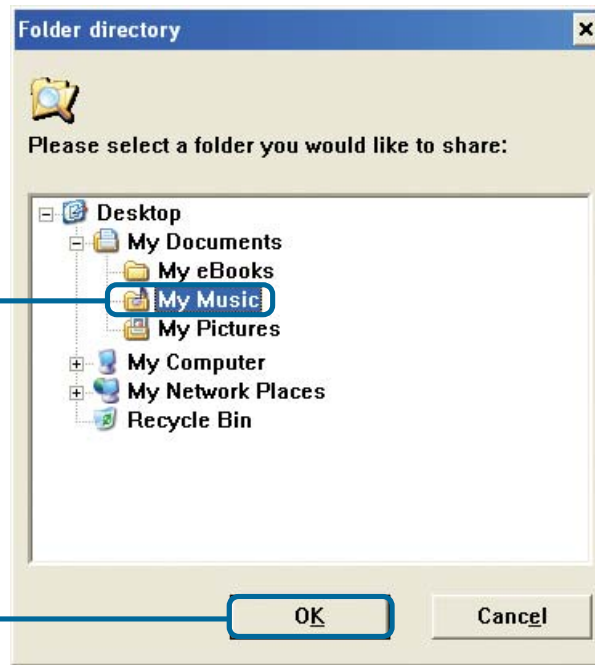
Repeat the steps until all of the folders containing audio, video, and photos you want to share have been added.

23
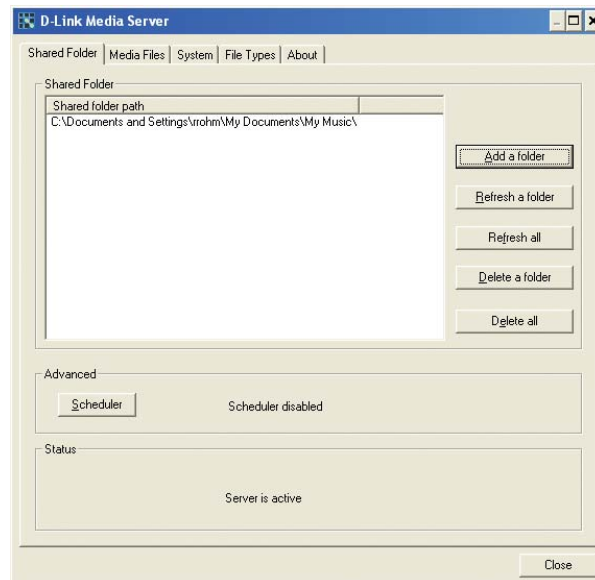
Choosing Music, Photo, and Video Files to Share (continued)

The **Media Files** tab will show all your audio, video, and photo files as well as display important file information.
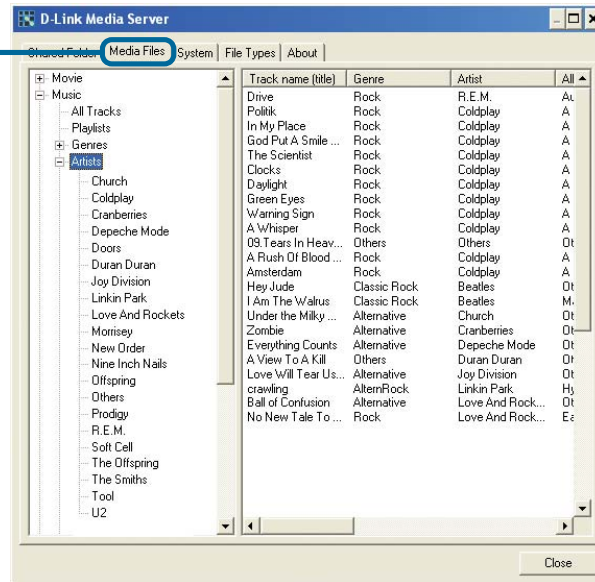
The D-Link® Media Server software configuration is complete!

24

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 17). Simply install the included software on each PC where music, video, or digital photos are stored.

If you selected the option to **Create a startup icon** during the Media Server software installation (See Page 20), 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-320RD System Tray Icon

25

Using the D-Link Media Server Software (continued)

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, photos, and videos are 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.
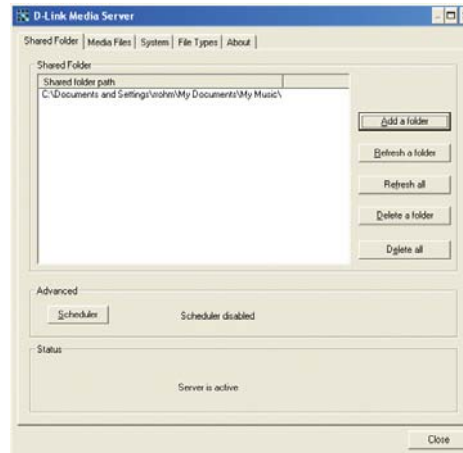
Refreshing Folder Contents

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-320RD 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.

26
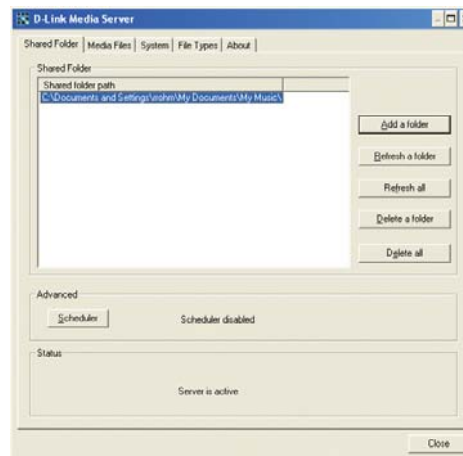
Using the D-Link Media Server Software (continued)

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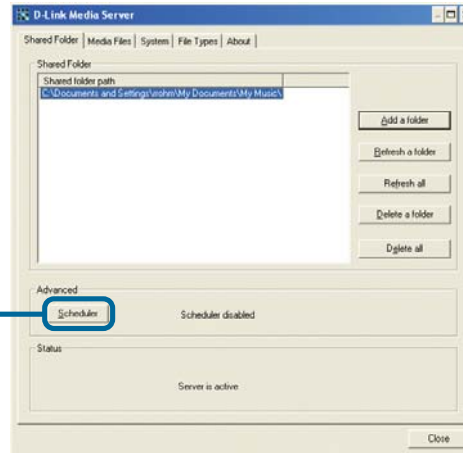
Click **Time** and select a time period. This is how often the server will refresh the folder contents.
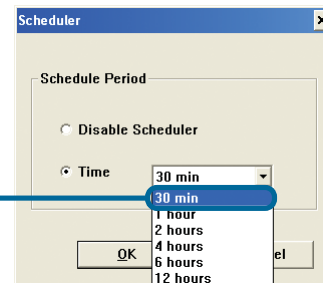
Naming the Media Server

The Media Server name is entered here. This is the server name that is displayed when searching for available media servers in the DSM-320RD interface.

27
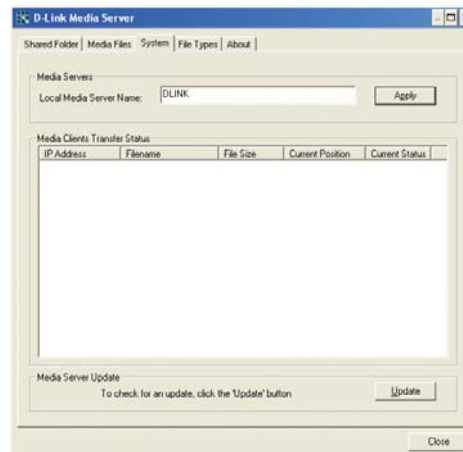
Using the D-Link Media Server Software (continued)

Stopping the D-Link Media Server

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

Note: The photo, video, and music files stored on your computer will be available to your DSM-320RD only if the D-Link® Media Server is running. Online media content that does not require PC-based software (such as Radio@AOL and Live365) can still be accessed from the DSM-320RD 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-320RD 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-320RD to the list of devices that interact with Windows Media Connect.

Click **Add**

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

Click **OK**

29

Using Windows® Media Connect Software (continued)

The **Sharing** tab is where you configure the folders that you want to share with your DSM-320RD.

Click **Add**
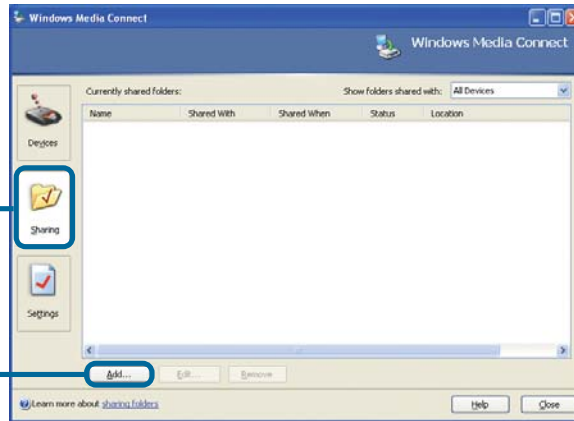
Click **Browse**
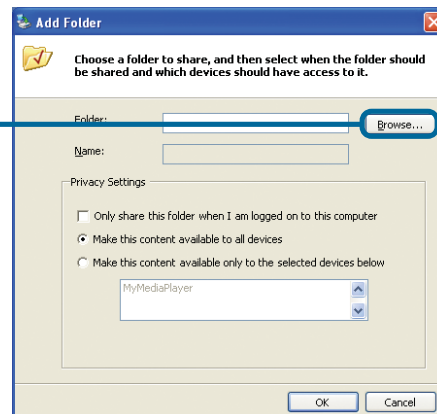
Select the folder that you want to share

Click **OK**

30

Using Windows® Media Connect Software (continued)

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

Click **OK**
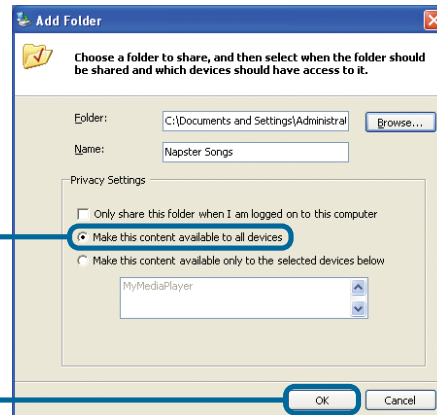
The Shared Folders will appear in the window. Repeat the steps until you've shared all of the folders that you want the DSM-320RD to access.
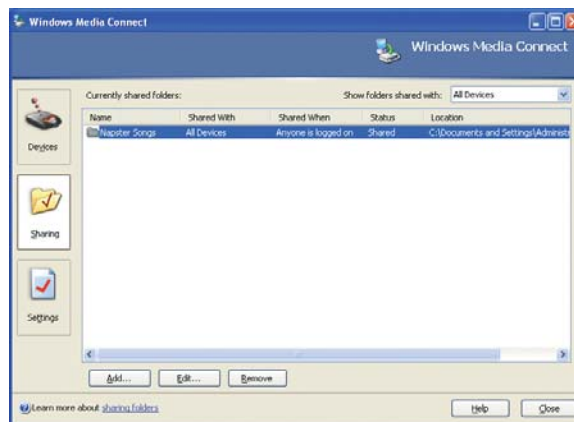
Click **Automatically start folder sharing when Windows starts**

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

Click **Close**

31
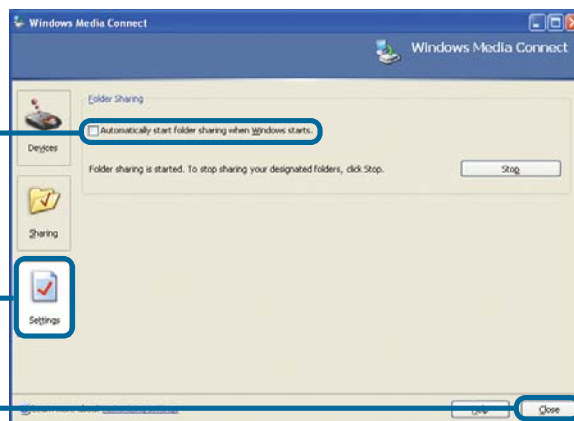
Using Windows® Media Connect Software (continued)

The DSM-320RD 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-320RD.

File Type	File Extension	Details
Audio		
Windows Media Audio	.wma	Does not support WMA lossless, WMA Pro
WAV	.wav	
MP3	.mp3	Up to 192kbps
Photo		
JPEG	.jpg	Does not support CMYK or YCCK
GIF	.gif	Does not support animated gifs
BMP	.bmp	non-compressed
TIFF	.tif	Does not support CMTK, YMC, YMCK, or KCMY
PNG	.png	Non-alpha channel only
Video		
Audio Video Interleaved	.avi	MPEG4 layer only, does not support uncompressed AVI
MPEG-1	.mp1, mpeg, or .mpg	Up to 8Mbps
MPEG-2	.mp1, mpeg, or .mpg	Up to 8Mbps
Playlists		
M3U	.m3u	

Note: Windows® Media Connect currently does not support Fast Forward and Rewind with protected files.

Be sure to select the Windows® Media Connect server as the default server in the DSM-320RD System Setup if you want to access the Windows® Media Connect software. To do so, press the **SETUP** button on the remote control. Navigate to System by using the **down arrow** and then press **ENTER**. Navigate to View All Servers using the down arrow and press **ENTER** to view a list of available servers.

32

Connecting the DSM-320RD

All audio, video, and networking connections are located on the rear panel of the DSM-320RD.

Video Connections

Select one of three ways to connect video to your DSM-320RD:

• Composite Video Connector

Plug the supplied yellow video cable into the DSM-320RD and the matching opposite end of the cable to your television input.

• S-Video Connector

Plug the supplied S-Video cable into the S-Video connector and the opposite end into the S-Video connector on your television.

• Component Connectors

Match the color coded cables to the matching connectors on the DSM-320RD and into the component video input of your television.

Note: This cable is not supplied.
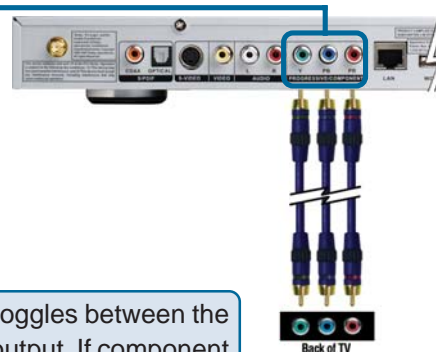
The **VIDEO OUT** button on the remote control toggles between the composite/S-Video output and the component output. If component connectors are used but not selected, the screen will be tinted blue.

Connecting the DSM-320RD (continued)
Audio Connections

The **AUDIO OUT** button on the remote control toggles between the composite audio output and the digital audio output (optical/coaxial).

• Composite Audio

Plug the supplied red and white connectors into the color-coded matching jacks on the DSM-320RD.

Plug the opposite ends to the matching jacks on your television or audio/video system.

Back of TV, VCR, or Home Stereo
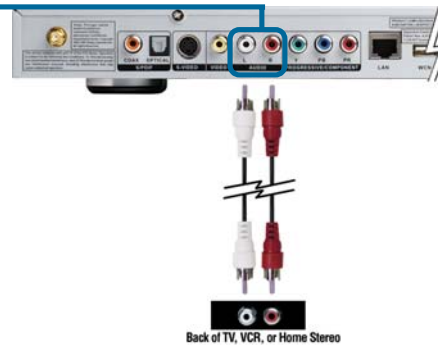
• Optical Digital Audio

Connect an optical audio connector into the DSM-320RD and the matching opposite end of the cable to the audio input of your audio system.

Note: This cable is not supplied.

Home Stereo System

• Coaxial Digital Audio

Connect a coaxial audio connector into the DSM-320RD and the matching opposite end of the cable to the audio input of your audio system.

Note: This cable is not supplied.

Home Stereo System

34

Connecting the DSM-320RD (continued)
Network Connections

Select one of two ways to connect a network to your DSM-320RD:

• RJ-45 Ethernet Connector

Connect the supplied Ethernet cable to the network cable connector, and attach the other end to the network.

• Wireless Antenna

Attach the supplied antenna by threading it onto the antenna connector. Be sure the antenna is secure and in an upright position.

Note: You may have an Ethernet cable plugged into the unit and have the wireless antenna connected. 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 be changed by going to the Setup Menu. To access the Setup Menu, press the SETUP button on the remote control.

Network Layout

Below is a diagram displaying what your network might look like once all of the connections have been made to the D-Link® DSM-320RD Wireless Media Player.

36
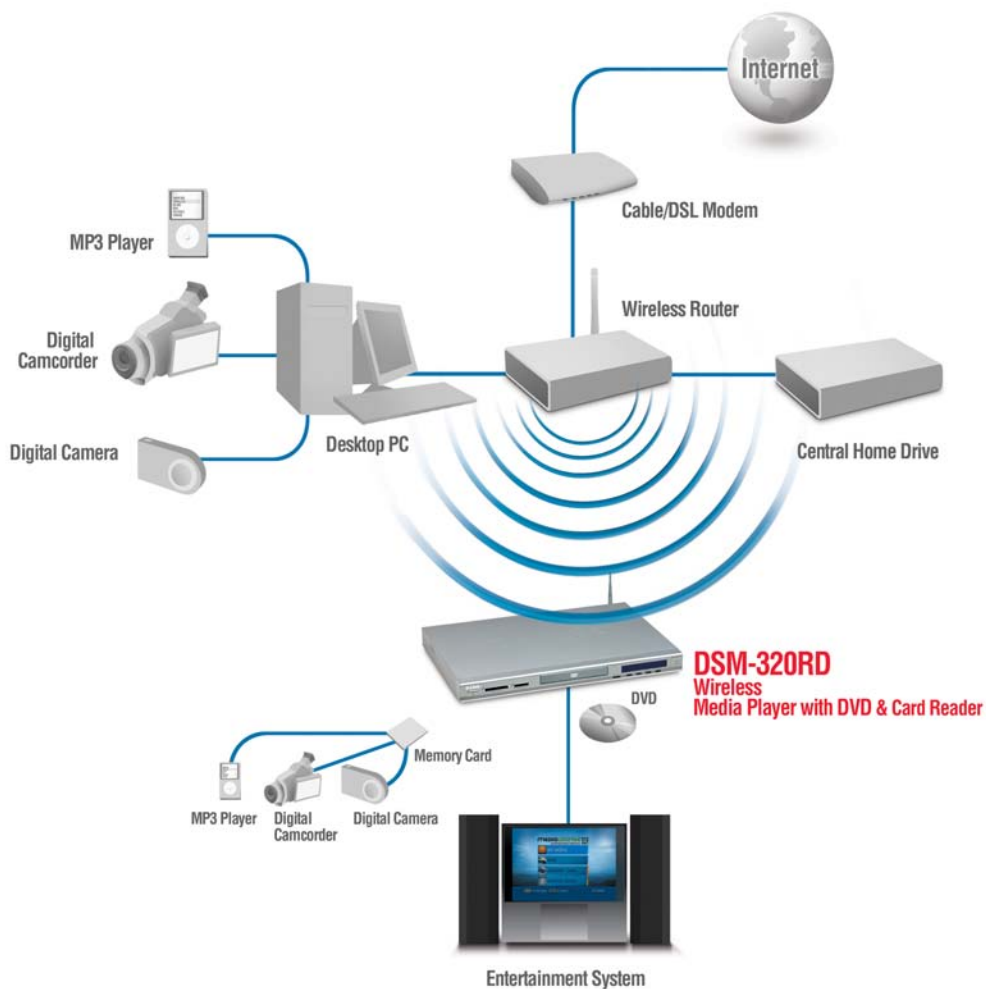
Using the On-Screen Keyboard

Whenever the cursor is in a text field and you need to enter text, press **ENTER** on the remote control and the on-screen keyboard will appear.

The keyboard is used for a variety of functions such as naming your DSM-320RD and performing searches for music, photos or video. To use the keyboard, highlight a character with the **arrow** buttons on the remote control and press the **ENTER** button. Text can also be entered by using numbers 2-9 on the remote, just as you would on a cell phone. Highlight **ENTER** and press **ENTER** when you're finished entering text.

Special Keys

The backspace key will erase the previous character.

The shift key will toggle the keyboard between upper and lower case characters.

The clear key will erase all of the characters that have been entered.

To exit out of the keyboard screen without making any changes, hit the **RETURN** button on the remote control.

37

The DSM-320RD Setup Wizard

The DSM-320RD Setup Wizard is navigated using the **directional 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-320RD displays the Setup Wizard Welcome screen. Press **ENTER** on the remote control to proceed to the next screen.

Personalize your MediaLounge Media Player

If you would like to change the name of the Media Player, press **ENTER** on the Remote Control to display the on-screen keyboard. To proceed to the next page, use the **down arrow** button on the remote control to navigate to the Next button and press **ENTER**.

38
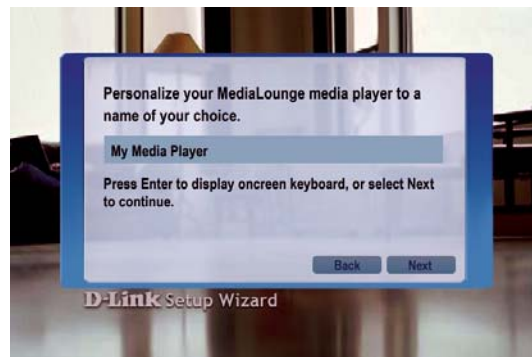
The DSM-320RD Setup Wizard (continued)

Select Your Network Connection

The connection type defaults to Wireless.

Wireless

If using a wireless network, press the **down arrow** on the remote control to navigate to the Next button. Once the Next button is highlighted, press **ENTER** on the remote control to proceed to the next screen.

Wired

To select Wired, press the **ENTER** button on the remote control while the Connection is highlighted. Press the **up arrow** on the remote control to choose Wired. Press **ENTER** again to make the selection and then press the **down arrow** on the remote control to navigate to the Next button. Once the Next button is highlighted, press **ENTER** on the remote control to proceed to the next screen. Skip to the Current Network Settings screen on page 41.

Select the SSID

Select the SSID (network identifier) that is being used by your wireless network. To select an SSID, press **ENTER** on the remote control while the SSID window is highlighted. Use the **up arrow** and **down arrow** buttons on the remote control to navigate through the list. Once you've highlighted the correct SSID, press **ENTER** on the remote control. Press the **down arrow** on the remote control to navigate to the Next button.
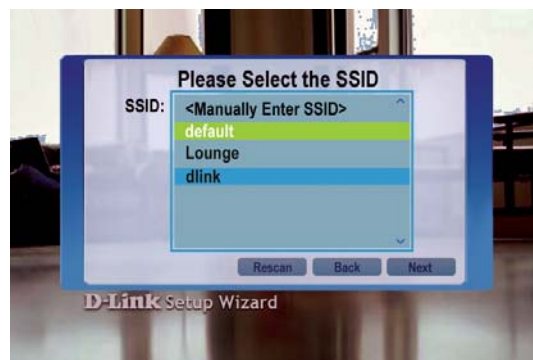
The Rescan button will refresh the list of available networks. Use the **left arrow** and **right arrow** to navigate from the Next button to the Rescan button. If you cannot locate the SSID, select <Manually Enter SSID> and you will be able to enter it on the next screen.

39

The DSM-320RD Setup Wizard (continued)

Current Wireless Settings

Your current wireless settings are displayed based on the SSID you selected in the previous step. If you chose the enter the SSID manually, then the default settings are entered.

SSID

The SSID name selected on the previous screen appears here. You can change the SSID you selected or enter one manually by pressing the **ENTER** button on the remote control with this field highlighted. The on-screen keyboard will be displayed and you can enter the SSID.

Mode

There are two different modes to select from: Ad-Hoc and Infrastructure Mode. Ad-Hoc Mode is used for peer to peer wireless networks that do not contain a router or an access point. Infrastructure Mode is used for networks with an access point or router. To toggle between the two, press the **ENTER** button when Mode is highlighted. The **up arrow** and **down arrow** will toggle between the two options. Press **ENTER** again to select.

Encryption

WEP (Wired Equivalent Privacy) & WPA (WiFi Protected Access; a wireless standard designed to improve upon the security features of WEP), are two encryption technologies used by wireless devices. There are six options configurable under this setting; Disable, 64bits-Hex, 128bits-Hex, 64bits-ASCII, 128bits-ASCII, and WPA-PSK-TKIP.

To toggle between the options, press the **ENTER** button when Encrypt is highlighted. The **up arrow** and **down arrow** will toggle between the six options. Press **ENTER** again to select.

Key Index

Select a number between 1 and 4. To toggle between the options, press the **ENTER** button when Key Index is highlighted. The **up arrow** and **down arrow** will toggle between the four options. Press **ENTER** again to select.

Key

To connect to an encrypted wireless device, the key you enter here must match the key of the device exactly.

40

The DSM-320RD Setup Wizard (continued)

Key (continued)

Press the **ENTER** button on the remote control with this field highlighted to enter a key. The on-screen keyboard will be displayed and you can enter the key. Keys are defined by entering in a string in HEX (hexadecimal - using characters 0-9, A-F) or ASCII (American Standard Code for Information Interchange – alphanumeric characters) format.

Encryption	64-bit		128-bit	
	Character Length	Example	Character Length	Example
HEX	10	12345678FA	26	456FBCDF123400122225271730
ASCII	5	DMODE	13	2002HALOSWIN1

After entering the appropriate wireless settings for your network, use the **down arrow** to navigate to the Next button. Press **ENTER** on the remote control to proceed to the next screen.

Current Network Settings

Your current network settings are displayed and can be modified at this point. DHCP is the default setting. The DHCP option allows your DHCP enabled device to assign the IP configuration to the DSM-320RD.

DHCP

If your network has a DHCP server then press the **down arrow** on the remote control to navigate to the Next button. Once the Next button is highlighted, press **ENTER** on the remote control to proceed to the next screen.

Static

If using a static IP address, press **ENTER** on the remote control with Configuration highlighted. The **up arrow** and **down arrow** toggle between the options. Press **ENTER** to make a selection. The on-screen keyboard or numbers on the remote are used to enter your address settings. Be sure to enter a unique IP address within the same range as the network. After entering the appropriate settings for your network, use the **down arrow** to navigate to the Next button. Press **ENTER** on the remote control to proceed to the next screen.

> *Please see the Glossary for an explanation of DHCP and static IP addresses.*

41

The DSM-320RD Setup Wizard (continued)

Select a Media Server

Select a Media Server from the list by pressing the **ENTER** button on the remote control with the Media Server list highlighted. Use the **up arrow** and **down arrow** to navigate through the list of servers. Press **ENTER** again to select a Media Server. Use the **down arrow** to navigate to the Next button.

Rescan will refresh the list of available Media Servers. Use the **left** and **right arrows** to navigate between the Next and Rescan button.

A Media Server is any PC running the D-Link Media Server software or UPnP AV compliant device on the network that can communicate with the DSM-320RD.

Setup is Complete

Press **ENTER** on the remote control with Done highlighted to complete the setup.

Your MediaLounge™ DSM-320RD is now ready to stream music, photo, and video content for enjoyment on your home entertainment center.
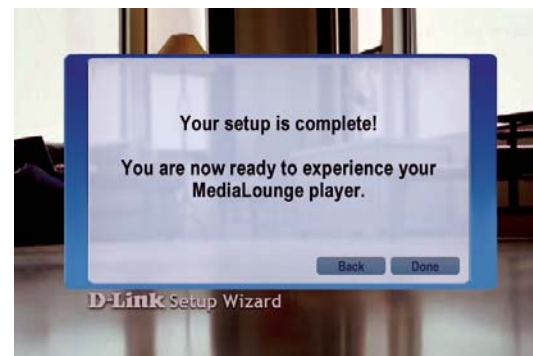
If you do not have a Media Server configured, you are still able to complete the Setup Wizard. This allows you to use the Online Services that do not require a Media Server such as Radio@AOL and Live365.

42

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 (WCN) to configure the wireless settings on your DSM-320RD. Note: WCN is only available on PCs running WindowsXP with Service Pack 2 installed.

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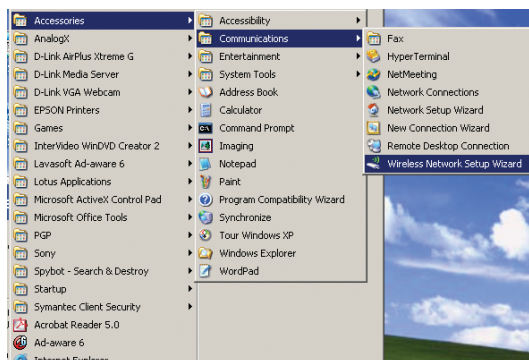
Your system will display the Setup Wizard Welcome screen. Click **Next** to continue.

43

Windows Connect Now Configuration (continued)

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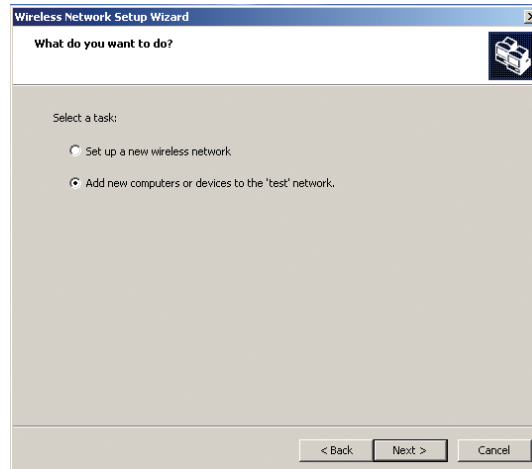
The wizard provides two methods for setting up a wireless network. Using a USB flash drive is recommended. Select to use a USB flash drive to save your wireless network settings and click **Next** to continue.

44
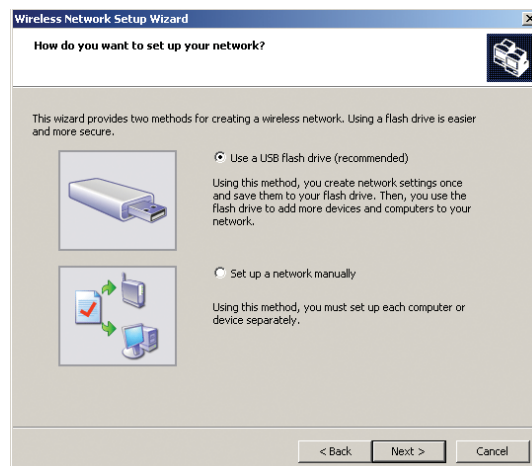
Windows Connect Now Configuration (continued)

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.
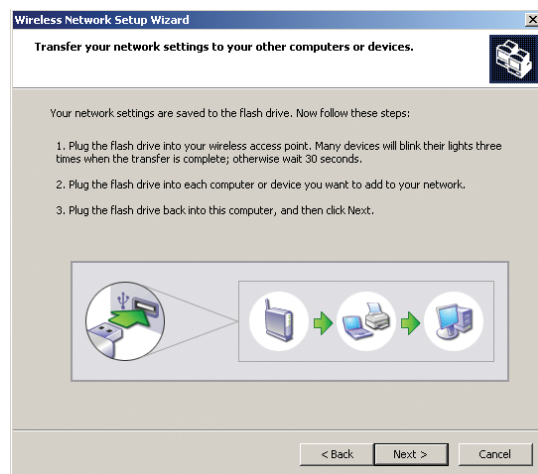
Next, remove the USB Flash Drive from your PC and insert into the USB port on the back panel of the DSM-320RD labeled "WCN."

45

Windows Connect Now Configuration (continued)

The following screen will appear, prompting you to apply your wireless settings. Click **OK** to continue.

> **SSID: M-LoungeWCN**
>
> WCN settings detected. Would you like to apply the settings?
>
> OK   Cancel
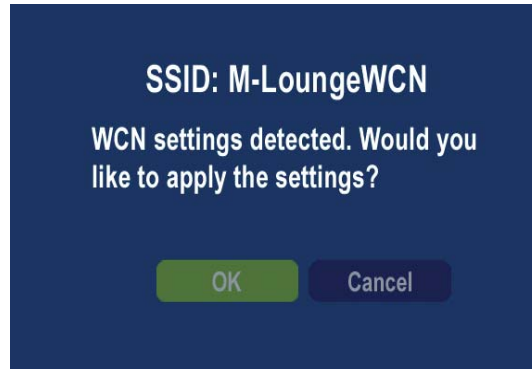
The following screen confirms that your wireless settings have been applied. Click **OK**.

> **SSID: M-LoungeWCN**
>
> The WCN settings have been applied.
> System is restarting.
> Please remove the USB drive.
>
> OK
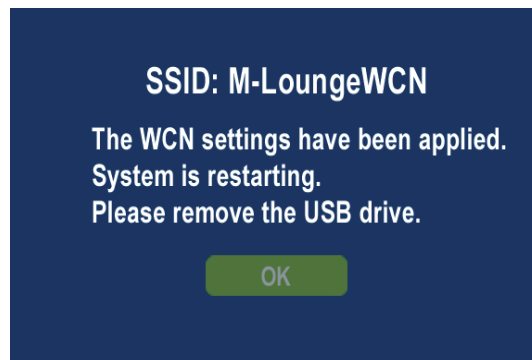
Next, remove the USB Flash Drive from the DSM-320RD and insert it back into the USB port on your PC. Click **Next** to continue.

> **Wireless Network Setup Wizard**
>
> **Transfer your network settings to your other computers or devices.**
>
> Your network settings are saved to the flash drive. Now follow these steps:
>
> 1. Plug the flash drive into your wireless access point. Many devices will blink their lights three times when the transfer is complete; otherwise wait 30 seconds.
>
> 2. Plug the flash drive into each computer or device you want to add to your network.
>
> 3. Plug the flash drive back into this computer, and then click Next.
>
> < Back   Next >   Cancel

46

Windows Connect Now Configuration (continued)

Wireless configuration using WCN is now complete. The setup wizard will display the devices that have been setup with your wireless network. Click **Finish**.

47
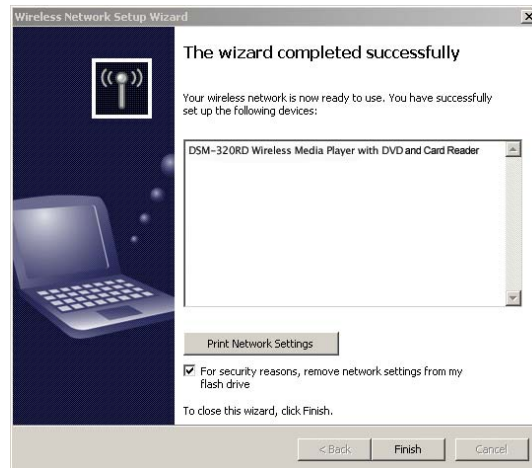
DSM-320RD Menu
Menu Basics

The DSM-320RD uses an on-screen menu interface. As you move through the menus, you will use the **selection arrows** on the remote control to move up, down, right and left. The highlight bar moves from item to item as you press the selection arrows. In some instances you will need to press **ENTER** on the remote control to access the pulldown menu within an item. You will then see an arrow within the highlighted bar. These arrow "hints" help you with menu navigation, and show you the possible paths you may take. For example, a **down arrow** hints that more items are available if you move the highlight bar down. To move to the next menu screen, use the **right arrow**. Similarly, use the **left arrow** to move to the previous screen.

Menu Home

The menu home screen is the top level menu. You will see one of the two home screens shown below. The top screen appears if you have the D-Link Media Server software up and running on your network. The bottom screen appears if you are using third party server software.

From this home screen, you can access MY MEDIA, DVD, MEMORY CARD, or ONLINE MEDIA. To jump directly to the home screen, press the **HOME** button in the center of the remote control.

48
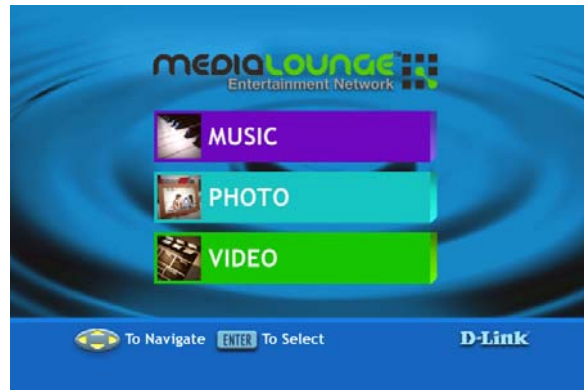
Music

Music Quality

Your music listening experience on the media player depends upon the quality of your digital music files on your PC. 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 192 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.
- **WAV**
  WAV was developed by Microsoft and IBM. WAV sound files end in .wav and are compatible with Windows applications supporting audio.
- **AIFF** (AIFF files must be encoded in PCM format only.)
  AIFF (Audio Interchange File Format) was developed by Apple Computers and is the standard audio format for Macintosh computers. File extensions are .AIF or .IEF.
- **MPEG 1** and **MPEG 2**
  Moving Pictures Experts Group created standards for compressing audio and video. Audio uses the file extension .mp3.
- **OGG Vorbis**
  Open source audio format. Uses the file extension .ogg.

49

Music (continued)

Organizing Music Files

Music files are located on your PC and can be contained in one directory folder, or organized in several subfolders.
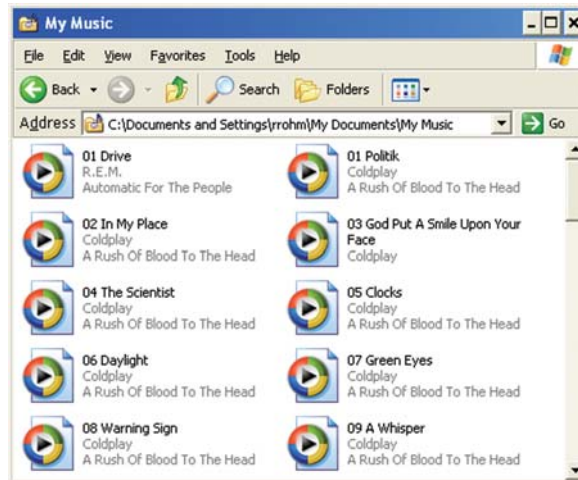
The DSM-320RD automatically organizes your music files by genres, artists, albums, and tracks. This information is obtained from the ID3 tags in each of your music files. The ID3 tag is created for you when you rip (copy) your music from your CD. However, if your music files have incorrect or incomplete tags, the tracks may not appear where they should in your music categories.

50

Music (continued)

Playing a Track

Once you enter the music menu, there are several ways that you can view tracks. You can view all tracks, playlists, tracks by genre, artist, album, or folder name. Use the **selection arrows** to navigate to the track you wish to play. Once you have located the appropriate track, highlight it and press **ENTER** or **PLAY** on the remote control. The track will begin playing on your stereo or television speakers.
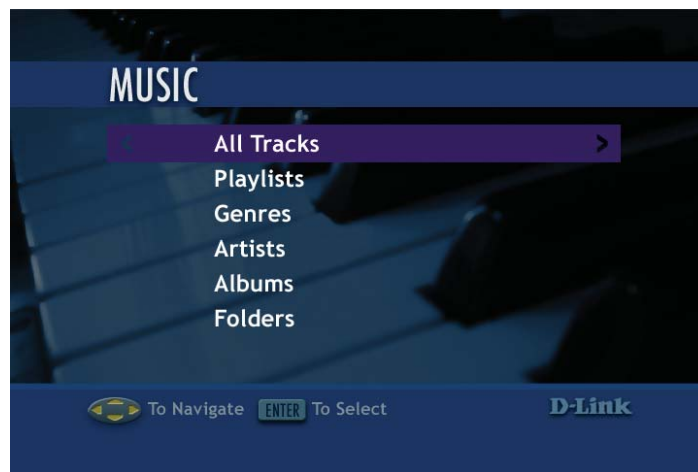
To play a track starting from the main home screen:

1. Select the **MUSIC** category from the Home page or click on the **MUSIC** button on the remote control.

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, Playlists, Genres, Artists, Albums, or Folders). Select the option by clicking **ENTER** or the **right arrow** on the remote control.

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.

4. After the appropriate track is highlighted, press **ENTER** or **PLAY** on the remote control.

51

Music (continued)
Creating a Preset

To create a preset, follow the steps below:

1. Select the **MUSIC** category from the Home page or click on the **MUSIC** button on the remote control.

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, Playlists, Genres, Artists, Albums, or Folders). Select the option by clicking **ENTER** or the **right arrow** on the remote control.

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. Highlight the track to define as a preset.

4. Press the number of the preset you want to assign to this track. Select a number between 1-9 on your remote control. If you select the number 1, hold the number 1 key down until the preset number icon 1 appears next to your selection after about five seconds. The number of the preset you selected will remain next to the track. If you selected a number that has already been assigned to another song, the previous selection will no longer be defined as a preset. *Note: Presets cannot be erased but can be replaced by another selection.*

After creating a preset, you can play the preset any time the DSM-320RD and the PC containing the tracks are powered on by pressing the preset number on your remote control. The song files on your PC must remain in the same folder location that they were in when the preset was created.

You can play your favorite preset during a slideshow presentation by pressing the number of the preset during the slideshow playback.

Download from Www.Somanuals.com. All Manuals Search And Download.

Music (continued)

Browsing for Music

There are many ways to browse for a music track. For example, let's use the following music file located in the following shared location:

c:\Documents and Settings\Rob\My Documents\My Music\Violator\Halo.mp3

Halo.mp3
Artist: Depeche Mode
Album: Violator
Genre: Alternative

To browse for this track in the track list:
1. Select **All Tracks**
2. Highlight **Halo**

To browse by artist:

1. Select **Artists**
2. Select **Depeche Mode**
3. Select **Violator**
4. Highlight **Halo**

To browse by album:

1. Select **Albums**
2. Select **Violator**
3. Highlight **Halo**

To browse by genre:
1. Select **Genres**
2. Select **Alternative**
3. Select **Depeche Mode**
4. Select **Violator**
5. Highlight **Halo**

To browse by folder:

1. Select **Folders**
2. Select **My Music**
3. Select **Violator**
4. Select **Halo**

53

Music (continued)

Creating Music Playlists

Use your favorite music software on your PC to create music playlists. A playlist allows you to specify exactly what tracks to play and in what order to play them. For example, create a "favorites" playlist and just listen to your favorite tracks. Save the playlist in the industry standard **.m3u** playlist format.

The DSM-320RD will play tracks from playlists you create on your computer. The media player supports playlists in two standard formats:

- **m3u** MPEG Playlist File

- **pls** MPEG Playlist File

Software for playing music on your PC can be used to create playlists. **WinAmp**TM and Microsoft Windows Media PlayerTM are two examples.

Playing a Playlist

To play all the tracks in a playlist, highlight the playlist name and press the **PLAY** button. All tracks will be played in the order they appear in the playlist.

Controlling Music Playback

Your DSM-320RD works just like a stereo or CD player. Controlling your music playback will be an easy and natural experience. Use the remote to **PLAY**, **PAUSE**, or **STOP** music.

Playing a Group of Songs

Highlight any folder and press the **PLAY** button on the remote control. All of the songs within the selected folder will be played. You can highlight a genre of music and all files that are associated with that genre will be played. Genre categories are defined when an audio file is created.

You can play songs within a folder from a specified track forward. For instance, if you have a folder with ten tracks and select Track 3, clicking on the **PLAY** button will play tracks 3 through 10. *Note: If you press the **ENTER** button on the remote control instead of the **PLAY** button, only the selected track (Track 3) is played.*

Playing Individual Songs

Individual songs can be played by highlighting a song and pressing **ENTER** on the remote control.

54

Music (continued)

Viewing Photos while Music is Playing

Your DSM-320RD is capable of displaying photos and playing background or preset music simultaneously.

Background Music: You can start background music by playing a song in **MUSIC** mode. Go to **PHOTO** mode and start your photo slideshow.

Preset Music: To play presets during your slideshow, simply press a number on the remote control that corresponds with an existing Preset. The appropriate song will begin playing (See Creating a Preset on page 52 for additional details).

Shuffle and Repeat

You can turn on the repeat function to continuously play individual tracks, playlists, or tracks within a folder.

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.

To repeat a track or a group of tracks, click **REPEAT** on the remote control. When the icon with the text REPEAT below it appears, you are in the repeat current track mode.

When the repeat icon with the ALL text below it appears, you are in Repeat All mode. This will repeat all of the tracks within your currently selected folder or playlist.

When you select a music track, information about the song is displayed (if available), as shown here.

55

Photo

Supported Photo Formats

The following photo file formats are supported:

- **BMP** (non-compressed)
  Windows bitmap file. Widely used in Microsoft Windows for pictures and backgrounds.

- **JPEG** (grayscale, RGB, YCbCy)
  (Does not support CMYK, YCCK.)
  The JPEG format is the Internet and digital photo format standard used by most digital cameras.

- **GIF**
  (Animated GIF's are not supported)
  Older format still widely available on the internet for photos, web pages, and clip art.

- **PNG** (Non-alpha channel only)
  Portable Network Graphics standard created in response to limitations in the GIF file format.

- **TIFF** (RGB)
  (Does not support CMYK, YMC, YMCK, KCMY)
  Tagged Image File Format is a raster file format.

- **JPEG2000**
  JPEG2000 is a new image format based on the latest compression technology.

56

Photo (continued)

Organizing Photo Albums

Unlike music files, photos contain little information about their content. Therefore, photos are organized by their filename and by the folder they are in. Many digital cameras will organize your photos into folders when you connect and unload them to your PC. Each time you dock or connect, a new folder is created using the current date and time, and all photos are copied into that folder.

To simplify browsing on your DSM-320RD, you can create folders on your PC. For instance, create a folder in the My Pictures directory called **Vacation** and copy all of your vacation photos into it. Your DSM-320RD will show the **Vacation** folder. To play a slideshow of the folder, highlight it and press the **PLAY** button. To view a list of photos in the folder, highlight it and press the **right arrow** button.

You can give your photos meaningful names by renaming the files on the PC. Most digital cameras number photos sequentially. For example, rename the photo **IM001125.jpg** to **sunset.jpg** on your PC. The photo will be displayed as **sunset.jpg** on your DSM-320RD*.

Right-click on the file and select Rename.
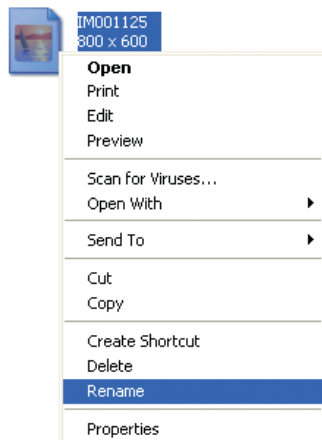
If the file extension does not appear as part of the name displayed when you select rename, then it is not necessary to enter the file extension (**.jpg**) at the end of the filename. To rename IM001125.jpg to sunset.jpg, type in **sunset** and hit Enter on your computer's keyboard.
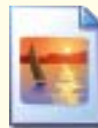
If the file extension appears as part of the name when you select rename, then be sure to include the extension when renaming the file. To rename IM001125.jpg to sunset.jpg, type in **sunset.jpg** and hit Enter on your computer's keyboard.

You can create as many folders as you need. Create a folder for the year, then create folders inside for each of the months, and then folders in each month for special occasions (birthday, vacation, holidays, etc...).

Folder creation and renaming files must be done on the PC via standard Windows procedures.

57

Photo (continued)

Playing a Photo Slideshow

To start playing a photo slideshow, highlight a folder and press the **PLAY** button. The first photo will be displayed and then followed by the next photo in the folder. All photos in the folder will be displayed.

Controlling Photo Playback

Controlling photo playback is very similar to controlling a CD player. Once you have started a photo slideshow, use the remote to **PLAY**, **PAUSE**, or **STOP** the show. Press the **PREV** and **NEXT** buttons to skip to the previous or next photo. To set the amount of time before the next photo in a slideshow is displayed, click **SETUP** on your remote and select **General/additional settings**. You can set the slide show delay at an interval between 1 second and 2 minutes.

Shuffle and Repeat

Photos are displayed in alphabetical order by filename. During slideshow playback you can shuffle the order by pressing the **SHUFFLE** button on your remote control. Shuffle automatically enables the repeat function.

To repeat all of the photos in a slideshow, press the **REPEAT** button on the remote control during the slideshow before the end of the slideshow. If the last image in the folder is displayed before you press repeat, then you must go to the previous page and start the slideshow again. Be sure to press the **REPEAT** button before you see the end of slideshow image in the upper right corner of the screen. Below are the icons you will see in the upper right corner.

	Shuffle on		**Shuffle off**
	Repeat all		**Repeat off**
	End of slideshow		**Pause**
	Invalid option selected		**Play**

58

Photo (continued)

Viewing Photo Information

To view information about a
photo, highlight the photo
and press the **DISPLAY**
button.

File Name: My_dog.jpg
Reslution: 720 x 480
Color Depth: 16bit
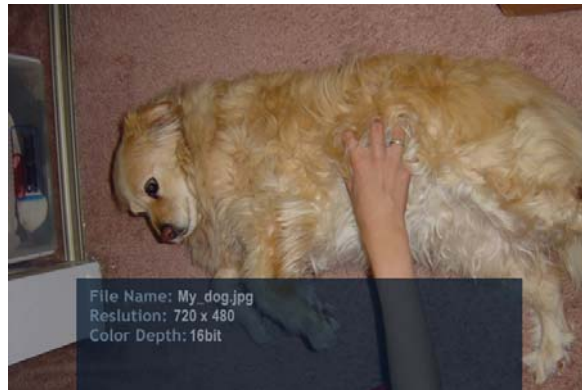
Photo (continued)

Photo Viewing Effects

When viewing a photo you can change the on-screen appearance by applying rotate, pan, and zoom effects. These on-screen effects are only for enhancing the on-screen view and are not saved to the actual file. To access the photo viewing effects, press the **MENU** button on the remote control while viewing the photo that you want to manipulate. To select an effect, highlight the effect using the arrow keys on the remote control and press **ENTER** on the remote control to select the effect. You can also use the **ZOOM** and **ROTATE** buttons on the remote control to achieve the same effects.

Rotate clockwise 90 degrees: Selecting this option will rotate the image clockwise 90 degrees every time it is selected.

Rotate counter-clockwise 90 degrees: Selecting this option will rotate the image counter-clockwise 90 degrees every time it is selected.

Rotate 180 degrees: Selecting this option will rotate the image 180 degrees every time it is selected.

Pan: When this option is selected, you can move the image using the **arrow** buttons on the remote control.

Zoom: Use the down or right arrow to zoom in on an image. Use the up or left arrow to zoom out. The image can zoom 5 steps either direction.

Exit: Use this button to exit from the effects menu or you can select the **MENU** button on the remote control.

60

Video

Supported Video Formats

The following video file formats are supported:

- **MPEG-1** (up to 8Mbps)

- **MPEG-2** (up to 8Mbps)

- **MPEG-4** (ASP - Advanced Simple Profile)

- **AVI** (MPEG4 layer only, does not support uncompressed AVI)

- **XVID** (with MP3 and PCM)

Viewing a Video

Once you enter the **Video** menu, you can view your list of videos.

Use the **selection arrows** to navigate to the video folder you wish to view. Highlight and press **ENTER** to view the video folder.

After you have selected a video folder, scroll down and highlight the video you wish to view and press **ENTER** or press **PLAY** to view the video.

61
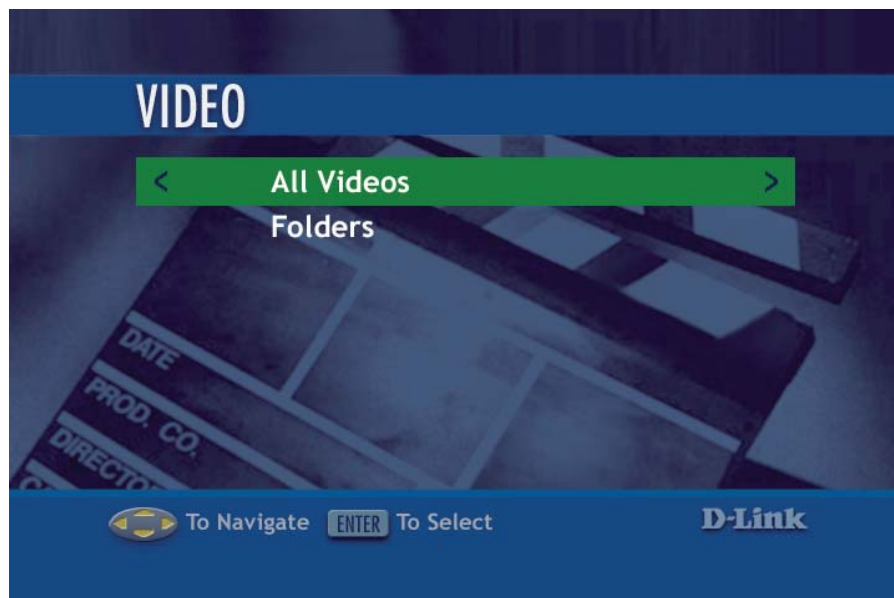
Video (continued)

Using the Remote Control with Videos

ENTER - Click **ENTER** to play your highlighted video.

PLAY/PAUSE - To pause the video and to resume playing the video.

+ (VOLUME) - To increase the volume.

- (VOLUME) - To decrease the volume.

MUTE - To silence the audio portion of the video.

FF - To fast forward through the video.

DISPLAY - To view the track time; the resolution and the bit rate.

REPEAT - To repeat the video after viewing it.

Below are the on-screen indicators when a button is pressed. These icons will appear in the upper right corner of the screen:

Pause   **Play**

Repeat   **Repeat off**

Mute sound   **Fast Forward**

Invalid option selected   **Fast Rewind**

Search

Click the **SEARCH** button on the remote control and the screen below will appear. This screen allows you to search for music tracks, videos, or photos.

Use the **up** and **down arrows** on the remote control to navigate through the options. Press **ENTER** on the remote control to make a selection. Use the **down arrow** to navigate to the next field.

Media Type: You can select All types of media or specify music, photo, or video.

Search Type: There are two options available under the Search Type.

- **Starts With** will search for files that begin with the characters entered in the *Search For:* field.

  For example, a Starts With search for **en** would bring up the following:
  Enjoy The Silence
  Enter Sandman
  Endless Love

- **Contains** will search for files that contain the specified characters anywhere in the file name.

  For example, a Contains search for **en** would bring up the following titles:
  This is the **En**d
  The Unforgiv**en**
  The Great Pret**en**der
  Enjoy The Silence
  Enter Sandman
  Endless Love

Search For: To enter text, arrow to the field to highlight it, press **ENTER** on the remote control and the on-screen keyboard will appear. Enter the title you are searching for. The more detailed you are, the more accurate the results will be. The search feature will locate all titles that contain the text you entered that match the media type selected. To begin a search, use the **down arrow** to navigate to the **SEARCH** button and press **ENTER**.

63

DVD

Viewing a DVD

Once you enter the **DVD** menu, if there is a disc in the DVD tray and the Auto Play setting is enabled (see **Setup-DVD** on page 92), the DVD will automatically play. Otherwise, press the **Play** button to launch the DVD menu.

Use the **selection arrows** and **ENTER** button to navigate the DVD menu.

Using the Remote Control with DVDs

EJECT - The Eject button opens and closes the DVD tray located on the front panel of the DSM-320RD.

DISPLAY - To view the DVD title, chapter, time and audio/video options.

ENTER - Click **ENTER** to make your selection from the DVD menu.

PLAY/PAUSE - To pause the DVD and to resume playing the DVD.

+ (VOLUME) - To increase the volume.

- (VOLUME) - To decrease the volume.

MUTE - To silence the audio portion of the DVD.

SLOW MOTION - To play the DVD in slow motion.

Fast Forward - To fast forward through the DVD.

Fast Rewind - To fast rewind through the DVD.

64

DVD (continued)

Next - To jump forward to the next chapter.

Prev - To jump back to the previous chapter.

ZOOM - To zoom in/out on the video.

Title - Displays the DVD's title.

Subtitle - Displays DVD subtitles.

Angle - If the DVD has multiple angle support, you can toggle between different camera angles.

REPEAT - To repeat the video after viewing it.

A-B - Select a start point (A) and an end point (AB) of video to replay.

Below are the on-screen indicators when a button is pressed. These icons will appear in the upper right corner of the screen:

⏸	**Pause**	▶	**Play**
	Repeat Chapter		**Repeat Title**
	Replay A		**Replay AB**
	Repeat/Replay off		**Step**
	Slow		**Fast Forward**
	Invalid option selected		**Fast Rewind**
	Zoom		**Mute sound**

65
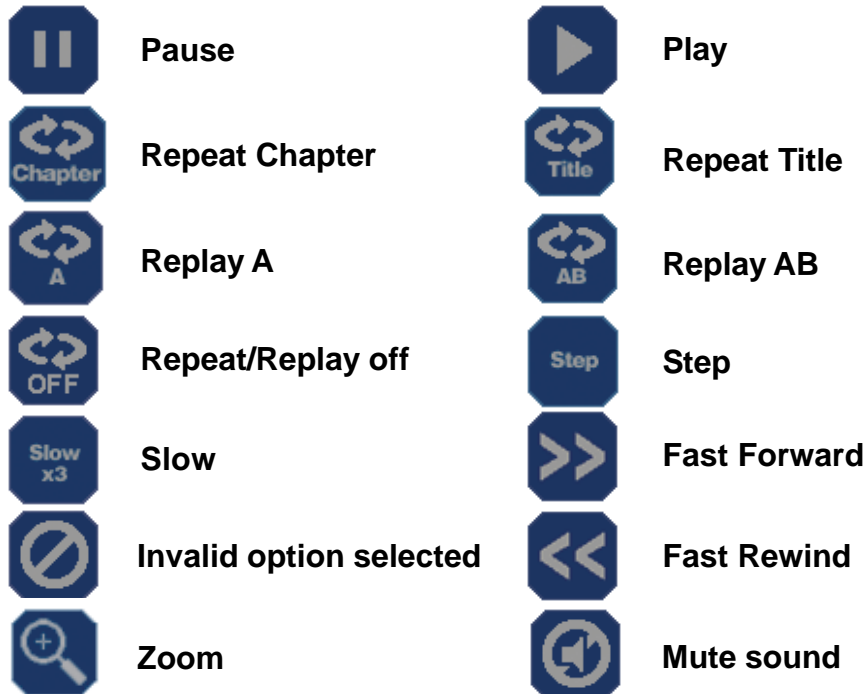
DVD (continued)

DVD Player Considerations

■ CD-R/CD-RW discs recorded by CDDA method can be played. Some CD-R/CD-RW discs may be incompatible due to laser pick-up and disc design.

■ DVD-R discs recorded by DVD-Video method can be played. Some DVD-R discs may be incompatible due to laser pick up and disc design.

■ This DVD player may not support some MP3 recordings due to differences in recording formats condition.

Memory Card
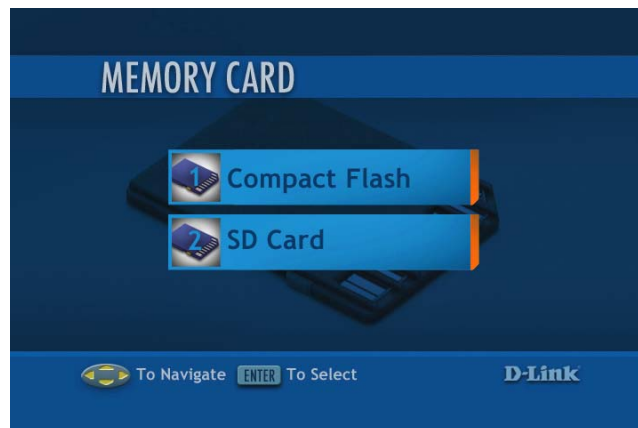
Viewing a Memory Card

In the **Memory Card** menu, the DSM-320RD will display if there are any memory cards plugged in to the device. The two memory card slots will display "Empty" if there are no available cards. When you plug in a memory card, the memory card type will display in **Slot 1** or **Slot 2**.

Use the **selection arrows** and press **ENTER** to select a memory card for viewing. Depending on your photo display options, your files will either display in a list or as thumbnails (see **Setup-Additional Settings** on page 94). You can also select **Auto Playback** (see **Setup-Memory Card** on page 95) in the setup menu and your files will automatically play when a card is inserted. Press **ENTER** to display the image in a full screen and use the **up** and **down selection arrows** to navigate back and forward through your files.
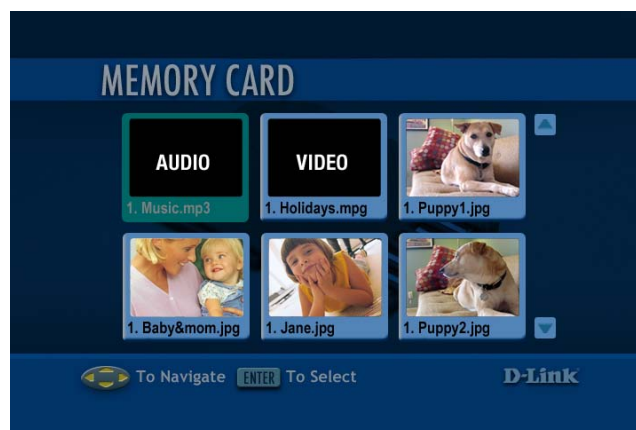
Supported File Types

The DVD player and Card Reader support the following file types:

Music:	Photos:
.mp1	.jpg
.mpa	.jpeg
.mp2	.tif
.mp3	.tiff
.wav	
.aif	
.aiff	
.wma	
.lpcm	
.ogg	

	Video:
	.mpg
	.mpeg
	.m1v
	.dat
	.m2v
	.vob
	.avi
	.mp4

Online Media

Currently the DSM-320RD supports Radio@AOL[1], Rhapsody™ [2], and Live365™ online services. Content downloaded from Napster™ [3] can also be used with your DSM-320RD.

New services will be added in the future and made available via firmware upgrades. If your DSM-320RD is configured to perform firmware upgrades automatically (see Version on page 96 for details), then you will see new options as soon as they become available.

To access the Online Media section, select **Online Media** from the Home screen or click the ONLINE MEDIA button on your remote control.

AOL® Services

The screen above will appear. Select AOL® Services by pressing ENTER on your remote control. This service allows you to listen to online radio. When you select AOL® Services, a setup wizard will appear, leading you through the simple steps required to listen to Radio@AOL.

> ** AOL® ISP Service is NOT required to access the AOL online radio. You can be an AOL member and have another Internet Service Provider.*

[1]Radio@AOL is available for USA customers only.
[2]Rhapsody™ is available for USA customers only.
[3]Napster™ is available for USA, Canada, and England customers only.

69

Online Media (continued)

After selecting **AOL® Services** (as shown on the previous page), you will be given the option to sign in as an **AOL® Member**, or, if you are not a member, you can enjoy a **Free Trial**. AOL® members will sign in as follows:

For AOL® Members:

Click **AOL Members - Sign In**.

Click **OK**.
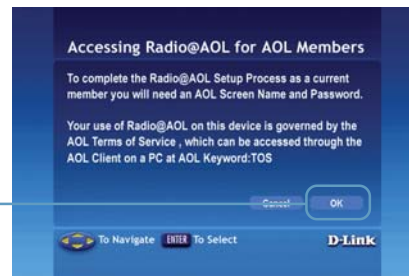
Enter **your AOL screen name** and **password**.
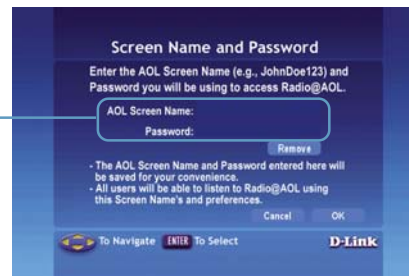
As an AOL member, you are now ready to use **Radio@AOL** or **Radio@AOL Presets**!

Click **Radio@AOL** to enter the radio station selection screen.

70

Online Media (continued)
For AOL® Members (continued)

Radio@AOL

Information about the current selection will be displayed here.
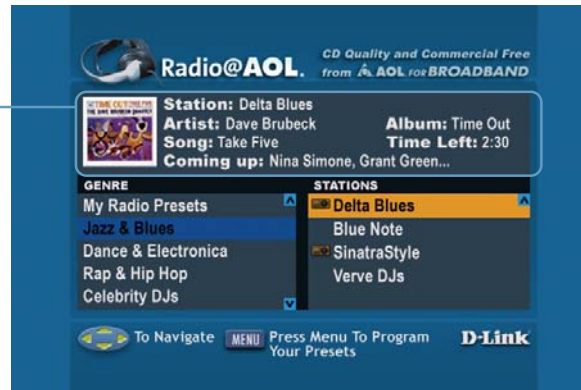
Use the **up** and **down arrow** buttons on your remote to scroll up and down through the genre list. If a station is highlighted, you will need to press the **left arrow** on your remote control to navigate to the genre list. When you've found a genre you like, you can press **ENTER** or use the **right arrow** button on your remote control to navigate to the station list. The **up** and **down arrow** buttons on your remote control are used to navigate through the list of stations. Press **ENTER** on the remote control to select a station. Use the **left arrow** on the remote control to return to the genre list.

Radio@AOL presets can be programmed from this screen. To program a preset, hold the **MENU** button on the remote control until the 📻 AOL preset icon appears next to the station you've selected. Up to five stations can be programmed as presets. The presets will remain in memory just as they do on your home/car stereo. Presets are only erased as new ones are programmed or if the **MENU** button is pressed again while the same station is highlighted. After you've stored five presets, any new preset selection will take the place of one of the previous presets. To play presets you must go to the AOL Presets screen as shown on the next page. To exit from the station selection screen, press the **left arrow** on your remote control.

> **Note: The screensaver feature is disabled on the Radio@AOL and Radio@AOL Presets screens.**

71

Online Media (continued)

For AOL® Members (continued)

Radio@AOL Presets

Click **Radio@AOL Presets**.

Preset Radio stations are available here. Use the **arrow** buttons on your remote control to highlight the station of your choice and press **ENTER** to select it. AOL® Presets can only be accessed via this screen. AOL® has a list of presets already programmed or you can define your own selections as shown on the previous page.

> *Note: Only Radio@AOL subscribers can select their own presets. Free trial users are not able to select their own presets.*

72

Online Media (continued)
AOL® Services for Non-members

Click **Setup** to begin your free trial of Radio@AOL using your DSM-320RD.

Click **Free Trial**.

Click **OK**.
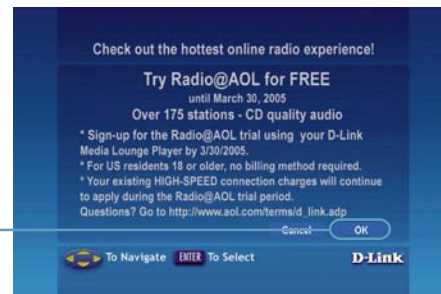
You are now ready to begin your free trial. Please see the previous pages for an explanation of your listening options. Non-members have access to Radio@AOL Presets, and can select from five preset stations.
(AOL members can configure their own preset stations.)

73
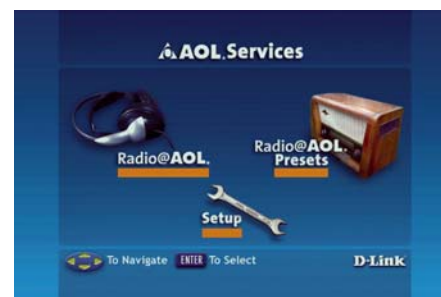
Online Media (continued)

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 Media** from the Home screen or click the ONLINE MEDIA button on your remote control. Press the down arrow on the remote control to select Live365™ and press ENTER to select it.

Use the **up** and **down arrows** on the remote control to navigate through the options. Press **ENTER** on the remote control to make a selection. Use the **down arrow** to navigate to the next field.

ALL Broadcasts: Displays all available internet radio stations.

My Presets: Displays your preset stations. Press the **MENU** button to delete the station from your preset list.

My Recommendations: Lists recommended stations based on your preset stations. Press the **MENU** button to add a station to your preset list.

74
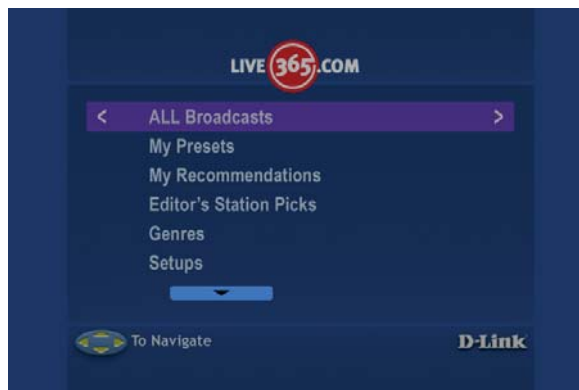
Online Media (continued)
Live365™ (continued)

Editor's Station Picks: Lists recommended stations based on your preset stations. Press the **MENU** button to add a station to your preset list.

Genres: Lists stations according to genre. Press the **MENU** button to add a station to your preset list.

Setups: Click to access setup features such as **Login** and **Learn about Sign Up information**.

Search: Allows you to enter a song or artist to search for Live365 stations that play that music. Press the **MENU** button to add a station to your preset list.

Click **Login** to enter in your Login information. If you do not have a Live365 account, click **Learn about Sign Up information**.
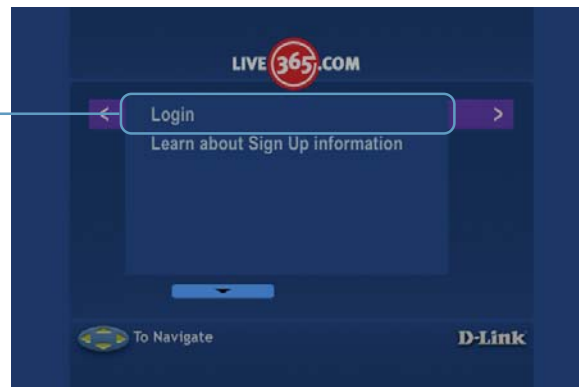
Enter in your **User Name** and **Password**, and click **OK**.

75
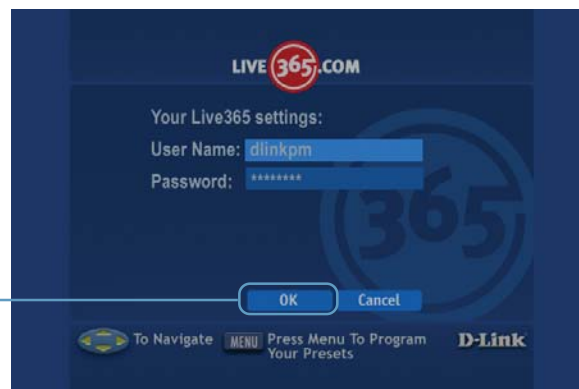
Online Media (continued)

Napster™

Napster™ is a legal music service that gives subscribers on-demand access to over 700,000 music tracks. Napster™ subscribers can listen to and collect full-length, high-quality tracks online and offline. Subscribers can also collect as many tracks as desired on the hard drives of up to 3 PC computers to listen offline and use with the DSM-320RD. These tracks can be enjoyed for the duration of your Napster™ subscription.

Files downloaded with Napster™ are in the Windows Media DRM format. This is a type of copy protection. These files can be played on the DSM-320RD if you use the Windows® Media Connect software. This software can only be run on Windows® XP with Service Pack 2 or Windows® XP Media Center Edition. For details on configuring Windows® Media Connect, please refer to page 29 of the manual.
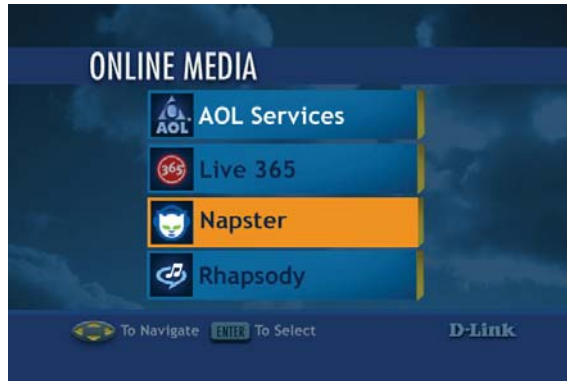
You can look up music by genres.

Online Media (continued)
Napster™ (continued)

You can search by artist, track names, album names, and even search other member's collections.

Select a track that you want to download.

Click the download button to download the file to your computer.

The library window will display the download status.
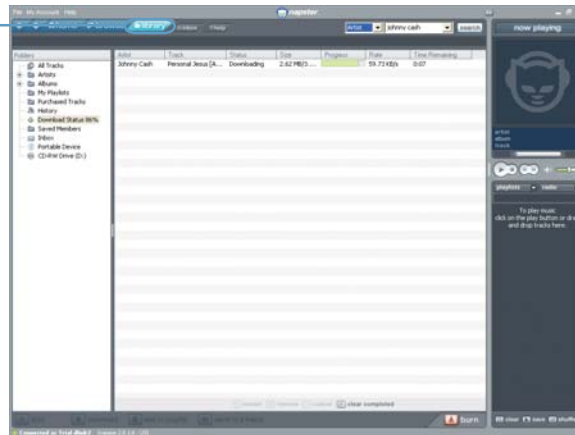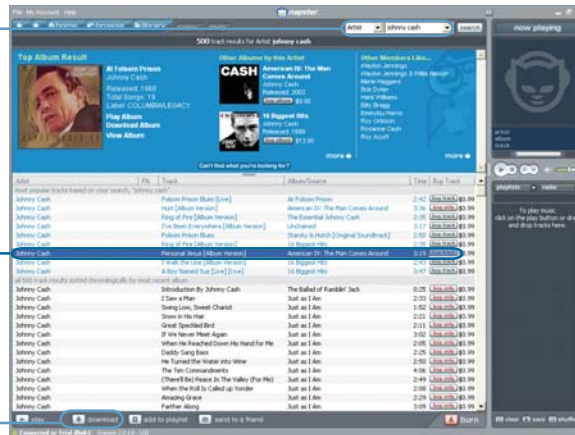
By default, downloaded music is stored in the **My Music** folder on your hard drive.

77

Online Media (continued)
Napster™ (continued)

Important! You need to use the Windows Media Connect® software to play the protected files that you download from Napster™. Please see page 29 for details.

Be sure to select the Windows® Media Connect server as the default server in the DSM-320RD System Setup if you want to access content downloaded from Napster™. To do so, press the **SETUP** button on the remote control. Navigate to System by using the **down arrow** and then press **ENTER**. Navigate to View All Servers using the down arrow and press **ENTER** to view a list of available servers.

Online Media (continued)

Rhapsody™

Rhapsody™ is a subscription music service that provides unlimited on-demand access to over 725,000 music tracks. The CD quality audio is streamed directly over the Internet. Rhapsody™ also offers access to Internet radio stations and allows you to create your own custom stations.

Select **Online Media** from the Home screen or click the ONLINE MEDIA button on your remote control. Press the down arrow on the remote control to select Rhapsody™ and press ENTER to select it.

Note: You must have the Rhapsody™ software running on a computer before selecting Rhapsody™ from the menu.
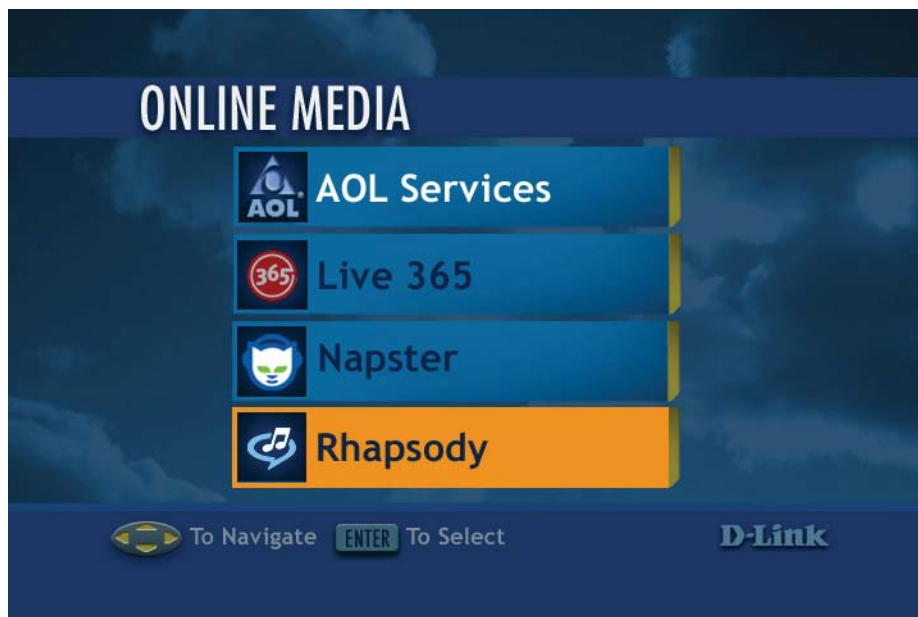
Current Rhapsody™ Subscribers

If you already have an account with Rhapsody™ and have the Rhapsody™ software installed on your computer, please skip to page 86 - Configuring Rhapsody™ for use with the DSM-320RD.

Online Media (continued)
For Users New to Rhapsody™

The D-Link DSM-320RD CD-ROM contains a link to the latest version of the Rhapsody™ software.

Click **Online Media Services**

Note: You can also get to the link by visiting our website at **http://support.dlink.com**

Click **Rhapsody**

Click **Next**

80
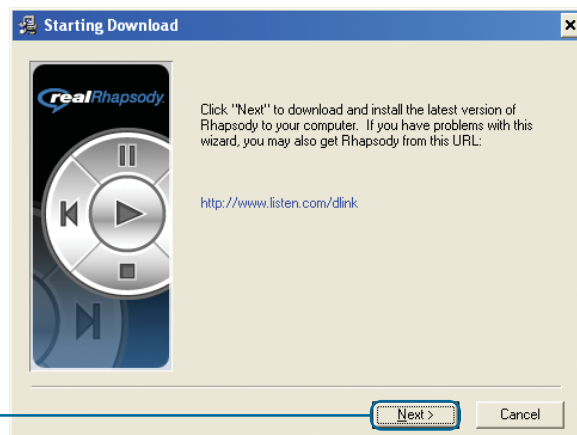
Online Media (continued)
For Users New to Rhapsody™ (continued)

The installation software will begin downloading to your computer.
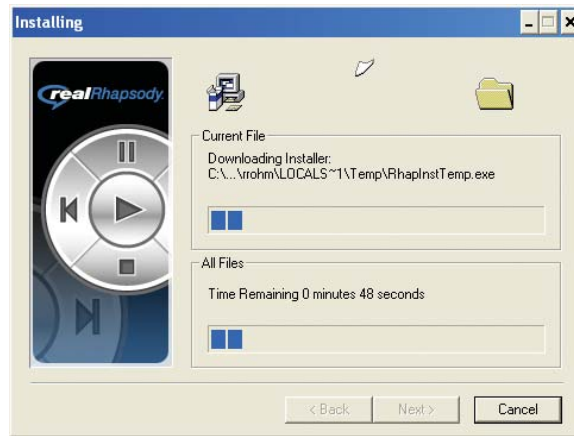
Click **Next**
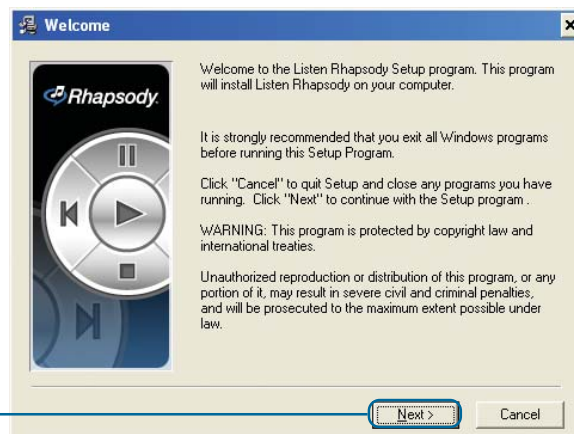
Please read the Terms of Use. If you do not agree to these terms, the installation process can not occur.

Click **I agree**

81
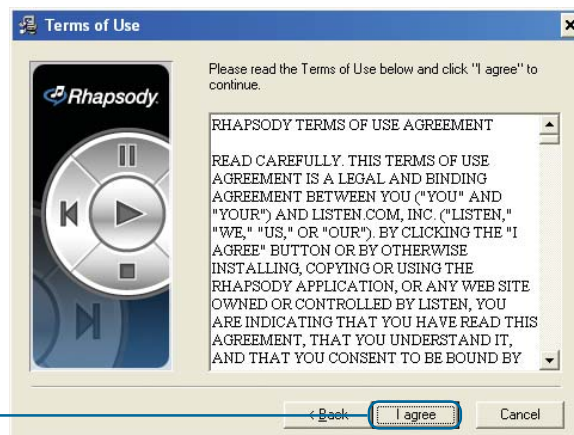
Online Media (continued)
For Users New to Rhapsody™ (continued)

Select a destination folder for the software installation or use the default location.

Choose Destination Location

Setup will install Listen Rhapsody in the following folder.

To install to a different folder, click "Browse" and select another folder.

If you don't want to install Listen Rhapsody, click "Cancel" to exit Setup.

Destination Folder
C:\Program Files\Listen Rhapsody   Browse...

< Back   Next >   Cancel
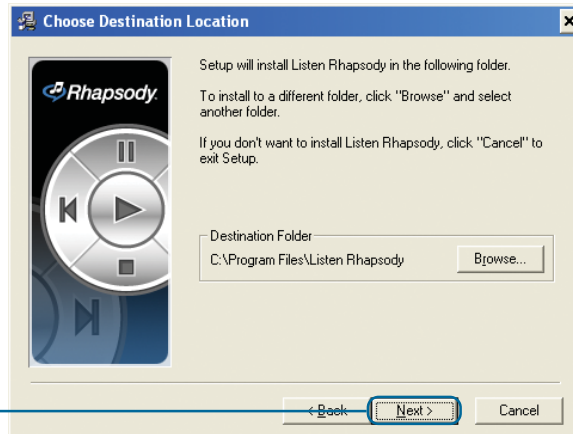
Click **Next**

If you are connecting through a proxy server you can enter the settings here. If you are unsure, leave it as is.

Enter Proxy Server

If you connect to the Internet through a proxy server, please enter its address below. If you don't know what to do here, leave it as it is and proceed to the next page.

Proxy Server
☐ Enable   server:port

< Back   Next >   Cancel

Click **Next**

Start Installation

You are now ready to install Listen Rhapsody. Press the "Next" button to begin the installation, or use the "Back" button to modify your installation information.

< Back   Next >   Cancel

Click **Next**

82
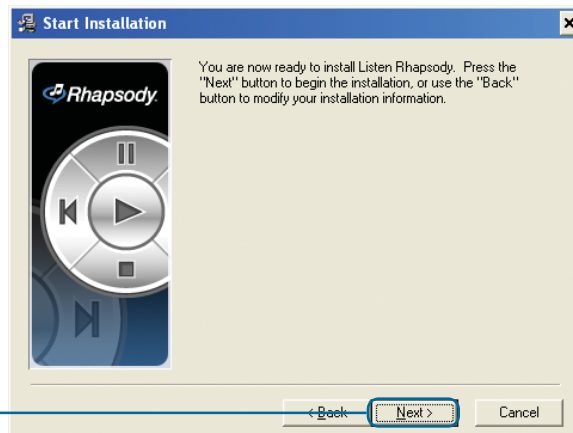
Online Media (continued)
For Users New to Rhapsody™ (continued)

By default the options are configured to create shortcuts on your Desktop and on the Quick Launch toolbar.

Click **Finish**

Click **Register Now!**

Fill in the blank fields to begin the registration process.

Click **Next**

83

Online Media (continued)
For Users New to Rhapsody™ (continued)

Complete the registration information on this page.

Click **Next**

Click **Finish**

84

Online Media (continued)
For Users New to Rhapsody™ (continued)

Enter **DLINK-MUSIC** as the coupon code and click the **Start Here** button.
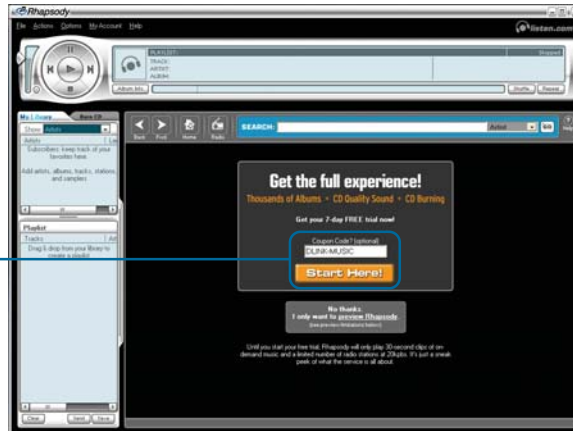
Select the service plan that you would like to sign up for.
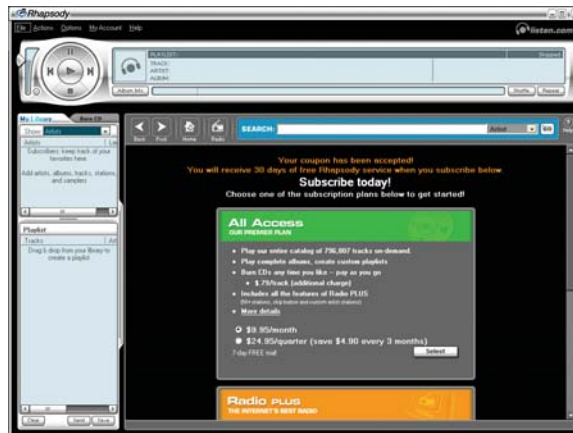
Now that you've installed the Rhapsody™ software and created an account, you need to configure the software for use with the DSM-320RD. Please follow the steps on the following page to configure the software.

Online Media (continued)

Configuring Rhapsody™ for use with the DSM-320RD

To use Rhapsody™ with your DSM-320RD you need to enable the UPnP Server within the User Settings. To do this, launch the Rhapsody™ application and follow the steps below.

Go to **Options** and select **User Settings**

Place a checkmark next to **Start UPnP Server once logged in**

Click the **Start** button to activate the UPnP Server

Click **OK** to save your settings
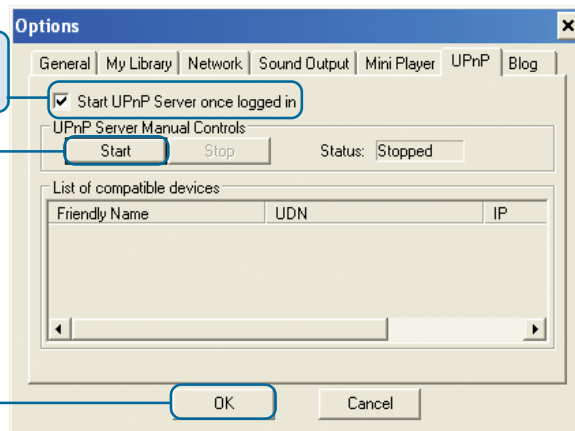
Online Media (continued)
Configuring Rhapsody™ for use with the DSM-320RD (continued)

Only songs (albums or individual tracks) and radio stations that have been added to your library are available for streaming to your DSM-320RD.

The library displays music and radio stations that have been added to your library. The library can be sorted by artist, tracks, albums, and radio stations. If you've created playlists, you can sort these as well. **Only items listed in the library are accessible through the DSM-320RD.**

To add a song to your library, click on the **down arrow** icon next to the selected track.
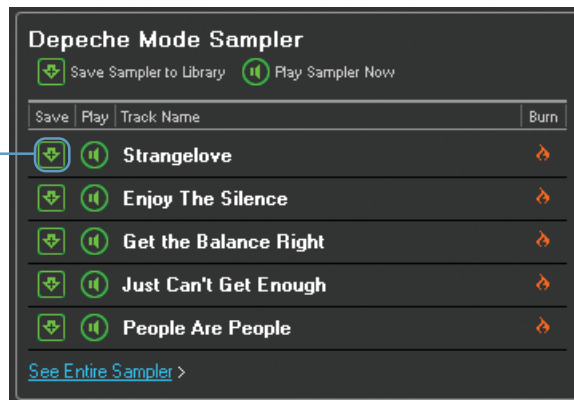
Once your library is configured, you can access the Rhapsody™ content on your DSM-320RD just as you would with media stored on your computer.

Setup

If you want to change the configuration of your setup you can press the **SETUP** button on the remote control.

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

Press **SETUP** on your remote control to access the setup features. 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.

SETUP

Network
Wireless
System
DVD
General
Version

To Navigate ENTER To Select SETUP To Exit   D-Link

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. After making all of your selections, you must navigate to the OK button and press **ENTER** to save the settings. To toggle between OK and CANCEL, use the **left** and **right arrow** buttons.

*Press **ENTER** in a text field, to display the onscreen keyboard. You can enter text either by using the onscreen keyboard, or by using the digits and letters on your remote control.*

Network

Connection: Select **Wired** or **Wireless**. Use the **up arrow** or **down arrow** to toggle between selections. Press **ENTER** to select the option. Press the **down arrow** to proceed to the next option.

SETUP : Network
Your current network settings:
Connection: Wireless
Configuration: DHCP
IP: 192.168.0.88
Netmask: 255.255.255.0
Gateway: 192.168.0.1
DNS: 192.168.0.1
OK   Cancel

To Navigate ENTER To Select SETUP To Exit   D-Link

88

Setup (continued)

Configuration: Select **Static** or **DHCP** by pressing the **up arrow** or **down arrow**. When the desired option is highlighted, press **ENTER** on the remote. If Static is selected, you will need to input the IP, Netmask, Gateway, and DNS.

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

*If you do not have a DHCP -enabled router, you will select **Static** and provide the following information:*

Entering address information:

Press **ENTER** on the remote control to select a highlighted field. Enter the address information by using the number keys (**0-9**) on the remote control. Use the dot button ("**.**") on the remote control as you would when entering an address on a computer. The **CLEAR** button will erase the entire field. Use the **left arrow** to erase one character.

IP: Enter the IP address of the DSM-320RD.

Netmask: Enter the subnet mask of the DSM-320RD.

Gateway: Enter the IP address of the router on your network.

DNS: Enter the IP address of the domain name server.

Wireless

SSID: Enter the SSID (Service Set Identifier, or the name of the wireless network) by pressing **ENTER** on the remote control when the field is highlighted. The on-screen keyboard will appear and you can manually enter an SSID.

Site Survey: When highlighted, press **ENTER** on the remote control. A list of available SSID's will appear. Navigate the list using the **up** and **down arrows**.

Mode: Ad-Hoc Mode is used for peer to peer wireless networks that do not contain a router or an access point. Infrastructure Mode is used for networks with an access point or router. To toggle between the two, press the **ENTER** button when Mode is highlighted. The **up arrow** and **down arrow** will toggle between the two options. Press **ENTER** again to select.

89

Setup (continued)

Encryption: WEP (Wired Equivalent Privacy) & WPA (WiFi Protected Access; a wireless standard designed to improve upon the security features of WEP), are two encryption technologies used by wireless devices. The type of encryption determines the key length. 128-bit encryption requires a longer key than 64-bit encryption. Keys are defined by entering in a string in HEX (hexadecimal - using characters 0-9, A-F) or ASCII (American Standard Code for Information Interchange – alphanumeric characters) format. ASCII format is provided so you can enter a string that is easier to remember. The ASCII string is converted to HEX for use over the network. Four keys can be defined, so that you can change keys easily. WPA-PSK-TKIP requires your router and the DSM-320RD to have the same pre-shared key to establish a wireless connection.

There are six options configurable under this setting, Disable, 64bits-Hex, 128bits-Hex, 64bits-ASCII, 28bits-ASCII, and WPA-PSK-TKIP. To toggle between the options, press the **ENTER** button when Encrypt is highlighted. The **up arrow** and **down arrow** will toggle between the six options. Press **ENTER** again to select.

Key Index: Select a number between 1 and 4. To toggle between the options, press the **ENTER** button when Key Index is highlighted. The **up arrow** and **down arrow** will toggle between the four options. Press **ENTER** again to select.

Key: To connect to an encrypted wireless device, the key you enter here must match the key of the device exactly. Press the **ENTER** button on the remote control with this field highlighted to enter a key. The on-screen keyboard will be displayed and you can enter the key.

Wep Key Types and Examples:

64-bit Hex: Keys are exactly 10 characters in length.
Example: 12345678FA is a valid string of 10 characters for 64-bit encryption.

128-bit Hex: Keys are exactly 26 characters in length.
Example: 456FBCDF123400122225271730 is a valid string of 26 characters for 128-bit encryption.

64-bit ASCII: Keys are exactly 5 characters in length.
Example: DMODE is a valid string of 5 characters for 64-bit encryption.

128-bit ASCII: Keys are exactly 13 characters in length.
Example: 2002HALOSWIN1 is a valid string of 13 characters for 128-bit encryption.

90

Setup (continued)

System

Device Name: You can change the name of your DSM-320RD here. To do so, press **ENTER** on the remote control with the Device Name field highlighted. The on-screen keyboard will appear.

Default Server: The default server is listed here. This field is not editable. To change the default server, you must select a server by going to View All Servers. If you are using multiple servers, such as Windows® Media Connect and the D-Link® Media Server software, then you must toggle between servers by selecting the server from the View All Servers option.

View All Servers: Navigate to this button by using the **down arrow** on the remote control. Press **ENTER** on the remote control to view a list of all the devices that are available to share media on your network.

System Restart: Navigate to this button by using the **down arrow** on your remote control. Press **ENTER** on the remote control to restart the DSM-320RD.

System Reset: You will lose all current settings when selecting this option. The factory defaults will be restored and any settings you have entered will be erased. To navigate to this option, use the **down arrow** on your remote control. Press **ENTER** to perform a system reset.

Wizard: When you select the Wizard option in the System Setup window, you will launch the Setup Wizard. This is the same Setup Wizard that is run during the initial startup of your device.

91

Setup (continued)

DVD

Audio Language: To change the audio language, press **ENTER** on the remote control with the Audio Language field highlighted. Use the **up** or **down arrow** to make your selection and press **ENTER**.

Subtitle: To change the subtitle language, press **ENTER** on the remote control with the Subtitle field highlighted. use the **up** or **down arrow** to make your selection and press **Enter**.

Angle: Enabling the Angle option allows you to toggle between multiple camera angles if it is supported on your DVD.

Auto Play: Enabling the Auto Play option will automatically play the DVD if there is a disc in the DVD player upon entering the DVD menu.

Rating: The Rating option allows you to select the highest rating level of DVD that will be played. The seven options are: Off, G, PG, PG-13, R, NC-17, and X. You must enter your password to change the rating level.

Edit Password: By default, the rating password is set to "1234." To edit the password, verify the old password, enter a new password (up to 8 numeric digits), and confirm the new password.

Setup (continued)

General

The General option contains a submenu of four options:

Audio/Video

Aspect ratio: The aspect ratio can be adjusted to match the capture settings of your video clips.

Video Output: You can select the video output from this screen or by pressing the **VIDEO OUT** button on the remote control from any screen.

The Composite setting should be selected for composite or S-Video connections. If component connectors are used but not selected, the screen will have a blue tint.

Audio Output: The audio output can be modified from this screen or by pressing the **AUDIO OUT** button on the remote control from any screen.

If you are playing audio that has been encoded in 5.1 surround then sound is in pass-through mode. This means that you cannot adjust the volume on the remote control or Mute the sound using the remote control. With 5.1 surround audio you must control the volume level from your digital tuner/receiver.

93

Setup (continued)

Additional Settings

Screen Saver Delay: Select the amount of idle time before the screen saver appears. Choose a time between 1-30 minutes. Use the **up** and **down arrows** on your remote control to navigate through the list. Press the **ENTER** button on your remote control to make a selection.

Photo Display: Choose to have photos displayed as a list or as thumbnails. Thumbnails are small previews of the image but may take longer to appear.

Slide Show Delay: The interval selected here is the amount of time that each image will be shown on the screen before changing to the next image. The lowest setting is 1 second. The maximum amount of time between images is 2 minutes.

Photo Scaling: Choose **Keep as Original**, **Scale with Distortion**, or **Fit to Screen**.

Music Presets

View all presets: This option will display the track titles of songs that have been defined as presets.

Clear all presets: This option will erase all of the presets.

The List of Presets page displays all presets that have been defined. You cannot modify the presets from this page. Presets 1-6 are displayed on the first page. Use the **up** and **down arrow** keys to toggle between the pages. To define presets, please see Creating A Preset on page 52.

94

Setup (continued)

Memory Card

Auto Playback: Enabling the Auto Playback function will automatically play the slideshow of files when you enter the Memory Card menu.

Adjust Video

Composite (RCA and S-Video): Selecting this option will allow you to adjust the Contrast, Brightness, and Hue of an RCA and/or S-Video connection to your monitor.

Component (YPbPr): Selecting this option will allow you to adjust the Contrast, Brightness, and Hue of a Component connection to your monitor.

Composite (RCA and S-Video)

Component (YPbPr)

95

Setup (continued)

Version

Automatically check for firmware update: Firmware updates are system software updates that correct known issues and add new features to your DSM-320RD. If Yes is selected, your DSM-320RD will check the Internet periodically to locate available firmware updates. If a firmware update is located, you will be prompted to update.

Check for Updates: Press **ENTER** on the remote control when this option is highlighted to check for firmware updates immediately. If a firmware update is located, you will be prompted to update. **IMPORTANT: DO NOT TURN OFF THE UNIT OR DISCONNECT THE POWER DURING THE FIRMWARE UPDATE.** Once the update has been completed the DSM-320RD will restart.

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.

Download from Www.Somanuals.com. All Manuals Search And Download.

Frequently Asked Questions

What kind of files are supported by the DSM-320RD?

- Audio - MP3, WMA, WAV, AIFF, OGG

  Video - MPEG 1, 2, and 4, AVI, XVID

  Images - JPEG, PNG, BMP, GIF, TIFF, JPEG2000

What do I need to set up the D-Link's DSM-320RD?

- 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. From this PC, you can choose the media files to be streamed to your TV. To access Rhapsody™ content, you will need the Rhapsody™ software installed on your computer.

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

- Windows XP/2000

How does the D-Link DSM-320RD 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 than contain music, photos, and videos that you want to play.

Can I access Radio@AOL, Rhapsody™, and/or Live365 without the Media Server software running?

- Yes, by pressing the **ONLINE MEDIA** button on the remote control from the Home screen. Note: You do however need the Rhapsody software running on your computer.

97

Frequently Asked Questions (continued)

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-320RD 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 29.

Can I use my Universal remote control?

■ No, the DSM-320RD is not compatible with a universal remote but you can use a remote with learning ability.

Can I connect the DSM-320RD 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-320RD's Ethernet port to the Ethernet port on your PC. The DSM-320RD'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-320RD.

Note: Online Media 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.

Troubleshooting

I cannot see the Setup Wizard when I turn on my DSM-320RD player for the first time.

- Make sure your TV is displaying the appropriate video source. You may need to use the **AV Input**, **Source**, **Select**, or **TV/Video** button on your TV or TV remote to change video sources. If you are having trouble changing the video source, refer to the instructions that came with your TV.

- If you did not connect the player directly to your TV, but are instead passing the signal through your VCR, make sure your VCR is displaying the appropriate video source. You may need to use the **Input** or **Source** button on your VCR or VCR's remote control. Some VCRs only pass the signal through when they are turned off. If you are having trouble displaying the correct video source, refer to the instructions that came with your VCR.

- Make sure cables are connected to the IN jacks on your TV or VCR, not the OUT jacks.

- The cables you are using to connect your receiver to your TV or other equipment may be damaged or defective. Try exchanging the cables connected to the receiver with other cables that you know are working properly.

- 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-320RD 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**

99

Troubleshooting (continued)

I inserted the a DVD into the DSM-320RD, but there is no on screen display.

- A possible cause for this problem may be that the disc was inserted upside down or the disc may be dirty, scratched, or cracked. Please make sure the disc is inserted right side up, and the disc is clean, or else replace the disc.

The DVD stops playing. The video skips or the sound is abnormal.

- A possible cause for this problem may be that the disc is not in good condition and has cracks or scratches on its surface. Please try to clean or replace the disc. Another possible cause is that the DSM-320RD is located too close to an amplifier. If this is the case, please move any speakers further away from the DSM-320RD.

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.

The volume and mute buttons on the remote control don't work when playing content that was encoded in 5.1 surround.

- The volume can only be adjusted on your digital stereo receiver.

Troubleshooting (continued)

I can't find any of my music, photos, or video.

- 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-320RD 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.

Troubleshooting (continued)

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

■ The DSM-320RD 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 29 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 128 kbps or higher, with a sample rate of 44.1 kHz.

I am not able to play certain media files.

■ The DSM-320RD supports most industry standard file formats but even supported file formats can be encoded in ways that are not supported. Try exporting media with different encoding settings or using different software applications to encode your files.

Troubleshooting (continued)

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.
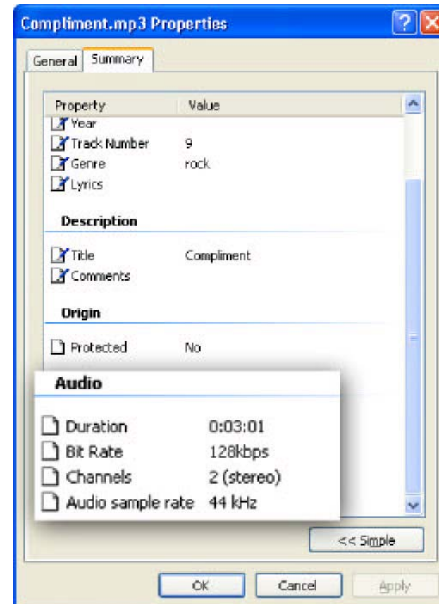
I created a playlist on my computer, but it doesn't appear on my media player.

■ Make sure the playlist file is located in a folder shared by your media 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-320RD?

■ Under normal circumstances, you should not need to reset your media player. However, to fully reset the media 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, press the **SETUP** button and select **Version**. The firmware version will be listed.

Troubleshooting (continued)

I am unable to access Rhapsody™ content.

- Make sure Rhapsody™ is running on a computer connected to the network and check your network connections.

- Verify that the UPnP Server has been started in Rhapsody™. Within the Rhapsody™ application on your computer, go to **Options**, select **User Settings**, and go to the **UPnP** tab. If the Status is stopped, click on the **Start** button. Be sure to check **Start UPnP server once logged in**.

- Make sure you are able to play audio from within the Rhapsody™ application on the computer. If you are unable to play Rhapsody™ content from the computer, check your network and Internet connection. If your Internet connection is ok but you are still unable to play Rhapsody™ content, please contact Rhapsody™ support. To contact Rhapsody™ support, go to **http://www.listen.com/dlink** and click on Contact Us at the bottom of the page.

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 media 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 media 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.

Troubleshooting (continued)

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

■ If you are sharing gigabytes of content, especially videos, 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 DSM-320RD will not play my AVI files.

■ Make sure that your AVI files are smaller than 2GB. AVI files have a limitation of 2GB. This is a limitation set in the AVI standard.

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 192 kbps)
- WAV & AIFF (AIFF files must be encoded in PCM format only.)
- WMA (Does not support WMA lossless, WMA Pro)
- MPEG 1 and MPEG 2 - Audio using the file extension .mp3
- OGG Vorbis - Audio using the .ogg extension

Supported Image Formats*:
- JPEG (Grayscale, RGB, YCbCy) (*Does not support CMYK, YCCK*)
- BMP (Non-compressed)
- PNG (Non-alpha channel only)
- TIFF (RGB) *(Does not support CMYK, YMC, YMCK, KCMY)*
- JPEG2000
- GIF (*Does not support animated GIF's*)

Supported Video Formats*:
- MPEG 1 (up to 8Mbps)
- MPEG 2 (up to 8Mbps)
- MPEG 4 (ASP - Advanced Simple Profile)
- XVID (with MP3 and PCM)
- AVI (MPEG4 layer only, does not support uncompressed AVI)

Audio Playlist Formats*:
- M3U
- PLS

Outputs:
- RCA audio jacks
- RCA video
- S-Video
- Component Video
- Optical Digital Audio
- Coax Digital Audio

* Supported file types for DVD and Card reader may vary. Please see page 68 for a full list of supported file types.

Technical Specifications (continued)

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) and WPA-PSK
- Up to 128-bit encryption

Configuration:
- UPnP-AV 1.0 Enabled
- INMPR Compliant

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 media access and firmware updates)*

Power Source:
- 100~240V 50/60Hz, 0.5A Max.

Power Consumption:
- 10W

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 and photos all the time, 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 or photos on your DSM-320RD. 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**.

Appendix (continued)

Wireless Installation Considerations

The D-Link® DSM-320RD 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-320RD and other network devices to a minimum. Each wall or ceiling can reduce your DSM-320RD'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.

109

Appendix (continued)
Audio and Video Cables Guide

DIGITAL AUDIO — COMPOSITE VIDEO — S-VIDEO — COMPOSITE VIDEO — COMPOSITE VIDEO — COMPONENT VIDEO — ETHERNET PORT

COAX   OPTICAL   S-VIDEO   VIDEO   L   R   Y   PB   PR   LAN
S/PDIF   S-VIDEO   VIDEO   AUDIO   PROGRESSIVE/COMPONENT
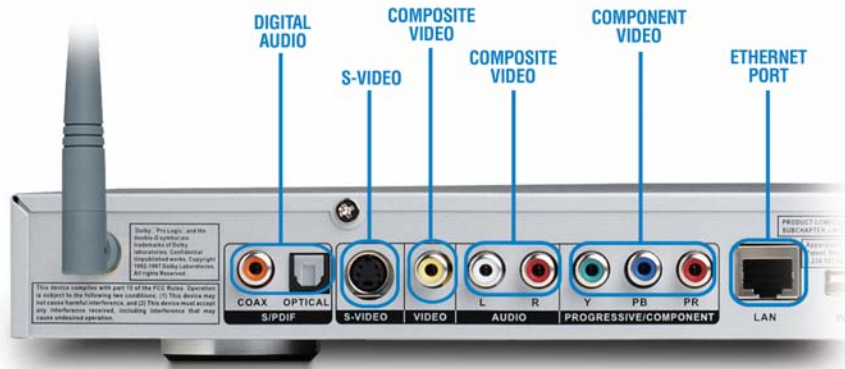
Good

Composite Audio	Composite Video
Most common audio cable. Offers good quality audio. (also known as RCA Audio)	Most common video cable. Sends all video information through a single wire. (also known as RCA Video)

Better

Optical Digital Audio	S-Video
Sends audio signals through a beam of light, leaving no room for interference.	By splitting video signal into two: one for brightness (luminance) and one for color (chrominance), it delivers a marked improvement over Composite cables.

Best

Coaxial Digital Audio	Component Video
Sends audio signals digitally and can handle a wider range of information for clean, crisp audio.	By splitting video signal into three: one for brightness (luminance) and two for color (chrominance), they deliver a great picture with minimum interference.

110

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-320RD. 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-320RD.

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.

Glossary (continued)

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-320RD 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-320RD supports 64-bit and 128-bit encryption.

Wired: Devices networked via Ethernet cabling.

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

WPA-PSK (Wi-Fi Protected Access with Pre-Shared Key): A security protocol for wireless local area networks that requires that the router and DSM-320RD have the same pre-shared key in order to establish a wireless connection.

Glossary (continued)

Music

AIFF is short for **A**udio **I**nterchange **F**ile **F**ormat, an audio format that was developed by Apple Computer and is the standard audio format for Macintosh computers. AIFF use a **.AIF** or **.IEF** extension.

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.

OGG or OGG Vorbis is an open source audio compression format. The name OGG is derived from term in a network game and Vorbis from a character in a novel. OGG is used for mid to high quality (8kHz-48.0kHz, 16+ bit, polyphonic) audio and music at fixed and variable bitrates from 16 to 128 kbps/channel.

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

WAV is the file extension for PC sound files and was developed by Microsoft and IBM. WAV sound files end with a .wav extension and are compatible with Windows applications supporting audio.

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.

Glossary (continued)

Photo

BMP: The standard bit-mapped graphics format used in the Windows environment. By convention, graphics files in the BMP format end with a .BMP extension.

GIF: Pronounced jiff or giff and stands for **g**raphics **i**nterchange **f**ormat, it is a bit-mapped graphics file format. GIF supports color and various resolutions. It uses data compression, but it is limited to a 256-color palette.

JPG: Short for **J**oint **P**hotographic **E**xperts **G**roup, and pronounced jay-peg. JPEG is a lossy compression technique for color images. Although it can reduce files sizes to about 5% of their normal size, some detail is lost in the compression.

JP2: JP2 is the file extension for the new image format called JPEG2000 based on the latest image compression technology.

PNG: Short for **P**ortable **N**etwork **G**raphics, is a bit-mapped graphics format similar to GIF. In fact, PNG was approved as a standard by the World Wide Web consortium to replace GIF because GIF uses a patented data compression scheme. In contrast, PNG is patent and license-free.

TIFF: Acronym for **T**agged **I**mage **F**ile **F**ormat, and is one of the most widely supported file formats for storing bit-mapped images on personal computers. TIFF graphics can be any resolution, and they can be black and white, gray-scaled, or color. Files in TIFF format often end with a .tif extension.

Glossary (continued)

Video

AVI: Short for **A**udio **V**ideo **I**nterleave, the file format for Microsoft's Video for Windows standard. See under Video for Windows.

DivX: Is a video format that is MPEG-4 compliant and widely used on the Internet for encoding video files.

MPEG: Short for **M**oving **P**icture **E**xperts **G**roup, and pronounced "empeg". MPEG generally produces better-quality video than competing formats. MPEG achieves high compression rate by storing only the changes from one frame to another, instead of each entire frame. MPEG uses a type of lossy compression, since some data is removed. However, the reduction in the resulting video quality is minimal. There are three major MPEG standards: MPEG-1, MPEG-2 and MPEG-4.

- The most common implementations of the MPEG-1 standard provide a video resolution of 352-by-240 at 30 frames per second (fps). MPEG-1 is used with Video CDs (VCD) and results in video quality slightly below the quality of a VCR video.

- MPEG-2 offers higher resolution with CD-quality audio. This is sufficient for all major TV standards, including NTSC, and even HDTV. MPEG-2 is used by DVDs. MPEG-2 compresses a 2 hour video into a few gigabytes of data on a single disc.

- MPEG-4 is a video compression standard based on MPEG-1 and MPEG-2. Videos encoded with MPEG-4 technology are considerably smaller than videos encoded with MPEG-1 or 2. MPEG-4 was standardized in October 1998.

QuickTime: An audio and video compression technology developed by Apple Computer and is widely supported on Macintosh and Windows PC computers. The latest QuickTime implementation is MPEG-4 compliant.

XviD: XviD is an ISO MPEG-4 compliant video codec. It's an open source project which is developed and maintained by many people from all over the world.

Warranty
USA Only

Subject to the terms and conditions set forth herein, D-Link Systems, Inc. ("D-Link") provides this Limited warranty for its product only to the person or entity that originally purchased the product from:

- D-Link or its authorized reseller or distributor and
- 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, addresses with an APO or FPO.

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

1-Year Limited Warranty for the Product(s) is defined as follows:

- Hardware (excluding power supplies and fans) One (1) Year
- Power Supplies and Fans One (1) Year
- Spare parts and spare kits Ninety (90) days

D-Link's sole obligation shall be to repair or replace the defective Hardware during the Warranty Period at no charge to the original owner or to refund at D-Link's sole discretion. Such 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 in its sole discretion 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 from the date of original retail purchase. If a material defect is incapable of correction, or if D-Link determines in its sole discretion that it is not practical to repair or replace the defective Hardware, the 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 ("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 Warranty Period, the magnetic media on which D-Link delivers the Software will be free of physical defects. D-Link's sole obligation shall be 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 at D-Link's sole discretion. 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. Software will be warranted for the remainder of the original Warranty Period from the date or original retail purchase. 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 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.

- The original product owner must obtain a Return Material Authorization ("RMA") number from the Authorized D-Link Service Office and, if requested, provide written proof of purchase of the product (such as a copy of the dated purchase invoice for the product) before the warranty service is provided.

116

Warranty (continued)
USA only

- 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, with shipping charges prepaid. Expedited shipping is available if shipping charges are prepaid by the customer and upon request.

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: This limited warranty provided by D-Link does not cover: Products, if 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; 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. Repair by anyone other than D-Link or an Authorized D-Link Service Office will void this 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 NINETY (90) DAYS. 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 the product owner may also have other rights which vary from state to state.

Warranty (continued)
USA only

Trademarks: D-Link is a registered trademark of D-Link Systems, Inc. Other trademarks or registered trademarks are the property of their respective manufacturers or owners.

Copyright Statement: No part of this publication or documentation accompanying this Product may be reproduced in any form or by any means or used to make any derivative such as translation, transformation, or adaptation without permission from D-Link Corporation/D-Link Systems, Inc., as stipulated by the United States Copyright Act of 1976. Contents are subject to change without prior notice. Copyright© 2002 by D-Link Corporation/D-Link Systems, Inc. All rights reserved.

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.

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment; such modifications could void the user's authority to operate the equipment.

FCC Caution:
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.
IMPORTANT NOTE:
FCC Radiation Exposure Statement:
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. The antenna(s) used for this equipment must be installed to provide a separation distance of at least eight inches (20 cm) from all persons.
This equipment must not be operated in conjunction with any other antenna.

For detailed warranty outside the United States, please contact 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.

Contacting 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
email: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 12:00am EST

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

03/15/05

Free Manuals Download Website

http://myh66.com

http://usermanuals.us

http://www.somanuals.com

http://www.4manuals.cc

http://www.manual-lib.com

http://www.404manual.com

http://www.luxmanual.com

http://aubethermostatmanual.com

Golf course search by state

http://golfingnear.com

Email search by domain

http://emailbydomain.com

Auto manuals search

http://auto.somanuals.com

TV manuals search

http://tv.somanuals.com