

VirtualDrive[®] Pro

Version 11.5

for Windows[®] XP, Vista, 2000 & Server 2003

User's Guide

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FarStone Technology, Inc.

U.S. Headquarters:

6 Morgan, Suite 160
Irvine, CA 92618
Phone: (949) 458-3666
Fax: (949) 458-3633

Asia-Pacific Offices

10F-1B, No. 207, DunHua North Rd., Taipei, 105, Taiwan
Phone: 886-2-2546-9898
Fax: 886-2-2546-3838

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Chapter 1: Product Overview

VirtualDrive Pro is a CD emulation utility that creates disc images, or “virtual CDs” from game and application CDs and DVDs. This lets you run games and applications without loading the physical disc in a CD/DVD-ROM drive. Your virtual CDs (VCDs) play when inserted in any one of up to 23 “virtual drives” that you configure in the software and that appear as drive letters in Windows Explorer. VirtualDrive Pro includes a full version of Virtual Hard Drive for RAM disk creation. A RAM disk drive operates in a computer’s physical memory and functions like an extra hard drive, only with much faster access rates and without wear and tear on physical parts.

1.1 Product Features

- **CD/DVD Support**
VirtualDrive supports CD-ROM, CD Extra, CD Text, audio CD, mixed-mode CD, photo CD, video CD, DVD-ROM, multi-session CD, and unprotected DVD video.
- **Copy Protection Support**
VirtualDrive Pro is compatible with many (but not all) titles using SafeDisc, SecuROM, LaserLock, StarForce, and other protection types.
- **Full Windows Integration**
The user interface is integrated with Windows Explorer and Device Manager. You can insert, eject, and browse your VCDs in a familiar environment.
- **VCD Cabinet**
Sort your virtual CDs in your VCD library and place them in customized “cabinets,” or categories.
- **Image Compression**
VirtualDrive Pro uses a high-performance compression engine when it builds VCDs. VCDs are automatically decompressed when you access them.
- **Optimized Disc Performance**
Virtual CDs have access rates up to 200 times faster than physical CDs in CD-ROM drives.
- **Optimized Application Performance**
The included copy of Virtual Hard Drive Pro lets you run files and applications in physical memory, boosting performance by bypassing the slower mechanical hard drive.

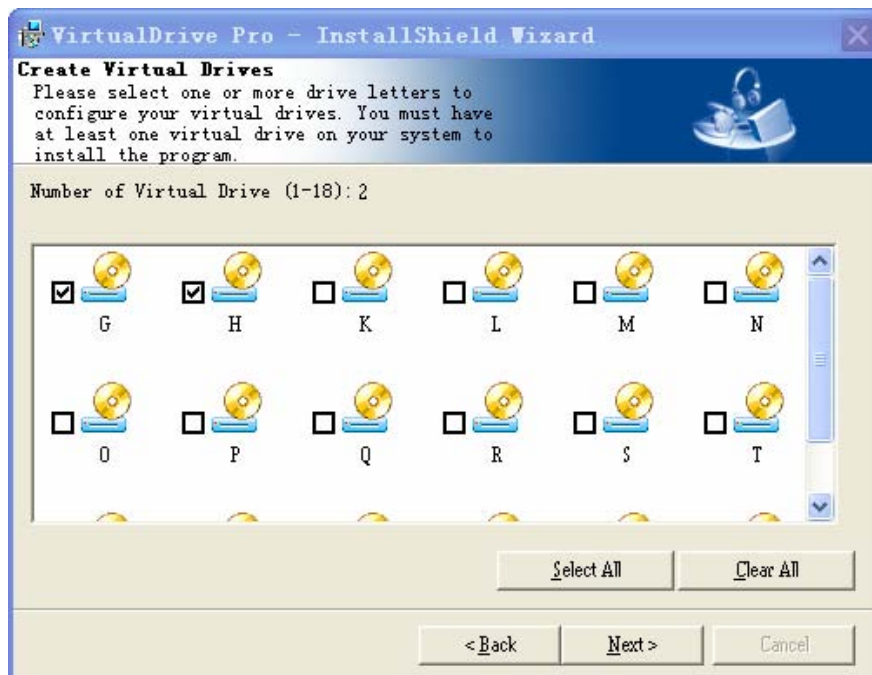
Chapter 2: Installation

2.1 System Requirements

- Windows 2000, XP (including 64-bit systems), Server 2003 (including 64-bit systems), or Vista (32-bit and 64-bit systems)
- CD/DVD drive or recorder
- 50 MB of hard drive space
- 256 MB RAM or more
- Intel Pentium (or compatible) 233MHz processor or better

2.2 Installing VirtualDrive Pro

1. Close any running applications.
2. Click on the VirtualDrive Pro executable file.
3. If you accept the terms of the license agreement, select **I Accept the License Agreement** and click **Next**.
4. Enter your Name, Organization (optional), and serial number. Click **Next**.
5. The installation wizard will recommend a default folder for VirtualDrive Pro program files. If you would like to store program files in another location, select **Change** to open the file browser and designate a new folder.
6. Confirm the setup configuration and click **Next**.
7. Select the number of virtual drives you would like to configure on your system and click **Next**. You must have at least one virtual drive for the program to install.



8. Select the appropriate checkbox to place a program shortcut on your desktop.
9. Click **Finish**. You must reboot your computer before launching VirtualDrive Pro.

2.3 Uninstalling VirtualDrive Pro

Close all running programs, including VirtualDrive Pro.

To launch the VirtualDrive Pro uninstall wizard:

- a. In the Windows taskbar, select **Start** → **All Programs** → **VirtualDrive Pro** → **Uninstall VirtualDrive Pro**.

Or:

- b. Select **Start** → **Control Panel** and double click the **Add or Remove Programs** icon to open the **Add or Remove Programs** screen. From the list, select **VirtualDrive Pro** → **Add/Remove**.

The uninstall program will remove all files created by VirtualDrive Pro, except image files (VCDs with the "VCD" or "D00..." extension), project files ("CIF" extension) and some log files that keep a record of the VCD list in your VCD library. These files can be deleted in Windows Explorer.




Note

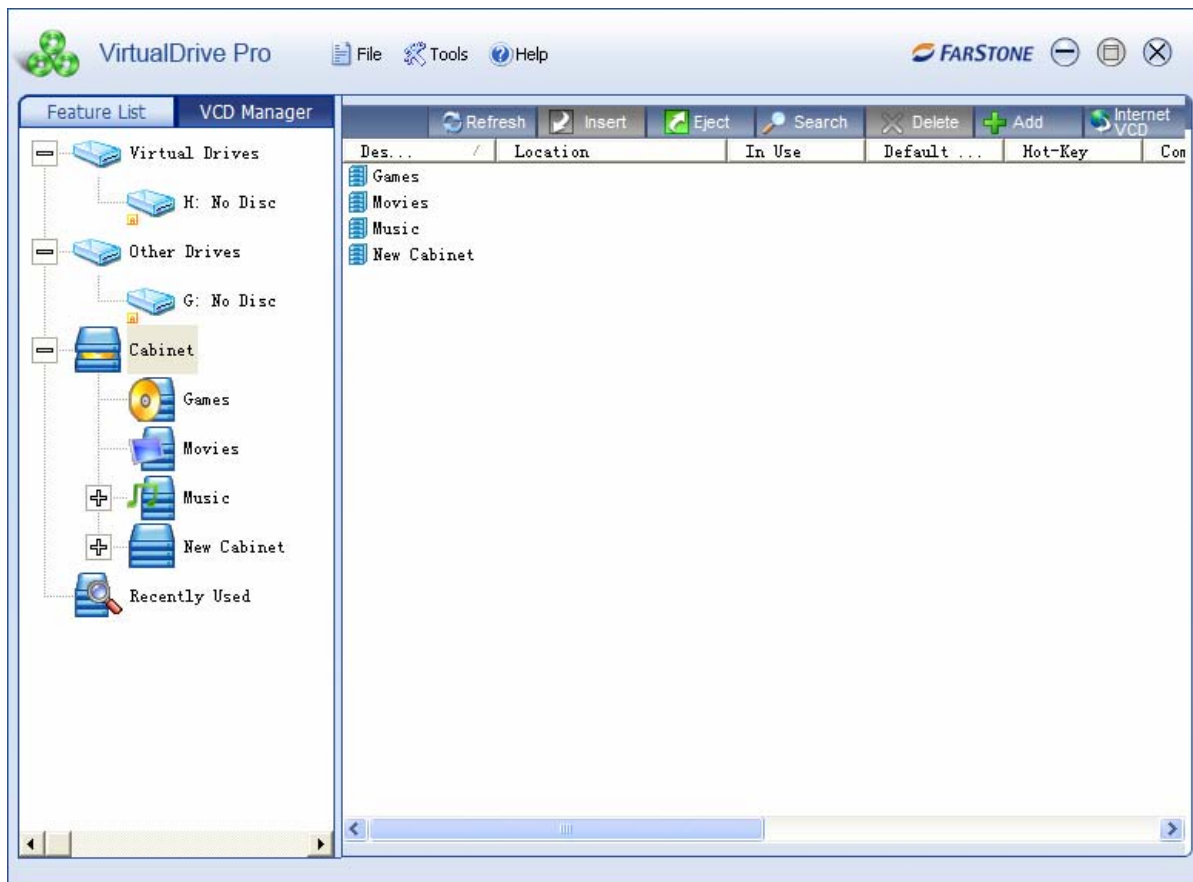
Select the corresponding checkbox to automatically delete VCD files and lists from your VCD Cabinets while uninstalling VirtualDrive Pro.

Chapter 3: Getting Started

3.1 Launching VirtualDrive Pro

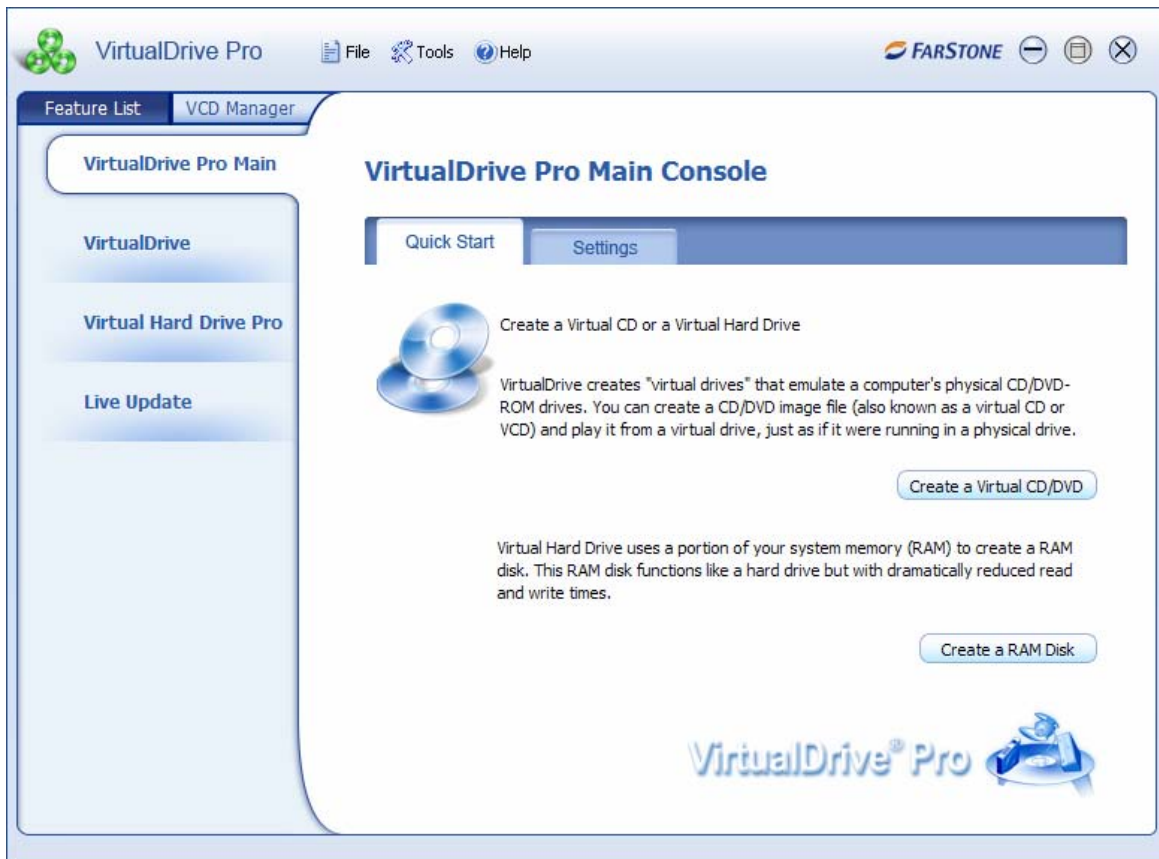
Double click the program icon  on the desktop, or select **Start → All Programs → VirtualDrive Pro → VirtualDrive Pro Manager**.

The **VCD Manager** lets you organize your virtual discs a VCD library, insert them into virtual drives for play, and open them up to examine their contents. You'll find more information on the VCD Manager in Chapter 3.



To view other functions of VirtualDrive Pro, click on the **Feature List** tab (under the VirtualDrive Pro logo in the upper left-hand corner). This will launch the Main Console, with shortcuts to virtual CD creation, RAM disk creation, and program settings. On the left side of the Main Console are buttons for the following program components:

- VirtualDrive
- Virtual Hard Drive Pro
- Live Update



A. VirtualDrive: Software that emulates your computer's CD/DVD-ROM drive, allowing you to run converted CD/DVD programs directly on your hard drive. Click on the VirtualDrive tab to:

- **Create a Virtual CD**
Make an image file from a physical CD/DVD.
- **Create a Virtual Drive**
Configure up to 23 virtual drives to play your virtual CDs (limited only by the number of available drive letters on your computer).

B. Virtual Hard Drive Pro: A RAM disk drive utility that lets you run files and applications in non-swappable physical memory. From the Virtual Hard Drive Pro screen you can:

- Create a RAM Disk
- Load a RAM Disk
- Save a RAM Disk
- Remove a RAM Disk
- Explore a RAM Disk

C. Live Update: Use this link to check for the latest program updates.

3.2 VirtualDrive Pro Start Menu

The VirtualDrive Pro icon should be displayed in your **Taskbar Notification** area.



Double click the icon to launch VirtualDrive Pro, or right click on the icon to open the VirtualDrive Pro **Start Menu**. The Start Menu offers a quick entry point to commonly used functions:

- **VirtualDrive Pro:** Select this option to launch VirtualDrive Pro.
- **Insert:** Select an image (VCD) to insert into a virtual drive. You can choose an image from your VCD library or from any other location on your hard drive.
- **Eject:** Click to eject a VCD from a virtual drive.
- **Browse:** View the contents of an inserted VCD via Windows Explorer.
- **Exit:** Select this option to quit VirtualDrive Pro.

3.3 VirtualDrive Pro Main Console

By default, the Main Console displays a **Quick Start** menu. Click on the **Settings** tab to change your preferences.

Quick Start

1. **Create a Virtual CD/DVD**
Refer to **Creating a Virtual CD** for details.
2. **Create a RAM Disk**
Configure a virtual hard drive in a designated amount of RAM.

Settings

1. **Global Settings**
 - a. **Show Animation when you insert or eject a VCD:** Select this checkbox to display the action of inserting or ejecting a VCD.
 - b. **Keep VCDs loaded upon system reboot:** Select this checkbox to keep VCDs loaded in VirtualDrive Pro when you restart your system.

Virtual Drive Settings

- c. If VirtualDrive Pro does not work with certain games or protected discs, you may want to change your device information.
- d. You can enable or disable Autorun in all drives on your system—virtual and physical.

Virtual Hard Drive Settings

- e. **Auto-load most recent image:** Automatically load the image that was last mounted in your RAM disk whenever you launch Virtual Hard Drive Pro.
- f. **Save image upon restart or shutdown:** Automatically save your last RAM disk image file to your hard drive whenever you turn off or reboot your computer.
- g. **Save image during hibernation:** Automatically save your RAM disk image whenever your computer goes into sleep mode.
- h. **Back up image before saving it:** Automatically back up your RAM disk data so that it is not lost in the event of power loss or a system crash.
- i. **Save the image every "N":** Automatically save your RAM disk at specified intervals.

Serial Numbers and Support

To activate a full version of VirtualDrive Pro, click **Help** → **Evaluation Starter** and enter your serial number. A serial number can be used on only one computer on any given LAN.

FarStone posts game and disc support information at www.farstone.com/gamecenter. The Game Center link is also available from the VirtualDrive Pro Help menu.

Should you experience a problem with your software, FarStone encourages you to submit a support ticket at www.farstone.com/support.

3.4 Creating a Virtual CD

A virtual CD or VCD (.VCD extension) is an image file created from a physical disc. VirtualDrive Pro lets you build VCDs from the following disc types:

- CD-ROM
- DVD-ROM
- Mixed-mode CD
- Video CD
- Unprotected (non-CSS) video DVD
- CD Extra
- CD-Cops
- Audio CD
- Photo CD
- Multi-Session CD
- CD-Text

VirtualDrive Pro supports many (but not all) DVD-ROM games, encyclopedias, multimedia content, and other large file formats.

Building an Image from CD or DVD-ROM, Video CD/DVD, or Photo CD

1. Insert the application disc. In the Main Console, select **VirtualDrive** → **Create Virtual CD**.
2. Select the physical drive from which you will build an image and click **Next**.
3. If wish to change the default path for saving your VCD, click the browse button, select a location, enter a name for your VCD, and click **Next**.
4. You can change the default settings for your VCD build:
 - a. Choose **Intelligent Extraction** if you don't know what type of protection is on your CD/DVD.
 - b. Choose **Other Protection Type** if you would like specify a protection type in the dropdown list.
 - c. Select **Use Data compression** to save hard drive space; however, this option will extend the time it takes to build a VCD.
5. Click **Advanced** to change the default file name of your VCD and enter a password, description, etc.
 - a. **CD Label**: Show the name of your VCD.
 - b. **Description**: Add a description of your VCD.

- c. **Author:** Enter the name of the CD's publisher or author (i.e., FarStone Technology).
- d. **Comments:** Add comments to your VCD.
6. (Optional) You can set a password for a VCD. You will need to enter this password whenever you access the VCD.
7. (Optional) If the source CD does not have an Autorun file, you can specify a program to run the VCD when you insert it in a virtual drive. Click the browse button to select the program you would like to use.
8. Once you have modified the properties of the VCD you are about to create, click **Next** to begin the build process.



Note

For your VCD to work, you may still have to install the game or supplemental software required to run the disk-based application that you have converted into a VCD.


Building an Image from Audio CD

1. Insert the application disc. In the Main Console, select **VirtualDrive → Create Virtual CD**.
2. Select the physical drive from which you will build an image and click **Next**.
3. To change the default save path, click the browse button, select a location, enter a name for your VCD, and click **Next**.
4. Select the tracks you want to include in your audio VCD.



Note


If your CD player is running, the Select Tracks window will not be able to show the tracks list.

Select the **Preview Track Play** button  to listen to the track.

5. Click **Next** to begin building your audio VCD.

Building an Image from a Mixed Mode CD

1. Insert the application disc. In the Main Console, select **VirtualDrive → Create Virtual CD**.
2. Select the physical drive from which you will build an image and click **Next**.
3. To change the default save path, click the browse button, select a location, enter a name for your VCD, and click **Next**.
4. You can change the default settings for your VCD build:
 - a. Choose **Intelligent Extraction** if you don't know what type of protection is on your CD/DVD.
 - b. Choose **Other Protection Type** if you would like specify a protection type in the dropdown list.
 - c. Select **Use Data Compression** to save hard drive space; however, this option will prolong the build process.
5. Click **Advanced** to change the default file name of your VCD and enter a password, description, etc.
 - a. **CD Label:** Show the name of your VCD.
 - b. **Description:** Add a description for your VCD.

- c. **Author:** Enter the name of the CD's publisher or author (i.e., FarStone Technology).
- d. **Comments:** Add other comments to your VCD.
6. (Optional) You can set a password for a VCD. You will need this password to access the VCD.
7. (Optional) If the source CD does not have an Autorun file, you can specify a program to run your VCD when you insert it in a virtual drive.
Select the audio tracks you want to include in your VCD. Select the **Preview Track Play** button  to listen to the track.



Note

If your CD player is running, the Select Tracks window will not display the track list.

8. Click **Next** to begin the build process.

3.5 Creating a Virtual Drive

A virtual drive emulates the functionality of a physical drive and appears as a drive letter in Windows Explorer. To create a virtual drive:

1. In the Main Console, select **VirtualDrive → Create a Virtual Drive**.
2. Select one or more available drive letters and click **Start**.

Note

You can create up to 23 virtual drives, depending on available drive letters.

3.6 Custom Backup

VirtualDrive Pro lets you create custom data and UDF virtual CDs.

Creating a Project

You can burn a selection of files to CD/DVD or save them as a virtual CD (VirtualDrive image file). Because the same method is used to create all disc types, we will describe only one method.

Select any of the following options from the CD/DVD Burning Manager:

1. **File → New → Data CD/Data DVD**, or;
2. Click the small triangle to the right of the **New** button, then select **Data CD/Data DVD**, or;
3. Right click in the Project Pane and select **New → Data CD/Data DVD**.

For more information on disc types, please refer to **Definitions** in the appendix.



Note

With a UDF CD, CD/DVD burning uses Unicode in the file name and supports only 127 characters.

An unclosed CD cannot be used for a multi-session disc.

Tip: Windows Explorer lets you view only the last session of a multi-session disc. With VirtualDrive Pro, you can view all sessions through **CD/DVD Burning Manager → Tools → Device Info → Disc Contents**.

Adding Files and Folders


Use any of the following methods to add files and folders to a project:

- Drag files and folders from the Source Pane or from Windows Explorer to the Current Project Pane, or use a copy and paste method.
- Select files and folders in the Source Pane. Right click on the selected objects and click **Add**.
- There are several other ways to add files and folders by right clicking.



Note

As you add files to your project, you can preview documents, photos, videos, and audio files by double-clicking on their icons in the Source Pane.

The horizontal scale bar at the bottom of the Project Pane displays the total size of the project. The default scale is set automatically according to the project type you are creating. You can change the scale by clicking the  icon in the left corner of the toolbar.

Working with Project Files and Folders

Once you have added one or more files to your project, you can perform the following operations:

1. **Create a new folder**
 - a. Click anywhere in the Current Project Pane and choose **Edit → New Folder**.
2. **Delete files and folders:** You can add or remove any files and folders from your project.
 - a. Select a file or folder and choose **Edit → Delete** from the menu bar.
 - b. Select the file or folder in the project and press the **Delete** key.
3. **Rename files and folders**
 - a. Select a file or folder and choose **Edit → Rename** from the menu bar.
4. **View File Properties**
 - a. Right click on a file or folder anywhere in the CD/DVD Burning Manager and select **Properties**. A dialog box will show general information about the file, including type, location, size, time created, and attributes.

Saving a Project

1. Choose **File → Save As** from the menu bar.
2. Type in a file name and select a location for the file.
3. Click **Save**.

Opening a Project

1. Click **File → Open** from the menu bar and browse for the project you want to open.

Renaming or Deleting a Project

You can rename a project in the Project Pane. This will be your CD label when you burn the project to CD/DVD.

1. Select the project and click **Edit → Rename** from the menu bar.

To delete a project from the Project Pane (this does NOT remove the file from your hard drive):

1. Select the project and click **Edit → Delete Project** from the menu bar.

Setting Project Properties

The project properties dialog box displays the general, file system, CD archive, and audio properties of a project.

To view project properties:

1. Select the project and click **File → Properties** from the menu bar.

Property Types

1. **General**
Edit the CD label and view the type, location, size, and attributes of the project, the number of files and folders it contains, etc.
2. **File System**
Set the disc file system as UDF, ISO9660, or ISO9660+Joliet. Edit volumes, serial number, CD publisher, etc.



Note

1. An ISO9660 disc has the best compatibility with other operating systems and devices, and can be read from all operating systems. However, ISO9660 (+Joliet) discs have the following limitations:
 - The folder depth is restricted to 8 levels, including the root directory.
 - ISO9660 supports file names in 8.3 format: 8 characters for the file name and 3 characters for the file extension.
2. If you choose UDF, the burned disc can only be used on operating systems with a UDF file system reader installed. Currently, Microsoft Windows 2000 (SP3), Windows XP and later versions support UDF discs.

3. **Advanced**
Set the disc format and times.

Format

CD-ROM Mode 1: CD-ROM Mode 1 is used for error-intolerant discs like software CDs, game discs, and documentation discs. Data is stored in sectors, with each sector holding 2,352 bytes of data. For Mode 1 CD-ROM data storage, the sectors are broken down even further. 2,048 bytes are used for the expected data, while the other 304 bytes are devoted to Sync, Header, EDC (Error Detection Code) and ECC (Error Correction Code).

Create Time

Use the date and time of the original file: Sets the date and time stamps of the files and folders on the burned disc as the date when the source files or folders were created.

Use the current data and time: Sets the date and time stamps of the files and folders on the burned disc as the date and time when the disc was burned.

Use this time: Lets you specify a date and time stamp for the files and folders on the burned disc.

Burning a Project to Disc

1. Set the **Default Recorder** to a physical CD/DVD recorder in your computer.
2. To launch the **Burning Setup** window, select **File** → **Burn** from the menu bar.
3. The Burning Setup dialog box will display. Choose your settings and click **Record**.

Note

If the Autorun function of your recorder is enabled, an Autorun warning dialog box will appear before the Burning Setup dialog box is displayed.

4. Click **OK** to end the burning process.

Using Multiple Discs for a Project

Burning Data onto Multiple Discs

VirtualDrive Pro supports split-volumes. When your data exceeds disc capacity, VirtualDrive Pro will burn the project onto multiple discs. Later, you will need to insert only the first volume of a multiple disc set to view and retrieve data.

1. Create a Data CD/DVD project in **CD/DVD Burning** or **Easy Backup**.
2. When you burn the project to disc, VirtualDrive Pro will automatically divide the data and prompt you to tag each volume.
3. After the first volume has been burned, VirtualDrive Pro will prompt you to insert more discs, as needed.

Note: Only **DATA CD/DVD** projects can be burned onto multiple discs and only when the file system of the disc is set as an ISO 9660 disc. You can set the disc file system in the **Disc properties / File System** area.

Retrieving Data from Multiple Discs

1. When you insert the first volume of a multiple disc set, the integrated tool retriever will run automatically. If the retriever does not run automatically, you can run it manually by launching START.EXE on the disc.
2. Clicking on the disc entry in the left pane will display all disc data in the right pane, including data from other discs in the set.
3. Select the file(s) or folder(s) to be retrieved by checking the corresponding check boxes.
4. Click the **Retrieve** button to launch the **Data Retrieve** window. Select a location to save the retrieved data.


Searching for Files on Multiple Disc Sets

1. Click the **Search** button to launch the search window.
2. Enter a file name in the search box. You should enter a full file name with its file extension, but can use "*" as the extension to search for all file types.
3. Choose a search mode and click **Search**.
4. Once the search results are displayed, select the file and click **Retrieve** to save it to your hard drive.

Using a Virtual Drive to Retrieve Data on Multiple Disc Sets

1. Copy the image file on each disc to the same location on your hard drive. Typically, the first volume of the entire image (the image file copied from the first disc) is named as "DATA_CD.VCD.000", and the second as "DATA_CD.VCD.001".
2. Insert the first volume into a virtual drive. You can now work with the image as you would with any other virtual CD created in VirtualDrive Pro.

Burning a Project to Virtual CD (VCD)

1. To create a virtual CD from the selected files, set the default recorder to the **Image Recorder**. Select **File → Burn**.
2. Click the browse button  and select a location to save the VCD. Name the VCD and click **Next**.
3. Enter a description of the VCD in the description box.
4. (Optional) You can set a password. If you do, you will need the password to insert the VCD image or view its contents.
5. (Optional) If the source CD does not have an Autorun file, you can specify a program to run the VCD when it is inserted.
6. Using data compression will save hard drive space but extend the build time.
7. A dialog box will display the attributes of the VCD about to be created. Select **Burn** to begin the build process.

3.7 Restoring a Virtual CD to CD/DVD

You can restore a Virtual CD by burning its contents back to disc. This will recreate the original files you used to build the image.

1. From the VirtualDrive Pro Main Console, select **Image to Disc**.
2. Select the VCD you want to burn and click **Open**. Only one image can be selected at a time.
3. The selected VCD and its relevant information will be displayed in a dialog box. To replace the selected VCD with another image, right click in the dialog box and select **Add**.
4. Click **Next**, choose your burning settings, and click **Burn**.

3.8 Burning Settings

Disabling the CD/DVD Drive Autorun Feature

If the Autorun function of your CD/DVD disc drive is enabled, a warning dialog box may appear. This can cause an error when you try to erase or burn a disc.

Click the first radio button in this dialog box to disable the auto insert notification. This will log you off of Windows, so be sure to first save your open documents and close all applications.

If you have canceled out of the dialog box, you can disable the Autorun function in the CD/DVD Burning Manager. Choose **Tools** → **Options** → **General** → **Disable CD-ROM drive Autorun function**.

Choosing Burning Settings

You must choose your burning settings before you can burn a disc from a project, a VCD, or from another disc.

- **Recorder:** Shows the recorder to be used for burning. Click the **Device Info** button to view information about the recorder.
- **Write Method:** Available write methods include DAO, SAO, TAO, and Raw. Write methods will vary according to operation you wish to perform.

Tips

- ★ **Disc-at-Once (DAO):** Writes all data onto CD in a single operation, starting with lead-in and ending with lead-out (start and end zone). Because there is no gap between tracks, a disc cloned with Disc-at-Once is exactly the same size as the source disc. If you cancel this operation after the lead-out has been recorded, you will not be able to re-use the disc.
- ★ **Track-at-Once (TAO):** Writes data to disc in multiple passes and allows you to record a single data or music track at a time. The lead-in and lead-out are written after all tracks have been recorded. Tracks recorded in Track-at-Once mode are separated by gaps of two to three second.
- ★ **Session-at-Once (SAO):** Writes data to disc in a single operation and finalizes the session. A Session-at-Once recording is similar to Disc-at-Once, except that the disc is not closed, allowing you to write another session on the disc at a later date. Session-at-Once is typically used to make a multi-session disc. If you are making a music CD, this option eliminates the two-second gap between tracks and write-protects the CD.
 - **Write Speed:** We recommend the Best Speed option.
 - **Number of Copies:** Select the number of discs to be burned.
 - **Buffer Under-Run Protection:** Select this option to reduce buffer under-run errors during the recording process (see below).

Tip

- ★ **Buffer Under-Run** errors occur when the data transfer rate is slower than the write speed to CD/DVD. In the event of a system slowdown or interruption, the CD/DVD recorder buffer fills with data. A buffer under-run occurs if the buffer is emptied before the system can recover. Buffer-under-run technology temporarily stops the recorder's laser without damaging the CD or DVD.
 - **Close CD:** Check this box to close the disc after recording. A closed disc has better compatibility on different computers and devices, and can be read on most CD/DVD drives. Once the disc is closed, no track or session can be added.
 - **Verify Data after Recording:** Check this box to allow recorded data verification for accuracy. Music CDs do not have this option.
 - **Burn Mode:**
 - **Test:** Checks for errors that occur during the burning process. No physical disc is needed for this test. Choose this mode if:
 - You are not sure whether the disc and the recorder are compatible, or;
 - You are not sure if the burning settings are correct.
 - **Test+Burn:** Simulates the burning process. If no errors occur, it then burns data to disc.
 - **Burn:** Burns data to disc immediately.

3.9 Cloning a CD/DVD

You can make an exact copy of a CD/DVD on another recordable disc.

1. Insert a blank disc into your CD/DVD recorder and insert the source disc into your other CD/DVD-ROM drive.
2. From the drop-down menu in the dialog box, select the drive loaded with the source disc.
3. Other options in this dialog box include:
 - **Disc Information:** View disc type, number of sectors, disc size, time and sessions, tracks, start sector, and end sector of the source disc.
 - **Read Speed:** For best results, choose the Best Speed option.
 - **Ignore read errors:** Checking this box will set the burner to ignore read errors from the source disc.
 - **On-the-fly:** Checking this option enables quick cloning.



Note

If the on-the-fly option is checked, data will be taken directly from the source disc and burned on the target disc.

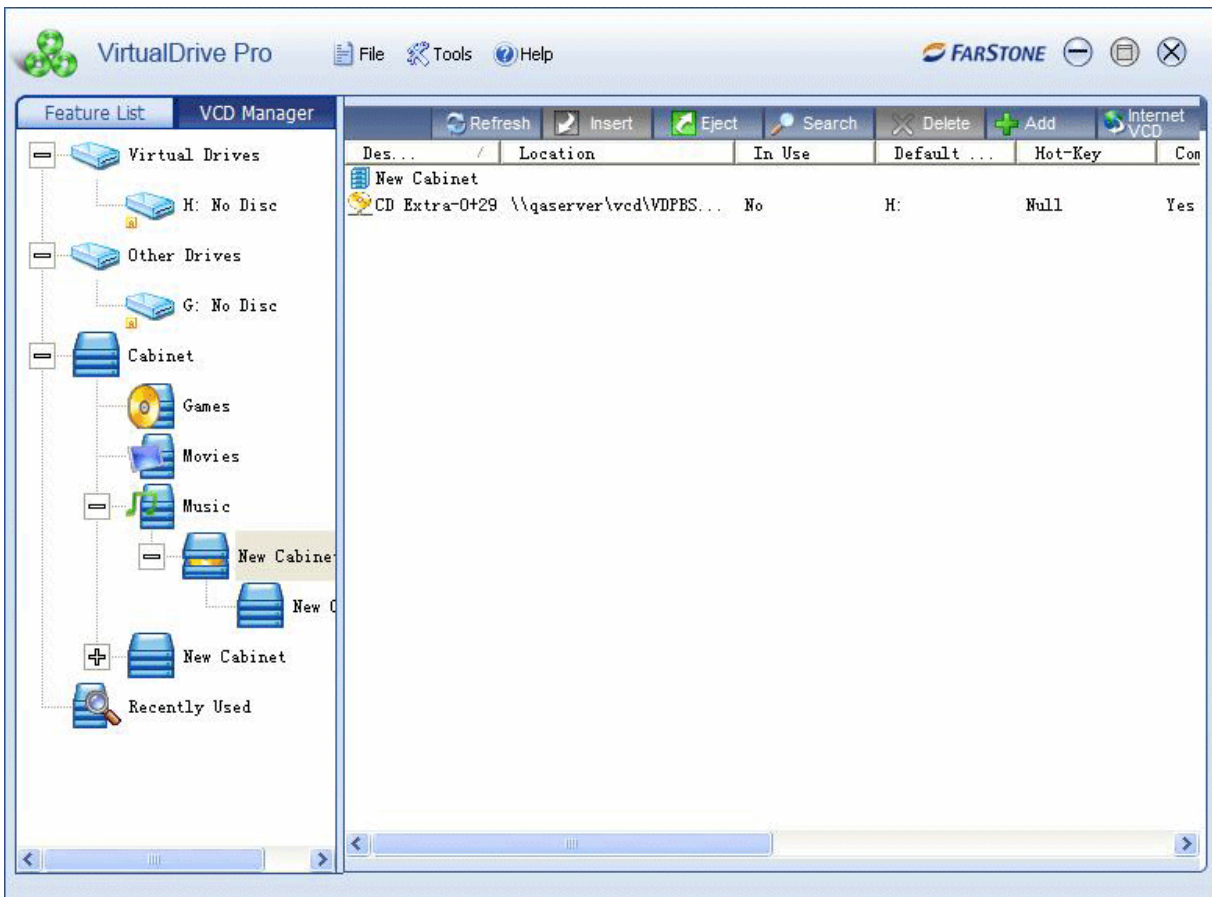
If on-the-fly is not checked, data from the source disc will first be compressed as an image and stored in a temporary files folder. The original contents of the source disc will then be burned to the target disc.

This option is not available if your computer has only one CD/DVD-ROM.

Click **Next** to display a dialog box. Choose your burning settings and click **Burn**.

3.10 The VCD Manager

Click the **VCD Manager** tab in the upper left-hand corner of the software interface.



The left window will display a directory tree of:

- All CD/DVD drives on your system, physical and virtual
- All VCD cabinets, in which you can organize your virtual CDs

Right click on a VCD to view its properties, password information, to rename a VCD, etc.

Using Virtual Drives in the VCD Manager

Your virtual drives are displayed in the left window of the VCD Manager. Right click on a Virtual Drive icon to view the following options:

- **Eject All:** From the top-level **Virtual Drives** icon, you can eject all VCDs from all your virtual drives.
- **Eject:** Eject an inserted VCD from the selected virtual drive.
- **Browse:** View the contents of an inserted VCD.

- **Autorun:** Play an inserted VCD automatically from the selected virtual drive.
- **Edit Drive:** Change the drive letter of the selected virtual drive.



Using Physical Drives in the VCD Manager

Your physical CD/DVD-ROM drives are also displayed in the left window of the VCD Manager. Right click on a CD/DVD-ROM drive to view the following options.

- **Eject All:** From the top-level **Other Drives** icon, you can eject all physical discs from all your CD/DVD-ROM drives.
- **Eject:** Eject a CD or DVD from a CD/DVD-ROM drive.
- **Close:** Close a CD/DVD-ROM drive.
- **Autorun:** Play an inserted CD or DVD automatically from the selected CD/DVD-ROM drive.
- **Edit Drive:** Change the drive letter of a CD/DVD-ROM drive.
- **Build:** Enter the **Create Virtual CD** interface.

Adding VCDs to the VCD Manager

You must add a VCD to the VCD Manager before you can play it.

1. Click the **Add VCD** button  to import a VCD from your hard drive, another computer, or from a local network; or
2. Right click in the upper right window of the VCD Manager. Select **Add** to open the **Add VCD** dialog box and browse for an image; or
3. Click the **Internet VCD** button  to open the **Add Internet VCD** dialog box. Type in or paste in the URL of the image. You must first make sure the VCD is a shared file.

Hot Keys

Right click on a VCD to open the VCD Properties window. Click on the **Settings** tab. Tab down to the hot-keys box and press a key. As an example, pressing "C" will create Ctrl +Alt + C as the hot key.

Erasing a Disc

1. Insert the disc you want to erase in a rewritable CD/DVD-ROM drive.
2. Select the **Utility** option and click **Erase Disc**.
3. Select the CD/DVD-ROM drive with the inserted disc. Choose an erase mode from the dropdown menu:
 - a. **Quick Erase:** Quick Erase takes less time but only erases the table of contents of the disc. Erased data can still be recovered by means of special tools.
 - b. **Full Erase:** This completely erases the disc, but takes longer to complete.
2. Click **Erase** to begin to begin the process. The disc will auto-eject when the process is complete.

Viewing Device and Disc Information

Device Info

Click on the **Device Info** tab to view details about a CD/DVD device, a virtual drive, or to view disc format information.

Disc Info

Click on the **Disc Info** tab to view the properties an inserted disc. To extract files or folders from the disc and store them on your hard drive, right click on a file or folder and select **Extract**.

Organizing VCDs in Cabinets

A cabinet is similar to a folder in Windows Explorer and stores multiple images by category. As your library grows, organizing your images in cabinets will reduce the time it takes to locate your VCDs.

VirtualDrive Pro creates several default cabinets: **Music**, **Games**, **Software**, **Photos**, **Movies**, and **Most Recently Used**.

Cabinets are listed on the left side of the VCD manager. You can organize cabinets and sub-cabinets by dragging them around, just as you might organize folders in Window Explorer.

To add a new cabinet category:

1. Right click on a cabinet icon.
2. Select **New Cabinet** to open the New Cabinet window.
3. Follow the instructions in the window.

To delete a cabinet:

Right click on a cabinet and select **Delete Cabinet**. Deleting a cabinet will remove the cabinet icon and sub-cabinets. It will not delete actual VCD files.

Searching for VCDs

1. Click the **Search** button to open the **Search VCD** dialog box.
2. In the **Path** field, specify a drive to search. To select a custom path, click the browse button and click **Search**.
3. Located files will be displayed in the right bottom window.

Extracting Files from a VCD

In the VCD manager, right click a VCD and select its contents to display them. You will be presented with three options:

1. **Open:** Open the selected file.
2. **Extract:** Extract the selected file and store it on the hard drive. You can extract any file from a multi-session VCD. Use this function to extract files in a multi-session which cannot be seen or accessed through Windows Explorer.
3. **Properties:** View properties of the selected file.

Inserting a VCD into a Virtual Drive

In the VCD Manager:

1. Select a VCD icon in the upper right window and drag it to an available virtual drive; or
2. Double click a VCD icon in the upper right window. This will insert your VCD into the default virtual drive, or the first available virtual drive; or
3. Select a VCD icon in the upper right window and click the **Insert** button; or
4. Open Windows Explorer, right click on a virtual drive, and choose **Insert** from the popup menu.
5. Open the VCD Manager, right click on a virtual CD, and select **Shortcut** to create a desktop shortcut. Double-click the desktop shortcut to insert the virtual CD into the first Virtual Drive listed.

Ejecting a VCD from a Virtual Drive

In the VCD Manager:

1. Click the **Eject** button on the menu bar. From the dropdown menu, select the VCD you wish to eject; or
2. Open Windows Explorer, right click on a loaded virtual drive, and select **Eject** from the popup menu.

Importing and Exporting a VCD List

To export a VCD list:

1. From the menu bar, select **File → Export VCD List**.
2. Select a location to save the VCD list and enter a name for it. Click **Save**.

Importing a VCD List

1. From the top menu bar, select **File → Import VCD List**.
2. Browse to select any saved VCD list you wish to import. Click **Open**.

3.11 Enabling and Disabling Physical Drives

You may need to disable your physical drives to play certain games as VCDs.

1. Select **Tool** from VCD Manager menu bar.
2. Click **Disable IDE CD/DVD ROMs** to disengage your physical drive.
3. Click **Enable IDE CD/DVD ROMs** when you wish to re-engage your physical drive.

3.12 Converting VCDs and ISO 9660 Images

You can convert an ISO 9660 image file into a VCD file, or conversely convert a VCD file into an ISO 9660 CD file.

1. From the top menu bar, select **Tools** → **Convert VCD/ISO**.
2. Click **Browse** to locate the ISO or VCD file.
3. Select the VCD or ISO 9660 image you would like to convert and click **OK**.
4. Click **Convert** to start the conversion process.
5. To play an .iso file directly, add it to the VCD Manager or insert it into a VCD.

**Note**

Audio, DVD, and compressed VCD files cannot be converted into ISO files.

Chapter 4: Command Line Support

4.1 Running VCDs with Command Line Syntax

Command line syntax is a powerful way of automating repetitious tasks in VirtualDrive Pro.

The basic syntax is as follows:

Each command starts with the term "VDrive." A virtual drive can be referenced by its drive letter (e.g., E:, F:, G:) or by a number corresponding to the position of the virtual drive. For example, if drives E, F and G are virtual drives, then drive F can be referred to as "2." Once a virtual drive is referenced, you can then issue a command telling VirtualDrive Pro what to do next.

Available commands are:

1. Vdrive <drive letter:> <VCDfilename> /I [@cmd] [/M] [/NA] => **Insert VCD**
2. Vdrive <drive letter:> /E [/M] => **Eject VCD.**
If successful, returns 0, otherwise 1
3. VDrive /drive: **Returns the number of virtual drives available**
4. /I **Insert a VCD**
5. /E **Eject a VCD**
6. [/M] **Show message**
7. [@<path><filename>] **Run a program on the VCD.** To use this, you must include the full path showing the location of the program to be run and the name of the executable file.

Note: Commands shown in square brackets [] are optional.

4.2 Creating Shortcuts to Run VCDs

You can use command line instructions to create custom shortcuts to your VCDs.

1. Write down what you want the shortcut to do, e.g. Vdrive •E:• "C:\VCDCollection\Age of Kings"• /I •@E:\Age.exe

Note: • The dot shows where a blank space must be inserted.

The above example, read from left to right, works as follows:

Vdrive -- Tells Windows that the following commands will be executed by the Vdrive program.

E: -- selects virtual drive E:

"C:\VCDCollection\Age of Kings" -- Adds the path and the name of the VCD to load.

Note: Any spaces in the character string must be replaced by quotation marks.

/I -- Tells Vdrive to insert the VCD

@ -- Tells Vdrive to execute a program

E:\Age.exe -- Tells Vdrive where the program is by specifying the drive (E :) and the name of

the file to run (Age.exe).

2. Create a shortcut by right clicking on an empty space on the Windows desktop and selecting **New → Shortcut**.
3. In the "Create Shortcut" window, enter the command line from Step 1.

Example: Vdrive E: "C:\VCDCollection\Age of Kings" /I @E:\Age.exe

Chapter 5: Virtual Hard Drive Pro

5.1 Creating a RAM Disk

Virtual Hard Drive Pro creates a RAM disk, or “virtual hard drive,” that runs in your computer’s physical memory. This RAM disk has read and write times more than 300 times faster than your physical hard drive. It creates no wear and tear on your computer’s mechanical parts. In VirtualDrive Pro, the included Virtual Hard Drive component lets you make a RAM disk that is limited only by the amount of physical memory on your system.

Please note that to run games and disk-based applications in your RAM disk, you must first install the program to that RAM disk. In this respect, you must treat your virtual hard drive exactly as you would treat a physical hard drive.

1. In the Main Console, select **Virtual Hard Drive Pro → Create a RAM Disk**.



Note

If a RAM Disk is already running in your system, you can not create a new Virtual Hard Drive. The functions of Create a Ram Disk and Load a Ram Disk image file will be disabled.

2. Select the following three parameters for your RAM disk (explained below). Click **Next**.

File system: Virtual Hard Drive Pro supports FAT, FAT32, and NTFS file systems. You must select one of these systems for your RAM disk

The file system is an operating system’s structure for naming, storing, and organizing files. The size of your RAM disk will dictate which file system you are able to use:

File System	RAM Disk Size	
	Minimum	Maximum
FAT	1 MB	2048 MB
FAT32	33 MB	4 GB
NTFS	3 MB	Maximum memory size supported by operating system

Drive letter: Assign a drive letter for your RAM Disk.



Note

Only the drive letters that are not used by other drives, including virtual drives, can be assigned. For example, you can set yours to G: if A:, B:, C:, D:, E: and F: are already being used.

Size: Determine the amount of physical memory you would like to allocate for your RAM disk. Your RAM disk is limited only by the amount of physical memory on your computer system and by the constraints of your operating system.



Note

Some programs might not work properly if there is not enough available memory on your PC. We recommend that you allocate no more than 70% of your physical memory to a RAM disk.

3. Click **Next** to open a dialog box where you can change the default location of your RAM disk and add a description. If you would like Virtual Hard Drive Pro to automatically save your Ram disk as an image, be sure to check the box next to this option.

5.2 Loading an Image as a RAM Disk

You can load a previously created image file on your hard drive as a Ram Disk (Virtual Hard Drive).

1. In the Virtual Hard Drive Pro console, select **Load a RAM Disk image file**.
2. Select the image you want to load and click **Finish**.

5.3 Saving a RAM Disk

Due to the nature of physical memory, the data in the memory-based RAM Disk will be lost when you shut down your computer, unless you save the data as an image.

1. In the Virtual Hard Drive Pro Console, select **Save a RAM Disk**.
2. Click **Save Now**.

5.4 Removing a RAM Disk

If you would like to free up the memory used by your RAM disk or modify the file system, drive letter, and disk space of your RAM disk, you will need to remove the RAM disk in use.

1. In the Virtual Hard Drive Pro Console, select **Remove a RAM Disk**.
2. Click **Delete Now**.

5.5 Exploring a RAM Disk

1. In the Virtual Hard Drive Pro Console, select **Explore a RAM Disk**. You can then explore the contents of the virtual hard drive you created.

Chapter 6: Live Update

If your computer is connected to the Internet, VirtualDrive Pro will automatically notify you whenever an update is available. You can also manually update your software.

1. In the Live Update Console, click **Live Update**.
2. Click **Start**.
3. Live Update will automatically search for new product components. Once it collects all available updates, click **Next** to download and install them. You may then be required to restart your computer.

6.1 Technical Support and Product Updates

Should you encounter a technical issue with our products, please contact your vendor or use the FarStone online support system at www.farstone.com/support.

Answers to frequently asked questions (FAQs) about FarStone products are posted on the corporate web site at www.farstone.com/support/faqs.

FarStone Technology, Inc.

6 Morgan, Suite 160
Irvine, CA 92618
Phone: (949) 458-3666

Glossary

CD Emulator: A program that imitates a physical CD-ROM device, creating MP3-like files out of game, application, and data discs.

CD Extra: A multi-session disc containing both music tracks and computer data.

CD-ROM: A disc format that holds text, graphics, and hi-fidelity stereo sound. It uses a different format for recording data than the audio CD (CD-DA) from which it evolved. An audio CD player cannot play CD-ROMs, but CD-ROM players can play audio discs.

CD-Text: The extra information added to a disc, like CD-Text for audio discs. It is stored in the disc subchannel.

Data CD/DVD: A CD/ DVD containing all types of files, including data files and audio files.

ISO 9660: A file system standard for discs which can be read on all operating systems. ISO9660 supports file names in 8.3 format (8 characters for the file name and 3 characters for the file extension).

Mixed-Mode CD: A single-session CD containing both computer data and music tracks. It is typically used for entertainment and educational programs.

Multi-session CD: A CD containing several sessions with a 30MB space between two successive sessions. Each session has a table of contents linking to the next free area of the disc until the final track is closed. If a CD-R/CD-RW disc is left unclosed, you can append data to it.

RAM Disk: A hard drive emulation device that functions like a physical hard drive but runs in a computer's memory, allowing it to access information much faster than a mechanical hard drive.

Virtual CD/DVD: An image file created from the digital contents of a physical CD or DVD. A virtual CD runs directly on a computer's hard drive, but must be inserted into a virtual drive created by your CD emulation software.

Virtual Drive: A CD emulation device that emulates the functionality of a CD/DVD-ROM drive, and appears as a drive letter in Windows Explorer.