CONVERTX™

Model PX-M402U

MPEG-1/2/4 AND DivX® DIGITAL VIDEO CONVERTER
FOR USB 2.0 INTERFACE
INSTALLATION AND USERS MANUAL

FEBRUARY 2004

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DECLARATION OF CONFORMITY

Model Number: PX-M402U
Trade Name: PLEXTOR
Responsible Party: PLEXTOR Corp.
Address: 48383 Fremont Blvd, Suite 120, Fremont, CA 94538-6509, USA
Telephone Number: 510-440-2000

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.

FEDERAL COMMUNICATIONS COMMISSION 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 communications. However, there is no guarantee interference will not occur in a particular installation. If this equipment causes 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.

CAUTION: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CANADIAN DEPARTMENT OF COMMUNICATIONS STATEMENT

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

This class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme a la norme NMB-003 du Canada.

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1. Getting Started

Congratulations! Thank you for purchasing the Plextor® ConvertX™ PX-M402U Digital Video Converter. We appreciate the confidence you have shown in us. Our goal is to put you—and keep you—on the leading edge of video capture and compression technology.

About this Manual

Please read this manual carefully and keep it handy for easy reference. Use the manual for installation, operation and troubleshooting. If your ConvertX needs service, see your dealer or call Plextor's Technical Support Department. (See "Appendix B: Technical Support" for the different ways you can reach us.)

Meet Your ConvertX

The Plextor ConvertX is a high-quality digital video converter that takes analog video from a video camera, camcorder, VCR, or cable source and provides high-quality compressed MPEG-1/2/4 digital video for display or archiving onto recordable CD or DVD discs.

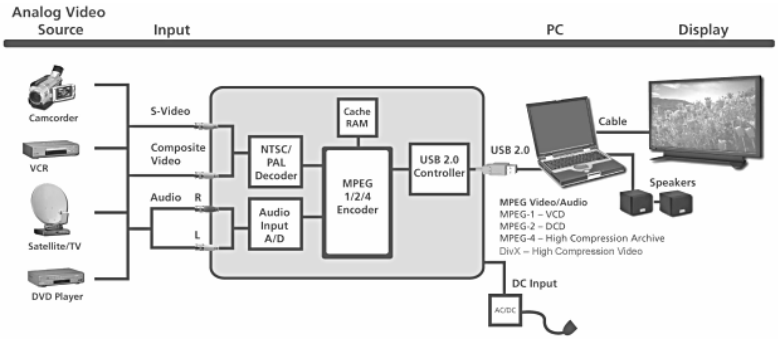

Figure 1: The ConvertX changes analog video to compressed digital video

What You Can Do with the ConvertX

Uncompressed full-motion video with sound takes as much as one gigabyte of storage space per minute of video. But with your ConvertX, you can compress that video so that an entire movie fits onto a DVD—or even a CD!

The ConvertX PX-M402U Digital Video Converter and the bundled InterVideo® WinDVD Creator™ 2 software let you:

- *Capture:* Capture video and sound from analog or digital sources.
- *Edit:* Modify that video to get just what you want.
- C*reate:* Author compelling DVD projects, complete with titles, menus, sounds, and music.
- *Share:* Actually make movies and burn them onto recordable DVD and CDs or share them over the Internet.
- *Direct record*: Record video directly to recordable DVD discs in one step.

In addition, the bundled WinDVD 5 software lets you *view* your videos and play video files.

The ConvertX lets you quickly and easily convert analog images on videotapes into digital video on CDs or DVDs. You can also create new videos for your CD or DVD player or computer, or webcasts for the Internet.

Your ConvertX offers MPEG-1, MPEG-2, MPEG-4, and DivX® video formats, with compression that allows you to store nearly two hours of digital video on a CD, or up to 10 hours on a DVD. The bundled WinDVD Creator software guides you through each step of capturing and editing video, adding effects, and burning the finished product. You get everything you need for quality digital production—just what you'd expect from Plextor.

Features of the Plextor ConvertX

- *Analog-to-digital conversion*: Convert analog video from your camcorder or VCR into digital format for a computer.
- *Archiving video memories*: Archive your video on long-lasting CD or DVD discs.
- *Real-time MPEG-1/2/4 hardware video capture*: Select the best format for your quality and speed requirements.
- *Official DivX Certified™ product*: Ready for video capture in the DivX format.
- *USB connection*: Use Hi-Speed USB 2.0 (480 megabits per second), for video capture at high bit rates. A Hi-Speed USB 2.0 connection maximizes data throughput to the host computer, enabling the highest speed video capture using MPEG-2 compression.
- *High-quality hardware encoder*: For fast, real-time conversion of analog source video into digital output video.
- *Video and audio synchronization*: For rich, true-to-life video.
- *Bundled WinDVD Creator 2 software*: For capturing, editing, authoring, and exporting video to CD or DVD.
- *Bundled WinDVD 5 software*: Video player for your DVDs and CDs.
- *S-Video and composite video*: Supports both popular types of video input.
- *Easily upgradable*: Just download the latest software from the Plextor web site and upgrade quickly, without connecting with the ConvertX.
- *One year warranty*: And unlimited toll-free tech support.

What You Need to Use the ConvertX

What You Need:

- **Computer**: Pentium® III, 800-MHz CPU or faster. (Pentium 4, 1.6-GHz CPU or faster suggested)
- **Minimum memory**: At least 256 megabytes of memory.
- **Hard disk size**: At least 10 gigabytes of free space recommended.
- **Monitor resolution**: 1024 x 768, 24 bit color.
- **Video graphics card**: With 24-bit resolution capability and DirectX support.
- **Sound card**: Windows-compatible sound card with 48-kHz playback. (Using a plug-in PCI sound card is recommended.)
- **CD-ROM drive**: For installation.
- **USB interface**: USB 2.0 (Hi-Speed USB) required.
- **Operating system**: Windows XP or 2000.
- **DirectX 9.0b**: Provided on the accompanying Plextor CD.

Also Highly Recommended:

- **CD-RW drive**: To burn CDs, Video CDs, or MiniDVDs.
- **DVD+R/RW or DVD-R/RW drive**: To burn DVDs, CDs or Video CDs. Also needed for direct recording to DVD.
- **Operating system updates**: To enhance your experience, Plextor highly recommends that you update your computer's Windows operating system with the following service packs (or later service packs) and all Microsoft critical updates before you install the ConvertX drivers. Suggested service packs include:
  - Windows 2000 Service Pack 4
  - Windows XP Home, XP Pro Service Pack 1

What's in the Box

Check the contents of the box. You should have:

- ConvertX PX-M402U Digital Video Converter
- AC adapter (100–240 V) and power cord
- USB 2.0 cable
- Set of audio/video (A/V) cables
- S-Video cable
- *Plextor ConvertX PX-M402U Installation and Users Manual*
- Plextor CD with:
  - Plextor ConvertX USB device driver
  - InterVideo® WinDVD Creator™ 2 and WinDVD™ 5 player software
  - Adobe® Acrobat® Reader
  - PDF of French-language users manual

ConvertX Features and Controls

Before proceeding, become familiar with the controls and features of your ConvertX.

Front Panel

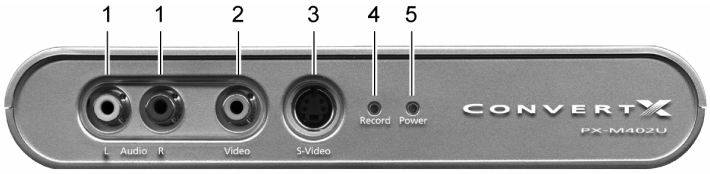

Figure 2: Front panel of the ConvertX PX-M402U Digital Video Converter

	Connector or Indicator	Function
1	**Audio**	Audio connector: Connect audio input here, using the RCA audio-video cables. The red connector is the right-hand stereo channel
2	**Video**	Video connector: Connect composite video here, using the RCA A/V cable.
3	**S-Video**	S-Video connector: If S-Video is available, connect it here using the S-Video cable.
4	**Record**	Recording indicator LED: Amber when converting video from analog to digital.
5	**Power**	Power LED: Blue when the AC adapter and USB cable are connected and the computer is turned on.

Rear Panel

Figure 3: Rear panel of the ConvertX PX-M402U Digital Video Converter

	Connector	Function
1	**DC 9V**	Power connector: Connect the AC adapter here. The unit has an automatic power switch controlled by the USB cable from the PC. When the PC power is on, the ConvertX power is also on. **CAUTION**: Use only the AC adapter shipped with your ConvertX.
2	**USB 2.0**	USB 2.0 connector: Connect your USB cable here. **CAUTION**: Use only the USB cable shipped with your ConvertX.

A Word about MPEG-4 and DivX

Together, this version of the ConvertX and WinDVD Creator support two types of MPEG-4 compression:

- Real-time MPEG-4 compression, with file extension .avi, is supported by the ConvertX.
- DivX compression, with file extension .avi, is also supported by the ConvertX.

The ConvertX hardware encoder can capture video and compress it using MPEG-4 or DivX, saving valuable space on your hard disk. You can play this MPEG-4 and DivX video and view it on your computer using the WinDVD 5 player or other software. You can even edit it or convert it into another format by using WinDVD Creator.

DivX compressed video is a popular format for sharing files on the Internet. DivX files are playable with Windows Media Player with a DivX decoder (see http://www.divx.com/) and with other decoders available on the Internet

Precautions

Like the rest of your computer system, your ConvertX requires reasonable care in its installation and use.

- Operate your ConvertX only in a horizontal position.
- Keep the area around your ConvertX clean from dust, smoke, and other contaminants. The unit is not dustproof.
- Do not allow moisture or liquids, including water or cleaning fluids, to touch the ConvertX. The unit is not waterproof. Furthermore, thinner, benzene, or alcohol-based solvents can mar the surface of your ConvertX.
- Do not drop or jolt the ConvertX.
- Do not attempt to open the ConvertX and service it yourself. Entrust service to Plextor-authorized service personnel only.

2. Installing Your ConvertX

Here's how to install your ConvertX.

Install the ConvertX Video Converter

Before installation, Plextor highly recommends that you get the latest updates available for your computer's operating system. Current service packs and critical updates are available from http://windowsupdate.microsoft.com.

If you have a computer with Windows 2000 or Windows XP, use the following procedure to connect your ConvertX USB Digital Video Converter.

Installing the ConvertX Device Driver

NOTE: Be sure you do this procedure to install the ConvertX Digital Video Converter driver from the CD **before** connecting the ConvertX to your computer.

To install the ConvertX Digital Video Converter Driver:

1. Turn ON your computer system and make sure that all applications are turned off. Do not connect the ConvertX yet.

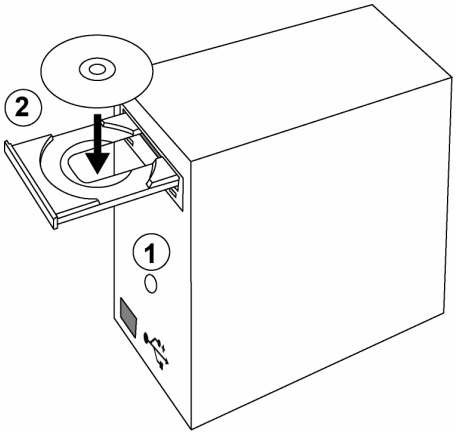

Figure 4: Turn on the computer and insert the ConvertX software disc

2. Insert the ConvertX software disc into your CD or DVD drive. You see the Plextor Application Installer screen. (If you don't see the installer screen right away, use Windows Explorer to navigate to the CD or DVD drive, and double-click the Plextor.exe file.)

Figure 5: Plextor Application Installer screen

3. Select the ConvertX Device Driver button. You may see a window that asks if you want to install DirectX version 9.0b. (If you don't see this window, you have the correct version of DirectX already installed. Skip to step 9 below.)

4. If you see the DirectX installation window, Select OK. You see a window with the Welcome to setup for DirectX and license agreement.

5. Click the I accept the agreement choice, then select Next. You see the DirectX Setup window.

6. Select Next to start the installation. You see the installation of DirectX as it proceeds. When installation is done, you see the Restart Computer window.

7. Make sure all applications are closed, remove the Plextor ConvertX software disc, then select Finish to restart your computer. Windows shuts down, then restarts.

8. After Windows restarts, re-insert the ConvertX software disc into your CD or DVD drive. You see the Plextor Application Installer screen. (If you don't see the installer screen right away, use Windows Explorer to navigate to the CD or DVD drive, and double-click the Plextor.exe file.)

9. In the Plextor Application Installer screen, select the ConvertX Device Driver button. You see the location for the installation folder where the Plextor PX-M402U files will be unpacked.

Figure 6: Location for the installation folder

10. Click Finish. You see a text box asking if you want to create the folder.

11. Click Yes. You see the License Agreement.

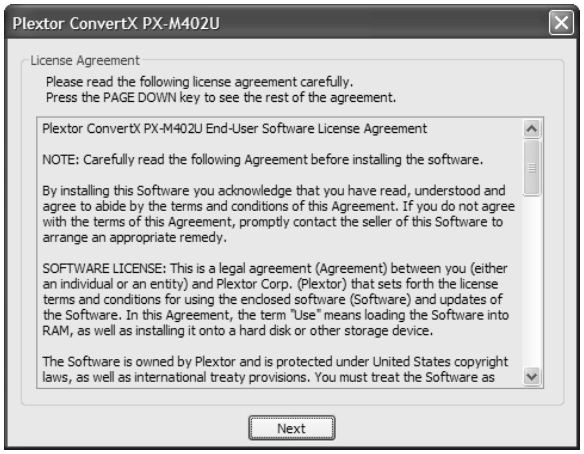

Figure 7: Review the license agreement

12. When you have read the entire agreement, click Next. You see the driver installation for the ConvertX PX-M402U.

Figure 8: Beginning of the driver installation

13. As directed by the driver installation, make sure your ConvertX PX-M402U is *not* connected to your computer yet. Then click Install. You see a text box indicating the Plextor ConvertX PX-M402U has been installed.

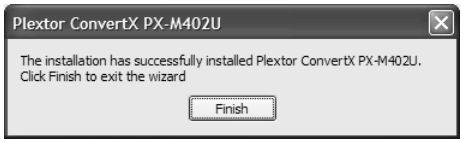

Figure 9: When the ConvertX has been installed, select Finish

14. Click Finish. You have successfully installed the ConvertX device driver.

Install the ConvertX Drivers

IMPORTANT NOTE: In the next steps of this procedure, you will be installing driver files into your computer. You'll see the "Found New Hardware" window more than once, and you may feel like you're seeing the same dialog over and over again. This is normal. You don't need to shut down or reboot your computer until all drivers have been installed.

1. You will use a USB cable to connect the ConvertX to your computer as shown in Figure 10. Begin by making sure your computer is on.

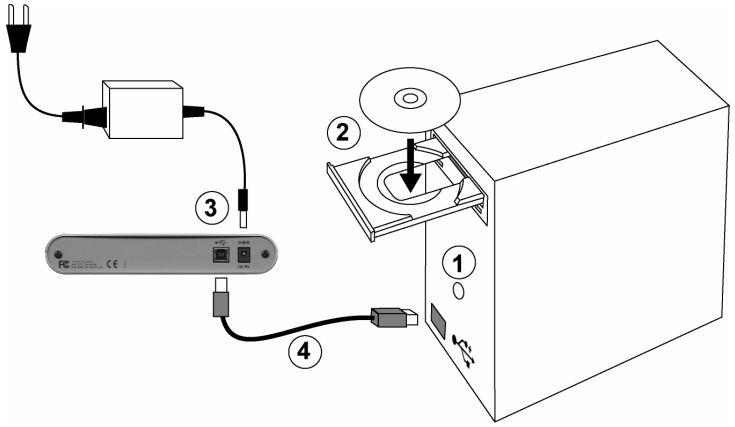

Figure 10: 1) Make sure the computer is on, 2) make sure the Plextor disc is inserted, 3) plug in the AC adapter, and then 4) connect the ConvertX with the included USB cable.

2. Make sure the Plextor disc is in the computer's drive.
3. Connect the AC adapter to an electrical outlet and to your ConvertX.
4. Connect the USB cable from your ConvertX to the computer.

The drivers are installed automatically. When all drivers are installed, your ConvertX is automatically recognized by the computer. (If you are asked to reboot, remove the Plextor disc from the drive and restart your computer.)

Turning the ConvertX On and Off

Note that there's no power switch on the ConvertX. When the computer power is on, the ConvertX is on. When the computer power is off, the ConvertX is off.

Don't Forget to Register!

Don't forget to register your ConvertX! In the Plextor Application Installer, select Register Your ConvertX and follow the prompts. Registration means you'll stay abreast of valuable information about new features, updated drivers, and more.

If the Installation Failed

If the ConvertX installation failed, check for these causes:

- **Make sure you are using Windows 2000 or Windows XP**. The ConvertX won't work with Windows 95, 98, 98SE, or Windows Me. You need to upgrade your computer's operating system to Windows 2000 or Windows XP.
- **Launch the installation manually**: If you have to launch the installation manually, look on the Plextor CD and double-click the Plextor ConvertX PX-M402U.exe file.
- **Make sure the ConvertX is recognized**. See "Make Sure the ConvertX Is Recognized" below.
- **Troubleshoot other devices**. (See "Troubleshoot Other Devices" on page 17.

Make Sure the ConvertX Is Recognized

After installation, you may want to make sure the ConvertX is recognized by your computer. To check whether it is recognized:

To see if the ConvertX is recognized in Windows:

1. In Windows XP or 2000, go to Start | Settings | Control Panel.
2. In Control Panel, double-click the System icon. You see the System Properties window.

3. In System Properties, click the Hardware tab, then click on the Device Manager button. You see the Device Manager.

4. Locate the icon for Sound, video and game controllers, and click the + sign next to it to expand the entry list.

5. Look for an entry for Plextor ConvertX M402U A/V Capture.

NOTE: You won't see the Plextor ConvertX icon unless the ConvertX is connected to your PC.

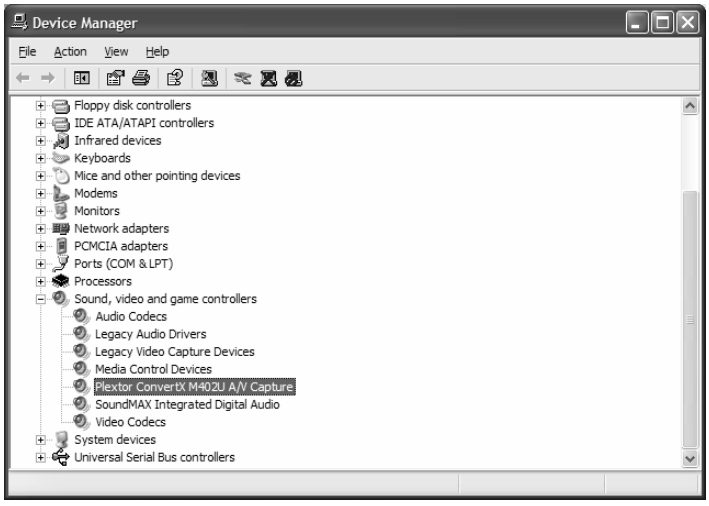

Figure 11: Device Manager shows the ConvertX device

6. If Sound, video and game controllers are listed and do not have a yellow diamond with an exclamation point, but you do not see the Plextor ConvertX icon listed among the devices, contact our Technical Support group at 1-800-886-3935, or e-mail us at support@Plextor.com for help troubleshooting.

7. If the ConvertX does not operate even though 1) the sound, audio and game controllers are listed and do not have a yellow diamond with an exclamation point, and 2) the Plextor ConvertX device is listed, in Device Manager double-click the Plextor ConvertX device and then select the Remove button. Then restart your computer. The computer will automatically perform another hardware scan and this time it should install the digital video converter correctly.

Troubleshoot Other Devices

- In the Device Manager, if any of your entries for Other devices have a yellow diamond with an exclamation point (!), troubleshoot your Plextor ConvertX device for compatibility problems or other conflicts. It may just be a matter of obtaining the latest USB driver or Windows 2000 or Windows XP Service Pack from Microsoft's Windows Update.

- To update the PX-M402U driver, right-click on the question mark and select Properties, then select the Driver tab and click Update driver. Look for the device driver on the Plextor CD.

Changing to Another Computer

Your ConvertX does not have firmware. It downloads its operating program from your computer each time you turn the computer on or reconnect the ConvertX.

Before using your ConvertX on a different computer, use the ConvertX installation CD and install the ConvertX drivers on that computer.

Connect the Video Input to the ConvertX

Connect the analog video source to the ConvertX input connectors. Figure 12 shows some of the sources you can use.

- **If you want to connect composite video**: Use the RCA A/V cables to connect the Line Out or Video/Audio Out connectors from the source to the front-panel Audio and Video connectors of the ConvertX.
- **If you want to connect S-Video**: Use the S-Video cable to connect from the S-Video connector at the source to the front-panel S-Video connector on the ConvertX.

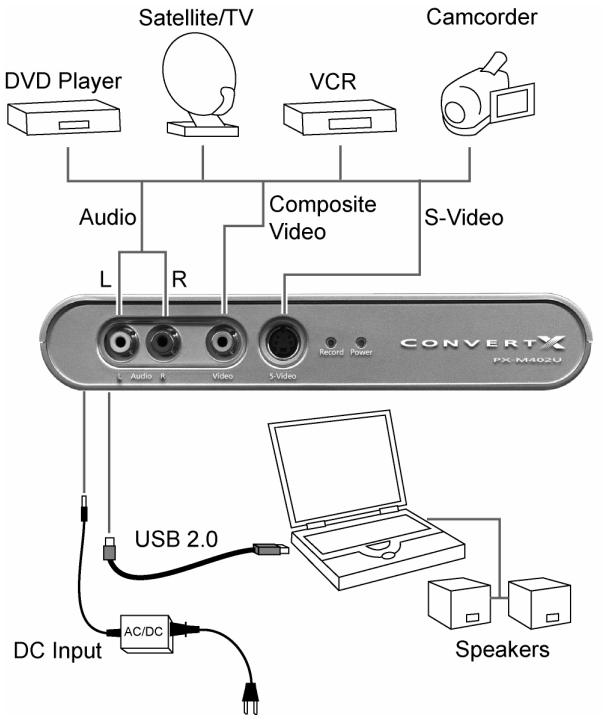

Figure 12: Connecting the video and audio sources to the ConvertX

3. Using the ConvertX with WinDVD Creator

WinDVD Creator 2 software lets you pull in video from your camcorder or another analog source and feed it to the Plextor ConvertX. WinDVD Creator also lets you capture, edit, create and share video and other content.

Install the WinDVD Creator 2 Software

To install the WinDVD Creator video capture and authoring software:

1. Turn ON your computer system.
2. Make sure that all applications are turned off.

NOTE: If you have a previous version of WinDVD Creator, uninstall it before installing WinDVD Creator 2. (To uninstall, go to Start | Control Panel | Add/Remove Programs, select WinDVD Creator, and uninstall it and all its components.)

3. Insert the ConvertX software disc into your CD or DVD drive. You see the Plextor Application Installer screen. (If you don't see the installer screen right away, use Windows Explorer to navigate to the CD or DVD drive, and double-click the Plextor.exe file.)
4. Select the WinDVD Creator button. You see the WinDVD Creator Setup screen.
5. Click Next. You see the License Agreement.
6. Read the License Agreement, then click Yes. Click Yes again. You see the User Information window.
7. Enter your Name, your Company, and the Serial Number for the product. (The serial number is located on the software CD envelope.) Then select Next. You see the Destination path screen.
8. Accept the default destination path proposed by the setup program and click Next. You see the Select Program Folder screen.

9. Accept the default program folder as the location where the setup program will add WinDVD Creator's icons, or enter the name of another folder. Then click Next. The setup program installs WinDVD Creator, a process that can take a few minutes. (You may see a Third Party Application Setup window, asking if you want to install Microsoft HTML Help. Click Next to install Microsoft HTML Help.)
10. When the installation is completed, you see the Setup Complete screen, asking if you want to restart your computer now.
11. Remove any discs from their drives, then click Finish to restart your computer. When the installation is complete and Windows reboots, you see program icons in the Windows Start menu.

Startup

To launch WinDVD Creator:

- On the computer, go to Start | Programs | InterVideo WinDVD Creator 2 and select WinDVD Creator.

When you start WinDVD Creator, you see the WinDVD Creator task window.

Understanding the Task Window

You see the Task Window every time you start WinDVD Creator. This window lets you choose whether to create your own personalized DVD or CD project, or whether you simply want to capture compressed video directly to your hard disc or to a rewritable DVD.

Figure 13. WinDVD Creator task window

No.	Window Area	Function
1	**Create new project**	Brings up an Untitled WinDVD Creator main window for you to create a new project. See page 22.
2	**Open existing project**	Lets you bring up the WinDVD Creator main window with a project you've already begun. You see files with the .wcp extension. See page 28.
3	**Create CD/DVD with existing video file**	Lets you choose a video file, opens the WinDVD Creator Edit window, and places the video file in the media library. See page 28.
4	**Capture video into hard disk**	Lets you capture video directly from the ConvertX into your hard disk. Brings up the WinDVD Creator Capture window. See page 24.
5	**Record video directly to DVD disc**	Lets you compress and record video onto a DVD disc in one step, without editing. Brings up the Disc Manager window. (Only available if you have a DVD+R/RW or DVD-R/RW drive.) See page 41.

Overview of Creating a Personalized CD or DVD Disc

When you open a new project or an existing one in WinDVD Creator, you see the main window, with areas for Preview, Media Library, and Story Board.

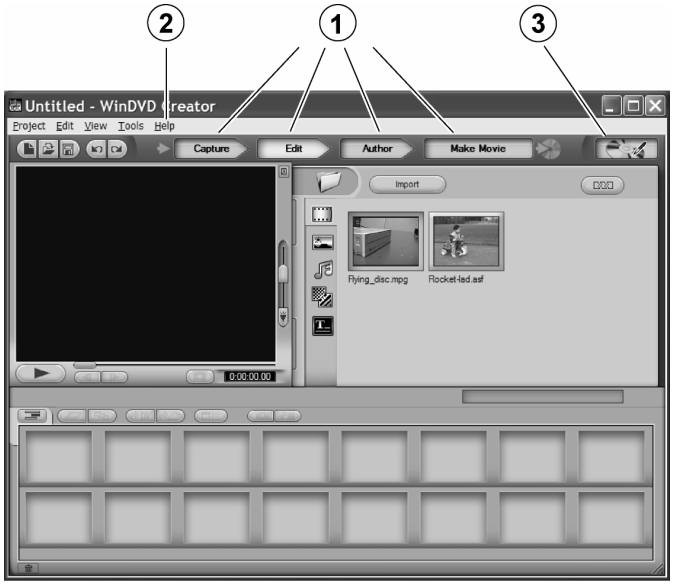

Figure 14: WinDVD Creator's main window

No.	Window Area	Function
1	**Task buttons**	Capture, Edit, Author, and Make Movie. These buttons lead you into the four steps you'll perform to create a CD or DVD.
2	**Help**	Click here to get help.
3	**Disc Manager**	Switch between project mode (shown here) and Disc Manager. (To show Disc Manager, you must have a DVD+R/RW or DVD-R/RW drive.)

Step 1, Capture: First is the capture step. You take videos from your digital camcorder or VCR, or pictures from your Web camera, and either feed them directly to the ConvertX or save them onto your computer for later use. If you do not need to capture any media content from your devices and already have the files on your computer, you can import the files from your hard drive in either Capture or Edit modes, by using the Import button in the Media Library.

Step 2, Edit: Next is the edit step. In editing, you arrange your media content in the exact order you want the clips to be viewed. You can trim your media files to the desired length, add other images you want to the CD or DVD, and make video transitions to the next clip. You can incorporate audio from CDs, a microphone, or another source. You can also add titles to your video files, and you can embellish those titles with title effects.

Step 3, Create: The third step is to "author" the CD or DVD by adding menus and other interactive features with the Author button. Authoring adds the menus that allow viewers to interact with the CD or DVD on their computer or DVD player.

Step 4, Share: Finally, the fourth step is to share your project by using the Make Movie button to burn it onto CD or DVD. You can burn using any one of several formats. At this time, you also indicate what type of TV system you use, and the name of your VCD or DVD. If you cannot burn your CD or DVD right away, you have the choice to either save the project or write the contents into a file for burning later.

NOTE: The rest of this chapter is a tutorial that will get you started capturing, editing, creating, and sharing video and other content. It's not a complete reference. For more details on all the exciting features of WinDVD Creator, look in that application's Help menu.

Capturing

To display the Capture window:

1. Ensure that the input device (such as a camera, camcorder, video cassette recorder, etc.) is connected to your computer, and that the device is on.

2. In the WinDVD Creator main window, click on the Capture button . You see the Capture window.

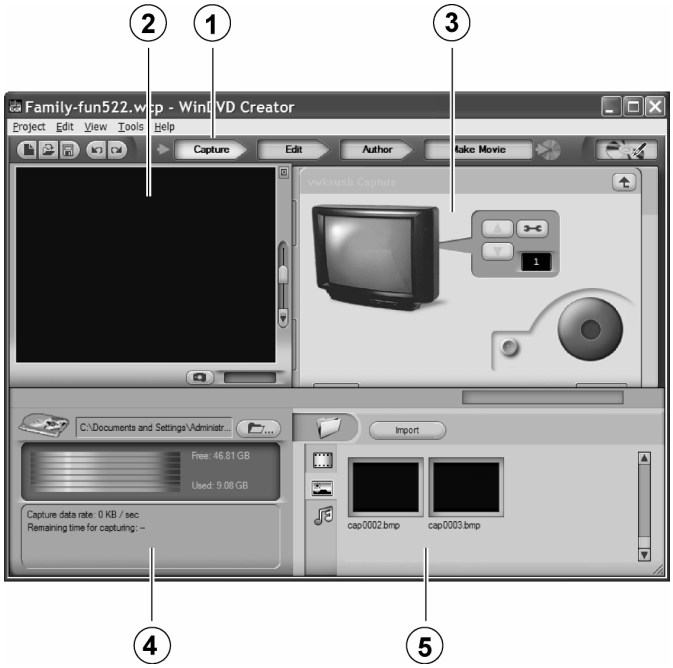

Figure 15: Capture window

No.	Window Area	Function
1	**Capture button**	Displays the Capture window.
2	**Preview window**	Allows you to preview the media content that you capture from outside devices or that you import from files.
3	**Input device list**	Shows a list of input devices that connect to your computer. Those devices allow you to capture video from the Plextor ConvertX, as well as from a television source, camera, or a digital camcorder. For each device, a control panel allows you to control the device.
4	**Disk information**	Displays the folder in which your media content is being saved. You can browse and change the folder where you are saving your files. This section also shows the amount of free space and used space on your hard drive, as well as the capture speed and the amount of time you have left to capture.
5	**Media library**	This is where all your video, image, and audio clips are categorized. Each of the files you have captured is placed into its own section of this library. For instance, if you capture a screen shot, it is sent to the Image Library. If you capture a video clip, it is sent to the Video Library.

Capturing Video

To use the Capture window to capture video content:

1. To record video, make sure the TV, VCR, or other input device is connected to the ConvertX, and use the device's controls to begin playing video.

2. From the device list on the top-right section of WinDVD Creator's Capture window, select the input device you are using. You see a control panel that allows you to control input from the device. (The control panel will be different depending upon which device you are using.)

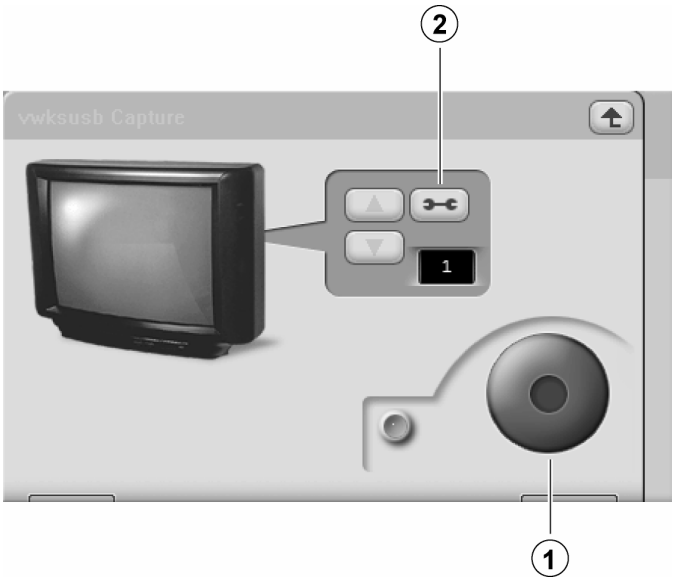

Figure 16: Control panel for the Plextor ConvertX

No.	Window Area	Function
1	**Record button**	Starts and stops recording.
2	**Configuration button**	Displays the configuration window for this device.

3. In the control panel, use the configuration button to get to tabs and menus that let you change the settings for capture:
   - In the Record tab, select a Format and a Profile for capture. See page 28 for an overview of the formats and profiles, and see page 54 for details of the video resolution and recording time for each ConvertX capture profile.

- In the Device Control tab, select the Video Source (S-Video or Composite) you have connected to the ConvertX. You can also select the Video Standard; set this to match the type of video that is coming into the ConvertX. (In general, NTSC is the TV standard used in North America and Japan, while PAL is used in Europe and South America. SECAM is used in France, Eastern Europe, and some African nations.)
- Use the Video Qualities tab to change the characteristics of the video you capture. (To begin, you can leave these characteristics set at their default values, and change them if your video is consistently too dark, too light, too contrasty, etc.)

4. Press the Record button on WinDVD Creator's on-screen control panel. You see the video in the preview window. In the disk information area you can see the free and used areas of your hard disk changing as video is recorded.

IMPORTANT: If you don't seem to be getting any video in the preview window, make sure you have used the Device Control tab to select the same Video Source (S-Video or composite) that matches the physical connection to the ConvertX.

CAUTION: Do not attempt to launch other applications while capturing. Video data may be corrupted if CPU usage approaches 100 percent.

5. When you have obtained the desired video, stop the recording by pressing the Record button again. Recording stops, and you see your video file in the media library (for video, this is the video library) located in the bottom-right section of the Capture window.

Recording Time and Disc Capacity

The table below summarizes the recording capacity and time available with the ConvertX. (Video record times may vary, depending on the selected bit rate, frame size and disc capacity. For more details about recording times and capacities, see page 54 in Appendix A.)

Video Encoder/ Decoder	Compression Bit Rate (Kbps)		Video Record Time (Minutes)		
	Video	**Audio**	**CD-R/ RW**	**Re-cord-able DVD**	**Reso-lution**
MPEG-1 (VCD)	1,150	224	80	N/A	SIF
MPEG-2 (DVD-Video)	6000 – 2000	224	12 – 27	79 – 169	Full D1 – SIF
MPEG-4	4000 – 700	224, 128	22 – 115	141 – 721	Full D1 – SIF
DivX	4000 – 768	224, 128	22 – 107	141 – 666	Full D1 – SIF

NOTE:
SIF = 352 x 240
Full D1 = 720 x 480

Editing

In this section of WinDVD Creator you can trim your project, and add music, titles, and transitions to make your project look fantastic.

To display the Edit window:

- In the WinDVD main window, click on the Edit button . You see the Edit window.

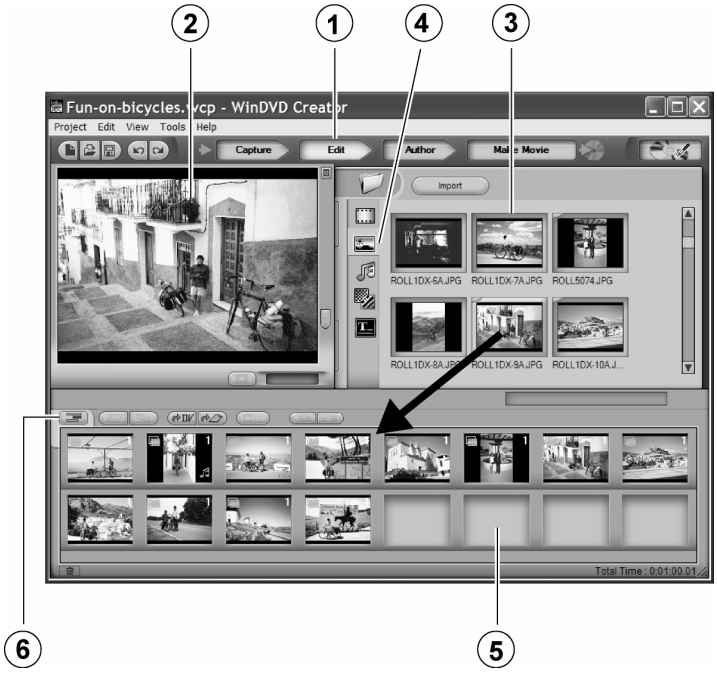

Figure 17: WinDVD Creator's Edit window

No.	Window Area	Function
1	**Edit button**	Displays the Edit window.
2	**Preview window**	View and listen to your media content. If your project is already arranged, you can preview it by pressing the Play button in the preview window. If you have already placed transitions into your storyboard, the preview window will also play them.
3	**Media library**	Stores all your files for easy access when you are adding them to your project.
4	**Library buttons**	Use to select a library: Video Library, Image Library, Audio Library, Transition Effects, and Title Effects.
5	**Storyboard or timeline**	Can either be a storyboard or a timeline. This window shows how your project will run. You drag and drop items from the libraries to here.
6	**Storyboard/Timeline button**	Switches between storyboard view and timeline view. In general, the storyboard view is for intermediate users, and the timeline view is for more advanced users.

To use the Edit window to edit your project:

1. From the Media Library at the top-right section of the Edit window, select one of the libraries: video, image, audio, transition effects, or title. You see that library.

2. From the library, select the file you want to use, and drag and drop the file onto the storyboard.
   - You can drag and drop a file anywhere on the storyboard.
   - To move one clip in front of another, just drag and drop the new clip in front of the current clip.
   - To rearrange the media clips, drag and drop clips until you are satisfied with the order.

Adjusting a Video Clip

To trim the length of a video clip:

1. In the timeline or storyboard at the bottom of the Edit window, select a video, then right-click. You see a pull-down menu with a selection for Video Manager.

Figure 18: Use sliders in Video Manager to trim video clips

No.	Window Area	Function
1	**Sliders**	Use to trim video to the desired length.
2	**Video cut tool**	Cuts video based on slider position.

2. Select Video Manager. You see the video cut tool and two sliders, one for the beginning position of the video and the other for the ending position.

3. Set the sliders, then click the video cut tool to trim the video clip to the desired length.

To divide a video clip into separate segments:

1. In the Edit window's video library, select the desired clip.
2. Right-click on the clip and select Show Video Scenes from the menu; or left-click on the clip, then click the Show video scenes button in the upper right corner of the video library. You see a window that lets you Auto Detect scene changes or make scene changes By Time.
3. Ensure Auto Detect is selected, then click the right Go arrow button . You see the clip automatically divided into several scenes according to changes in the video. This does not create new video clips, but only breaks the video into different segments.
4. To eliminate the divisions and merge the video sections into one clip again, click the Reset button.

Adding and Adjusting a Transition

To add a transition:

1. Browse through the Transition Effects library.
2. If desired, preview the transition by clicking on the Transition's icon.
3. Click on a the desired transition, then drag and drop the transition to the desired location on the storyboard. You place transitions in between clips.
4. To adjust the length of the transition, right-click on the transition on the storyboard. You see a pulldown menu with a selection for Video Manager.
5. Select Video Manager. You see a slider for the transition. You also see a check box that lets you reverse the transition effect.
6. Adjust the slider for the amount of time you want the transition to take. To reverse the effect, put a check mark in the Reverse box.

Adding Titles, Audio Effects, and Media Content

To add and adjust a title:

- From the Title Library, drag and drop a title to the desired location on the storyboard. Double-click on the title in the storyboard, then edit the title text. To format the title, select the text and change the color, alignment, and the font size as desired. Choose F to change the font, or C to change the color.

To add an audio effect:

- From the Audio Library, drag and drop an audio file onto an existing cell on the storyboard. You can also add audio recorded from a CD, or even record audio from a microphone.

To import more media content:

- In the Edit window, select the Import button, then select the desired files for importing. The files are automatically categorized as they are imported.

Previewing Your Project

To preview your entire CD or DVD project:

- In the storyboard, select a scene where you want to begin the preview. Then in the Edit window's preview window, select the Play button . You see project played, so you can see if the video is playing properly and if the transitions and other effects are in the correct spots.

Viewing File Properties

To view the file properties of the media content in your media library:

- In the Edit window, select the Media Library of your choice, right-click on the file you choose, and select Properties from the pulldown menu.

Saving Your Project

To save your project before continuing:

- Select the Project menu at the top of the window, then choose Save Project As, and enter the path and filename.

Creating

Creating means using the Author window to add an interactive menu for your CD or DVD project. You can add a play button and a chapter menu for easy scrolling through your CD or DVD. You can also add a background image that can give a theme to your DVD.

To display the Author window:

- In the WinDVD Creator main window, click on the Author button Author. You see the Author window.

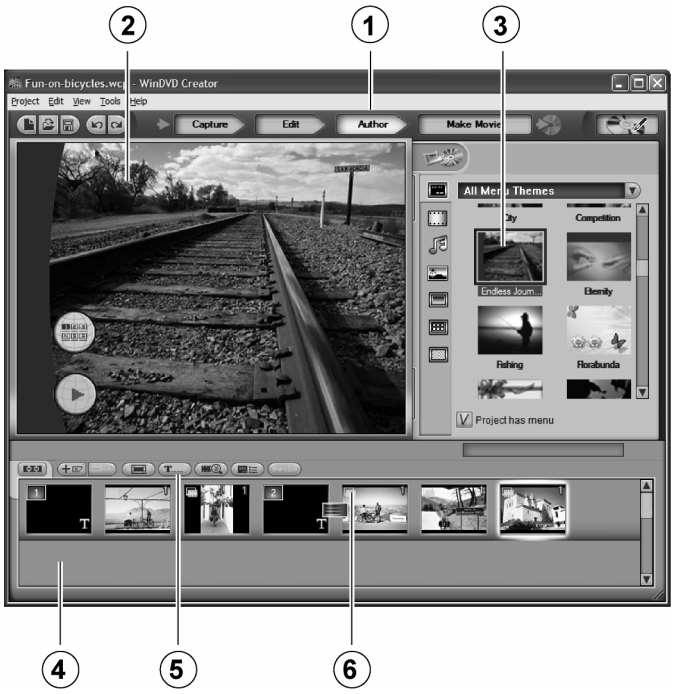

Figure 19: WinDVD Creator's Author window

No.	Window Area	Function
1	**Author button**	Displays the Author window.
2	**Preview window**	The top-left section of the Author window is the preview window. You can edit the theme here.
3	**Theme library**	The top-right section is the Theme Library. Here you can select a theme for your project. This section automatically adds a play button and a chapter menu to your project. When you double-click on a thumbnail of a theme, you see a preview in the preview window.
4	**Chapter board**	The bottom of the Author window is the Chapter Board. WinDVD Creator automatically creates a chapter for each cell. So the number of clips will determine the number of chapters unless you remove the chapter marks.
5	**Text insertion**	Click once to select text insertion mode, then put the cursor in the Preview window to add text to the menu.
6	**Chapter mark**	These mark the chapters of your project. You can add chapter marks or delete them.

Deleting a Chapter Mark

To delete a chapter mark:

1. In the Chapter Board at the bottom of the Author window, right-click on the chapter you wish to remove. You see the Delete Chapter Mark text box.

2. Click to delete the chapter mark.

When you remove a chapter mark from the chapter list, subsequent chapters are automatically reordered. If you want only a certain number of chapters in your project, just delete the chapter marks that you don't want.

NOTE: Only the chapter mark is deleted. The file remains.

Whether or not there are chapter marks between clips, all clips remain where they are unless you choose to move or delete them.

Adding a Chapter Mark

To add a chapter mark to a video clip:

- Right-click on the clip and select Add Chapter Mark.

This lets you recover if you accidentally delete a chapter mark that you wanted to keep.

Editing a Menu Theme

To edit a menu theme in your project:

1. In the Theme Library at the upper right of the Author window, browse through the library and find the best menu theme that will go with your project.

2. Double-click on the theme. You see the menu theme in the Preview window.

3. In the Preview window, double-click on the menu theme to edit it. You can add music, change the background, move or change the buttons, and more.

To add text to the menu, select the text insertion button in the Chapter Board.

Sharing

This is the final step in making your DVD. This is where you select the Make Movie button and choose the format you want to use for your DVD project. You can choose what type of television standard to use, and you can supply a name for your DVD.

To display the Make Movie window:

- In the WinDVD Creator main window, click on the Make Movie button Make Movie. You see the Make Movie window.

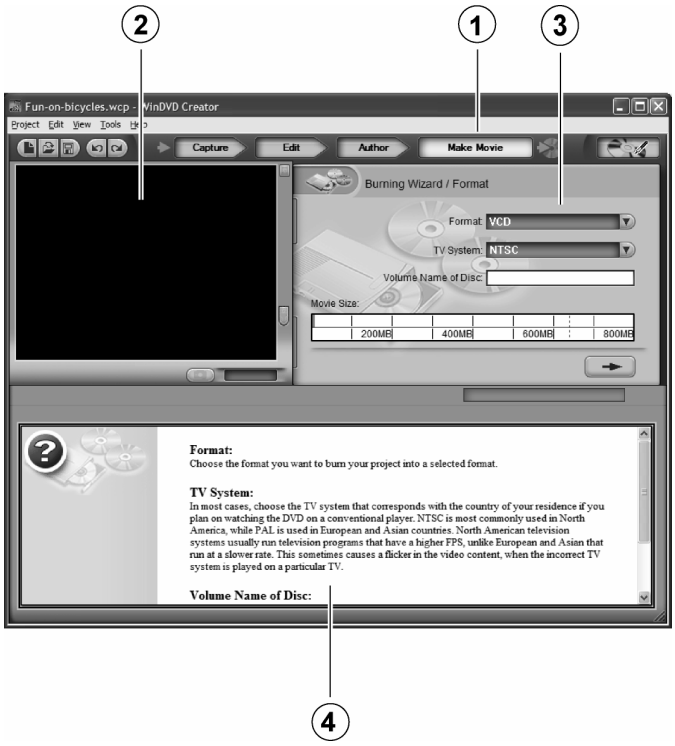

Figure 20: WinDVD Creator's Make Movie window

No.	Window Area	Function
1	**Make Movie button**	Displays the Make Movie window.
2	**Preview window**	The top-left section of the Make Movie window is the preview window. Here you preview your project as it is being burned, ensuring that it is properly displaying and playing.
3	**Burning wizard**	The top-right section is the Burning Wizard, which provides a step-by-step procedure for burning your project onto CD or DVD.
4	**Help**	The bottom of the window gives detailed help about the burning process.

Burning a Disc

To burn your project onto a CD or DVD disc:

1. Insert a blank CD or DVD disc in your CD or DVD drive.
2. In the Make Movie window's Burning Wizard, choose a Format for output. The formats are:
   - **DVD (1 hour) and DVD (2 hour)**: High quality sound and video content, with a specified length of video content.
   - **VR**: DVD-Video Recording. Allows some editing of a the disc after burning. The ConvertX supports output to drives that support DVD-VR or DVD+VR. For this format, use a rewritable (DVD-RW or DVD+RW) disc in the burner.
   - **DVD on CD HQ**: High quality video and sound on a CD holding up to 650-700 megabytes.
   - **DVD on CD**: Compressed video and sound on a CD holding up to 650-700 megabytes.
   - **SVCD**: Holds up to a maximum of 650-700 megabytes of video content. A better version of VCD, SVCD is used primarily in European and Asian countries.
   - **VCD**: Video Compact Disc. Uses MPEG compression and can display full motion video and sound. Holds up to a maximum of 74 minutes or 80 minutes of video content on a 650- and 700-megabyte CD, respectively.

3. In the Burning Wizard Format window, choose a TV System. The TV systems are:
   - **NTSC**: Most commonly used in North America and Japan.
   - **PAL**: Used in European and Asian countries.
4. In the Volume Name of Disc text field, enter the name for your disc.
5. When you have filled out the Burning Wizard/Format window, click the Next button . You see the Select Media window.

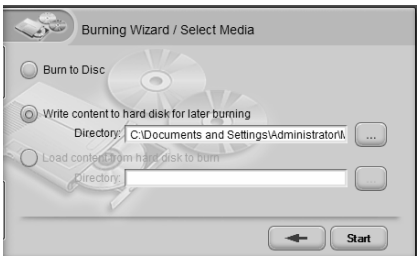

Figure 21: Selecting the media for burning

6. In the Select Media window, choose how you want to burn your disc:
   - **Burn to Disc**: Burns the CD or DVD now. You see the Device Setting window. In this window you can choose the device (such as the Plextor PX-504UF or PX-708A DVD writer) you want to burn to, the speed of the burning, and the number of copies. Then press the Start button to begin recording.

Figure 22: Device Setting window

- **Write content to hard disk for later burning**: Saves the project in a set of files on your hard disk, allowing you to burn the project at a later time. With this option, choose a location to save your project, then press the Next button . The set of files and folders containing the project are automatically created on your hard disk, in a folder labeled IVI_DVD.
- **Load content from hard disk to burn**: Allows you to load a set of project files that you have previously saved on your hard disk and burn the project now. To take a project you have burned to your hard disk and burn it to a DVD or CD: Go the Project menu and select Load image to burn. In the Burning Wizard you see that the Load content from hard disk to burn button is selected. Browse and select the IVD_DVD folder, and press the Next button. You see the Device Setting window immediately. Choose the device you want to burn to, the speed of the burning, and the number of copies. Then press the Start button to begin recording.

When burning is done, the burned disc is ejected and you see a window indicating the burn process is complete.

Compression Options

Together, the ConvertX and WinDVD Creator support many different MPEG-1, 2, and 4 and DivX compression profiles for *incoming* video. WinDVD Creator supports an expanded set of these formats for *output*, too. How much you can fit on a DVD or CD? Storage rates vary based on the capacity of the disc, frame size and selected resolution. See the tables on page 54 in Appendix A to help you decide what compression and media to use.

Saving to a File

You don't need to save your project to a DVD or CD. You can simply save it to any of a host of file formats for sharing.

- To save to a file, in WinDVD Creator go to Tools | Output to File and select a file format.

You see a full list of the output file formats available with WinDVD Creator, as well as the parameters and details for all formats.

Disc Manager

Disc Manager lets you capture video directly onto a recordable DVD disc, without going through WinDVD Creator's main window.

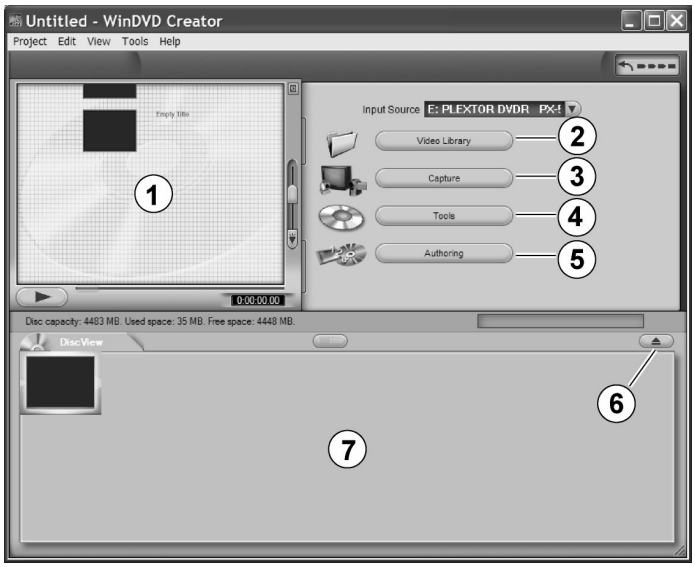

Figure 23. Disc Manager window

No.	Window Area	Function
1	**Preview window**	View and listen to your media content.
2	**Video library**	Import directly from the video library.
3	**Capture**	Capture video from external devices such as a camcorder or VCR.
4	**Tools**	Perform a quick format or a full format of the recordable or rewritable DVD disc.
5	**Authoring**	Select a background theme.
6	**Eject**	Ejects or loads the DVD±R/RW disc.
7	**DiscView**	Shows the contents of the disc.

Disc Manager is ideal for recording video directly from your TV set to a DVD, or for archiving videotapes in a one-step operation.

Capturing Directly to a DVD Disc

You can capture video directly to a recordable or rewritable DVD disc. This is especially useful for capturing video using a digital video (DV) device, a capture card, or a web camera; or for copying VHS tapes to a DVD. With a DVD+RW or DVD-RW disc, use Disc Manager's DVD (VR) format for real-time recording.

NOTE: Commercially pressed DVDs are copy protected, so you can't record them.

To capture video directly to recordable or rewritable DVD disc:

1. Make sure you have a rewritable DVD drive (such as the Plextor PX-708A or PX-708UF) installed in or connected to your computer.
2. Launch Disc Manager by selecting it from the upper right corner of the WinDVD Creator main window (or from the Task Manager window). You see the Disc Manager window, with DiscView at the bottom.
3. Insert a recordable or rewritable DVD disc into the drive. (Depending on your drive's capabilities, you can use a DVD+R or +RW disc, or a DVD-R or -RW disc.) If you're using an RW disc, you are asked if you want to format the disc as a VR disc.
4. Click Yes to format the disc. (Always choose Yes if you are using an RW disc.) You see a choice of formatting options.
5. Choose a format option.
   - If you know the disc is blank, you can usually choose a quick format.
   - If you know the disc has data on it, you'll need to erase it with a full format.

   You can also give the disc a name. Then click OK. You see a message indicating the disc is being formatted, then a message indicating the disc is being loaded. Finally you see the Disc Manager window with a blank screen in the DiscView area at the bottom.

6. Start the video source: camcorder, TV, videocassette player, etc., and in the Disc Manager window click Capture. You see the control panel for the capture device.

7. In the control window, use the configuration button to set the parameters for recording:
   - In the Record tab, select a Format and a Profile for capture. See page 28 for an overview of the formats and profiles, and see page 54 for details of the video resolution and recording time for each ConvertX capture profile.
   - In the Device Control tab, select the Video Source (S-Video or Composite) you have connected to the ConvertX. You can also select the Video Standard; set this to match the type of video that is coming into the ConvertX. (In general, NTSC is the TV standard used in North America and Japan, while PAL is used in Europe and South America. SECAM is used in France, Eastern Europe, and some African nations.)

     NOTE: If you want to change the **output** format, go to Tools | Start-Up Wizard | Format and select NTSC or PAL. NTSC output is the default.
   - You can use the Video Qualities tab to change the characteristics of the video you capture. (To begin, you can leave these set at their default values, and change them if your video is consistently too dark, too light, too contrasty, etc.)

8. To record video, press the Record button on this device's on-screen control panel. During recording, you can see a counter showing the time of recording. You can also see a counter showing the remaining capacity of the disc.

IMPORTANT: If you don't seem to be getting any video in the preview window, make sure you have used the Device Control tab to select the Video Source (S-Video or composite) that matches the physical connection to the ConvertX.

CAUTION: Do not attempt to launch other applications while recording. Video data may be corrupted if CPU usage approaches 100 percent.

9. To stop recording, press the Record button again. You see a window that indicates the disc content is being updated; then recording stops, and you see the Disc Manager preview window blank again.

10. You can continue recording and stopping, or you can simply let the entire video record onto the disc. The DiscView windows show the scenes on the disc. You can also use the Video Library button to import other video clips, and the Authoring button to bring a theme (double-click on the theme) as a background in the preview window.

11. If you are using an RW disc, when you are done recording, use the up arrow, then select Tools and Finalize.

12. Then use the Eject button to eject the disc. The recorded DVD is playable with WinDVD 5 and on most modern commercial set-top DVD players.

Where to Go from Here

This chapter has shown some simple procedures for capturing, editing, creating and sharing your audiovisual creations. For more in-depth information, consult WinDVD Creator's Help files. And don't be afraid to experiment—you'll learn more by doing than any manual or help file could possibly teach you.

4. Using the WinDVD Player

InterVideo's WinDVD 5 is a simple-to-use DVD player that combines all the features you would expect to find in a standard consumer DVD player. It also has full VCD 2.0 and MPEG-4 support, full precision video decode, and a choice of user interfaces and video display options.

Used with your ConvertX, the WinDVD player lets you play all kinds of media: commercial CDs and DVDs, MPEG-4 video CDs, and especially the CDs and DVDs created with WinDVD Creator. The WinDVD player automatically determines the type of disc in your DVD drive and uses the correct playback method.

Install the WinDVD 5 Software

To install the WinDVD player software:

1. Turn ON your computer system.

2. Make sure that all applications are turned off.

3. Insert the ConvertX software disc into your CD or DVD drive. You see the Plextor Application Installer screen.

4. Select the WinDVD button. You see the WinDVD Setup screen.

5. Click Next. You see the License Agreement.

6. Page down to read the entire License Agreement, then click Yes. If you still see the License Agreement, click Yes again. You see the User Information window.

7. Enter your Name, your Company, and the Serial Number for the product. (The serial number is located on the software CD envelope.) You see the Destination path screen.

8. Accept the default destination path proposed by the setup program and click Next. You see the Select Program Folder screen.

9. Accept the default program folder as the location where the setup program will add WinDVD player's icons, or enter the name of another folder. Then click Next. The setup program installs WinDVD player, a process that can take a few minutes. When the installation is completed, you see the a File Types Association screen, asking if you want to associate certain file types with WinDVD Player.

10. If you want WinDVD Player to automatically play DVD Video and Movie files, leave the check marks in the boxes and click Next. (You may see a Third Party Application Setup window, asking if you want to install Microsoft HTML Help. If so, click Next to install Microsoft HTML Help.) When the installation is completed, you see the Setup Complete screen.

11. Click Finish. The installation is complete, and you can launch the WinDVD player.

Launch the WinDVD Player

To launch the WinDVD player:

- Click the InterVideo WinDVD 5 icon on your desktop.
  -or-
  Select Start | Programs | InterVideo WinDVD | InterVideo WinDVD 5.
  -or-
  Insert a CD or DVD to launch the player automatically.

Use the WinDVD Controls

Once WinDVD is launched and active, use the controls shown on the WinDVD panel to navigate. Note that not all options are available with all CD and DVD titles; if a WinDVD feature is not available with a particular title, it is grayed out and inaccessible.

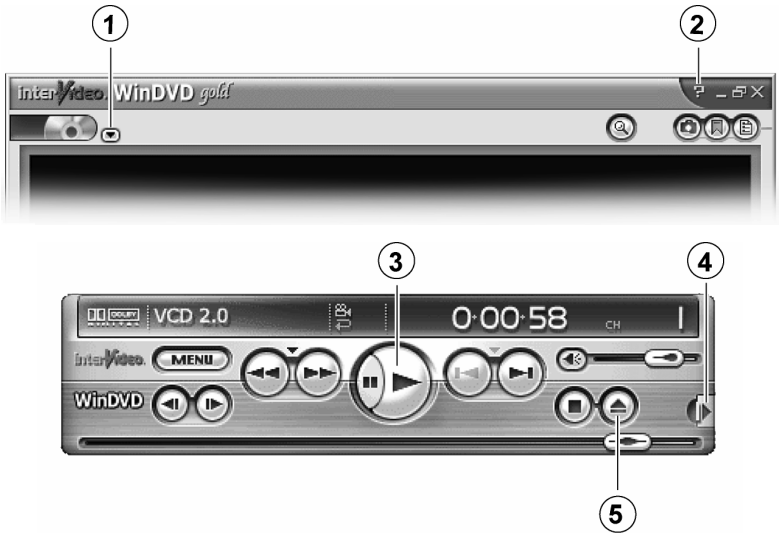

Figure 24: WinDVD plays CDs, DVDs, and media files

No.	Window Area	Function
1	**File menu**	Opens the File window, letting you select files for playing.
2	**Help**	Shows controls and step-by-step operation.
3	**Play (Enter)**	Plays current selection.
4	**Subpanel**	Shows choice of several subpanels and menus.
5	**Eject**	Ejects the disc.

The illustration shows key WinDVD controls. For an explanation of all controls, select the WinDVD Help menu.

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5. Maintenance and Troubleshooting

This chapter explains maintenance and troubleshooting procedures for your ConvertX.

With proper maintenance, you can prevent problems. If trouble arises, you can often solve many simple problems on your own, rather than wait for assistance from a Plextor representative.

Upgrading Your ConvertX

Periodically, Plextor makes available updates for the operating program of the ConvertX. Before troubleshooting a possible problem with your digital video converter, please make sure to visit our web site at www.plextor.com to make sure you have the latest ConvertX operating program.

To obtain the latest operating program for your ConvertX:

1. Go to the Plextor web site at www.plextor.com.

2. Look for the upgrade in the Support area, on the Downloads page. There is a description of the latest software program revision and its intended use.

3. Download the program to the computer that you are using with the ConvertX.

To upgrade the ConvertX operating program:

1. First, locate the executable file (it ends in ".exe") that you downloaded from Plextor's web site.

2. Run the executable file by using Windows Explorer to double-click on the file.

   Accept all defaults by continuing to click on the Next button until you see a message indicating the update has completed.

3. Restart your system.

Troubleshooting Hints

Use these hints if you have problems with installation or capture.

Problems with Installation

If you have problems during or right after installation of your ConvertX, use these hints to help solve the problem:

- First, make sure to update your version of Windows using Microsoft's Windows Update.

- Also, visit the Plextor web site to find other tips to help find and solve the problem.

Problems with Capture

- Make sure you are using a USB 2.0 connection. USB 1.1 is not fast enough to reliably capture video.

- You may need to shut down other applications while recording. Video data may be corrupted if CPU usage approaches 100 percent.

Appendix A: Specifications

ConvertX Specifications

Product Name	Plextor ConvertX
Product Type	MPEG-1/2/4 and DivX Digital Video Converter
Product Model	PX-M402U
System Interface	Hi-Speed USB 2.0

Minimum System Requirements

Computer	Pentium III, 800-MHz CPU (minimum); Pentium 4, 1.6-GHz or faster CPU suggested
Minimum Memory	256 MB or higher
Hard Disk Size	10 GB free space preferred
Interface	Hi-Speed USB 2.0
Operating System	Windows XP, 2000
Monitor	Resolution: 1024 x 768, 24-bit color
Video Graphics Card	Windows-compatible 24-bit color capability with DirectX support
Sound Card	Windows-compatible sound card with 48-kHz playback
CD Drives	CD-ROM drive: For software installation. CD-RW drive: Recommended DVD+RW or DVD-RW drive: Recommended
DirectX Support	DirectX 9.0b or later required (supplied by WinDVD Creator)

MPEG Specifications

Video Compression	MPEG-1: ISO/IEC11172-2 MPEG-2: ISO/IEC13818-2 MPEG-4: ISO/IEC14496-2 DivX: Home Theater, Portable profiles
Video Bit Rate	MPEG-1: 1.15Mbps (CBR) MPEG-2: 2Mbps-6Mbps (VBR) MPEG-4: 7Kbps-4Mbps (VBR) DivX: 768Kbps and 4Mbps (VBR)
MPEG Profile	MPEG-1 MPEG-2: Main Program @ Main Level MPEG-4: Simple Profile @ L3
Video Capture Size	MPEG-1: SIF: 352 x 240, NTSC; 352 x 288, PAL (VCD) MPEG-2: ▪ SIF: 352 x 240, NTSC; 352 x 288, PAL (EP) ▪ Half D1: 352 x 480, NTSC; 352 x 576, PAL (SP, LP) ▪ Full D1: 720 x 480, NTSC; 720 x 576, PAL (HQ, GQ) MPEG-4: ▪ SIF: 352 x 240, NTSC; 352 x 288, PAL (LP, EP) ▪ Full D1: 720 x 480, NTSC; 720 x 576, PAL (HQ, GQ, SP) DivX ▪ SIF: 352 x 240, NTSC; 352 x 288, PAL (Portable) ▪ Full D1: 720 x 480, NTSC; 720 x 576, PAL (Home Theater)

MPEG Specifications (continued)

Aspect Ratio	MPEG-1: 1.0950 (NTSC), 0.9157 (PAL) MPEG-2, 4, DivX: 4:3 (All modes)
Frame Rate	29.97 (NTSC), 25 (PAL, SECAM) **NOTE**: PAL, SECAM=PAL
Audio Bit Rate	224 Kbps 16-bit stereo 128 Kbps* 16-bit stereo *MPEG-4 SP, LP, EP and DivX Portable
Audio Compression	PCM (The capture application converts PCM data to MPEG-1 Layer II)
Audio Sampling Frequency	44.1 kHz 16-bit stereo 48 kHz 16-bit stereo
Multiplexing	Elementary stream
GOP Structure	MPEG-1: IBBP MPEG-2: IBBP MPEG-4: IP DivX: IP
Video Input Signal	NTSC, PAL, SECAM
Video Output Format	NTSC, PAL

Example Video Resolution and Recording Times

Legend:
HQ = High quality
GQ = Good quality
SP = Standard quality
LP = Long play quality
EP = Extended play quality

NOTE: Video recording times can vary depending on the video source. Actual bit rates can vary from the target bit rate, depending on how much motion is in a video.

MPEG-1 Video Resolutions and Recording Times

Pro-file	Video Reso-lution	Video Target Bit Rate (Kbps)	Total Data (MB/s)	Data/ Minute (MB)	Time (min), 700 MB CD	Time (min), 4.3 GB DVD
VCD	SIF	1,150	0.17	10.06	69.86	434.94

MPEG-2 Video Resolutions and Recording Times

Pro-file	Video Reso-lution	Video Target Bit Rate (Kbps)	Total Data (MB/s)	Data/ Minute (MB)	Time (min), 700 MB CD	Time (min), 4.3 GB DVD
HQ	Full-D1	6,000	0.76	45.59	15.42	96.02
GQ	Full-D1	4,500	0.58	34.60	20.32	126.50
SP	1/2 D1	3,000	0.39	23.61	29.77	185.36
LP	1/2 D1	2,000	0.27	16.29	43.16	268.71
EP	SIF	2,000	0.27	16.29	43.16	268.71

Example Video Resolution and Recording Times (continued)

MPEG-4 Video Resolutions and Recording Times

Pro-file	Video Reso-lution	Video Target Bit Rate (Kbps)	Total Data (MB/s)	Data/ Minute (MB)	Time (min), 700 MB CD	Time (min), 4.3 GB DVD
HQ	Full-D1	4,000	0.52	30.94	22.72	141.48
GQ	Full-D1	3,000	0.39	23.61	29.77	185.36
SP	Full-D1	2,000	0.26	15.59	45.10	280.83
LP	SIF	1,500	0.20	11.92	58.96	367.08
EP	SIF	700	0.10	6.06	115.92	721.75

DivX Video Resolutions and Recording Times

Pro-file	Video Reso-lution	Video Target Bit Rate (Kbps)	Total Data (MB/s)	Data/ Minute (MB)	Time (min), 700 MB CD	Time (min), 4.3 GB DVD
Home The-ater	Full-D1	4,000	0.52	30.94	22.72	141.48
Home The-ater LP	Full-D1	2,000	0.27	16.29	43.16	268.71
Port-able	SIF	768	0.11	6.56	107.12	666.97

Front Panel

Audio R, L	RCA audio connectors. Red connector is right channel, white is left channel.
Video	RCA video connector for composite video
S-Video	S-Video connector
Record	Amber when capturing video
Power	Blue when AC adapter and USB cable are connected to the ConvertX and the computer is turned on.

Power

AC Adapter	Input: 100-240 Vac Output: 9.0 Vdc, 750mA max. (ConvertX is operational at DC +8V min, +15V max.) **CAUTION**: Use only the AC adapter shipped with your ConvertX.

Host Interface

USB Connector	B Type
USB 2.0 transfers	480 Mbps max (Hi-Speed) **CAUTION**: Use only the USB cable shipped with your ConvertX.

Dimensions and Weight

Dimensions (W/H/D)	184 mm (W) x 32.4 (H) mm x 155 mm (D) 7.24" x 1.28" x 6.10"
Weight	525g (1.16 lb)

Environmental Conditions

Operating and Performance Guarantee Temperature	5 to 40 degrees Celsius
Operating Humidity	20% to 80% (non-condensing)
Storage Temperature	–40 to 60 degrees Celsius
Storage Humidity	20% to 80% (non-condensing)
Vibration, Operating	$2.0G_{0\text{-}Pk}$ (5-300Hz), Sine sweep 5 minutes (Normal operation)
Shock, Operating	$3.0G_{0\text{-}Pk}$ (5-300Hz) 11msec, Sine sweep 10 sec interval (Normal operation)
Electrostatic Discharge	±8KV aerial discharge ±4KV contact discharge (Normal operation)
External Pressure (Ambient Air)	50n (No damage)
Unimpeded Drop Height	5cm (Normal operation)
Operating Position	Horizontal ± 15 degrees

Approvals, Safety and EMC Standards

Country/ Region	Type	Agency	Standard
USA	Safety	UL	UL 60950 (AC adapter only)
	EMC	FCC	Part 15J Class B
Canada	Safety	UL (C-UL)	CSA C22.2 No. 60950 (AC adapter)
Europe	Safety	CE	IEC 60950 (AC adapter)
China		CCC	AC adapter only
	EMC	CE	EN 55022 Class B, EN 55024
International		USB-IF	USB-IF (USB Implementers Forum)
		WHQL	Microsoft Windows Hardware Qualifying Labs

WinDVD Creator 2 Specifications

Input Formats	Video: MPEG-1, MPEG-2, AVI Audio: WAV and MP3 Image: BMP, JPEG, GIF
Video Output Formats	MPEG-1 MPEG-2 DivX WMV AVI
Format Support	VCD, DVD, DVD+VR, DVD-VR (Supported media include DVD-R, DVD+R, DVD+RW, DVD+VR, DVD-VR)
Compatibility	Not compatible with .wcp files created by first edition of WinDVD Creator.

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Appendix B: Technical Support

Store Plextor's e-mail, web site, phone, and fax numbers in a convenient location. Keep your digital video converter's serial number and a copy of your sales receipt handy as well.

If you experience a problem while installing or operating your ConvertX, please refer first to the relevant sections of this manual regarding setup and installation (Chapters 1–2). If you do not uncover the solution there, then refer to the maintenance and troubleshooting chapter that begins on page 49. You may also wish to visit the Frequently Asked Questions (FAQ) section of our web site to assist you in troubleshooting the problem on your own.

NOTE: We encourage you to go the Plextor web site (www.plextor.com) before attempting to contact Technical Support. The answers to the most common questions callers ask can be found quickly in the support area. Select PlexHelper for online troubleshooting or FAQs for common questions.

If you have not been successful in your quest, our Technical Support Department will help you solve problems that relate specifically to your ConvertX. In many cases, a problem that appears to be caused by your ConvertX actually originates in another part of your computer. In such instances, our technical support staff will try to help you identify the part at fault and will refer you to the manufacturer of that part for further assistance.

How to Contact Plextor Technical Support

There are several ways for you to contact Plextor's Technical Support Department:

- Visit our web site (www.plextor.com) for answers to Frequently Asked Questions.
- Send us e-mail at support@plextor.com. Include your telephone number and the hours during which you can be reached. Be as detailed as possible in describing your problem. Please include system configuration, hardware and software, as well as versions of digital video converters used.
- Call 800-886-3935 and select the tech support option.

Before You E-mail/Log On/FAX/Call

Please gather as much of the following information as possible before contacting us.

- The serial number and TLA number of your ConvertX. Your serial number can be found on the label on the digital video converter itself. The TLA number appears on the label at the rear of the digital video converter.
- The latest version of the operating program you loaded onto the digital video converter, if applicable.
- The version of the Windows operating system you are using.
- The brand name and model number of your computer (e.g., Dell 466/NP, Hewlett-Packard Pavilion 752n, etc.).
- The type of VGA, Super VGA, or other graphics board you use.
- Brand name and model number of any other peripherals you have installed or connected to your computer (e.g., CD-ROM, scanner, fax board, network board).

Returns

In the unlikely event that you need to return a digital video converter to Plextor, you need an RMA (Returned Materials Authorization) number. You need this number before any Plextor digital video converter can be returned for repair or replacement. Here's how you get an RMA number and return your digital video converter:

1. Contact Plextor Technical Support. You will receive assistance in troubleshooting your system. If the ConvertX is determined to be defective, you will receive a Tech Support Ticket Number.

2. Locate the RMA request form at: https://www.plextor.com/english/support/rma_request_form.htm. Complete the form, providing the Technical Support Ticket number and details of the ConvertX failure. After completing the form, click the Submit button.

IMPORTANT NOTE: The RMA form will not be processed without the Tech Support Ticket Number.

3. Plextor will then return the RMA form to you via e-mail, with the RMA number and shipping information included.

4. When you receive the RMA number, pack the Plextor ConvertX securely in a box, and include the RMA form as a packing slip.

5. Write the RMA number in large letters on the outside of the box, and ship the box and the ConvertX to Plextor.

Contacting Plextor's RMA Department

You can contact our RMA Department and request RMA forms at:

- rmasupport@plextor.com
- Or by fax at 510-651-9765
- Or by calling us at 800-886-3935

Packing Your ConvertX

If possible, pack your ConvertX in the original box. Some of our customers have not held on to their boxes and have had to resort to less-than-secure methods to get their units back to us.

If you did not receive a box, we recommend you pay a packaging store (such as Mail Boxes Etc.) to ship your ConvertX. If you don't have a packaging store in your area, ask for packaging pointers when you contact us to get an RMA number before returning any digital video converter.

Shipping Your ConvertX to Plextor

Be sure to write the RMA number on the outside of the shipping box. Any unit sent to Plextor without an RMA number will not be accepted.

NOTE: The RMA number must be clearly visible on the outside of the shipping box.

ConvertX units must be sent postage prepaid. We recommend that you insure your shipment, as Plextor cannot be held responsible for any damage that may occur during shipment.

Appendix C: Warranty

PLEXTOR CORP. (“Plextor”) warrants your ConvertX PX-M402U Digital Video Converter against any defect in material and workmanship, under normal use, for a period of one year following its date of purchase. In the event this product is found to be defective within the warranty period, PLEXTOR will, at its option, repair or replace the defective unit.

This warranty is void: a) if the unit is operated or stored under abnormal use and maintenance conditions; b) if the unit is repaired, modified or altered, unless such repair, modification or alteration is expressly authorized in writing by PLEXTOR; c) if the unit is subjected to abuse, neglect, lightning strike, electrical fault, improper packaging, or accident; d) if the unit is installed improperly; or e) if the serial number of the unit is defaced or missing.

PLEXTOR will not, under any circumstances, be liable for direct, special, or consequential damages such as, but not limited to, damage or loss of property or equipment, loss of profits or revenues, cost of replacement goods, or expense or inconvenience caused by service interruptions. Under no circumstances will any person be entitled to any sum greater than the purchase price paid for the unit.

To obtain warranty service, you must contact PLEXTOR’s Technical Support Department by calling 800-886-3935. They will attempt to diagnose and correct your problem by phone. If the unit does not function properly, they will issue a Tech Support Ticket number to be used on your RMA return request. You may be asked to furnish proof of purchase to confirm that the unit is still under warranty.

All product returns must be authorized in advance by PLEXTOR’s RMA Department. Authorization is confirmed by issuance of the RMA number, which must be written prominently on the outside of the box in which the defective unit is returned to PLEXTOR.

All ConvertX units returned to PLEXTOR must be securely packaged and shipped postage prepaid.

The ConvertX will be returned to the customer at Plextor's expense when originating within the United States. For a ConvertX originating outside of the United States, the customer is responsible for shipping costs in both directions.

NOTE: Warranty validity is limited to that applicable in the location where the ConvertX was originally purchased.

If You're Outside the U.S. or Canada

Note that the warranty and RMA policy only apply to the United States and Canada. If you are in South America, contact your dealer or reseller for all warranty and RMA claims.

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Notes

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