



# **IBM ThinkPad 390**

## **DVD/FDD Bay Drive**

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*User's Guide*

**OPTIONS**  
*by* 

**First Edition (February 1999)**

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## Part 1. Using the ThinkPad 390 DVD/FDD Bay Drive

The *ThinkPad 390 DVD/FDD Bay Drive* (hereafter called the *DVD option*) supports the ThinkPad 390 series computer in the Windows 95 or Windows 98 environment, with either of the following processors:

- Intel Pentium II Processor or faster
- Intel Celeron 300-MHz processor or faster

To use the DVD option in your computer, you need to install the software programs after inserting the DVD option into the UltraBay FX. This book explains how to install software programs. For how to insert the DVD option into your computer, refer to the *User's Reference* of your computer.

Before you begin the installation, make sure that the following items are included in your option package:

- DVD drive
- DVD Software CD-ROM (includes software programs for DVD movies)
- This user's guide

**Note:** The DVD movie player is supported by Windows 98 and Windows 95 OSR2.0 or later versions. You can check which version of Windows 95 you are using by doing the following:

1. Click **Start**, move the cursor to **Settings**, and then click **Control Panel**.
2. Double-click **System**.

Read the numbers under "System."

- 4.00.950B means that it is Windows 95 OSR2.0 or OSR2.1.
- 4.00.950C means that it is Windows 95 OSR2.5.

**Note:** Be sure to keep your proof of purchase, because it might be required for warranty services. (See Appendix A.)

## Installing programs

If you want to view DVD movies, do the following to install the software programs:

To install the software programs, do as follows:

- 1** Remove the warm swap driver.
- 2** Update the video driver
- 3** Enable the DMA setting.
- 4** Install the DVD movie player program (DVD Express).
- 5** Select the region code.

Details are provided in the following sections.

If you are not going to watch DVD movies—that is, if you are going to use the DVD drive only for reading DVD-ROMs or CD-ROMs—you do not need to install these programs.

## Removing the warm swap driver

To remove the warm swap driver, do the following.

**Note:** To view the DVD movies comfortably, you need to remove the warm swap driver.

- 1** Click **Start**.
- 2** Move the cursor to **Settings**, and click **Control Panel**.
- 3** Double-click **Add/Remove Programs**.
- 4** Click the **Install/Uninstall** tab.
- 5** Select **Agate Tioman**.
- 6** Click the **Add/Remove** button.
- 7** Follow the instructions on the screen.

From now on, before replacing a device in the UltraBay FX, you need to power off the computer.

## Updating the video driver

To update the video driver, go to appropriate section.

If you are using Windows 98, go to the next section.

If you are using Windows 95, go to “Updating procedure for Windows 95 .”

### Updating procedure for Windows 98

- 1** Insert the DVD Software CD-ROM into the DVD drive.
- 2** Click **Start**.
- 3** Move the cursor to **Settings**, and click **Control Panel**.
- 4** Double-click **Display**.
- 5** Click the **Settings** tab.
- 6** Click **Advanced...**
- 7** Click the **Adapter** tab.
- 8** Click **Change...**

The “Update Device Driver Wizard” window appears.

**9** Click **Next**.

**10** Click **Display a list of all the device drivers in a specific location so you can select the driver you want**.

**11** Click **Next**.

**12** Click **Have Disk...**

**13** When you are prompted to specify the driver disk, type `x:\DISPLAY\` and click **OK**.

**Note:** x represents the drive letter of the DVD drive.

**14** Select **NeoMagic MagicMedia 256AV**, and click **OK**.

**15** Click **Next**.

**16** Click **Finish**.

**17** Click **Close**.

**18** Click **Close** again.

**19** When you are prompted to restart the computer, click **Yes**.

### Updating procedure for Windows 95

- 1** Insert the DVD Software CD-ROM into the DVD drive.
  - 2** Click **Start**.
  - 3** Move the cursor to **Settings**, and click **Control Panel**.
  - 4** Double-click **Display**.
  - 5** Click the **Settings** tab.
  - 6** Click **Advanced Properties**.
  - 7** Click **Change...**
  - 8** Click **Have Disk...**
  - 9** When you are prompted to specify the driver disk, type `x:\DISPLAY\` and click **OK**.
- Note:** x represents the drive letter of the DVD drive.
- 10** Click **OK**.
  - 11** Click **Close**.
  - 12** Click **Close** again.
  - 13** When you are prompted to restart the computer, click **Yes**.

### Enabling the DMA setting

- 1** Click **Start**, move the cursor to **Settings**, and click **Control Panel**.
- 2** Double-click **System**.
- 3** Click the **Device Manager** tab.
- 4** Double-click the **CDROM** icon.  
The DVD drive name appears under the **CDROM** icon.
- 5** Double-click the DVD drive name.
- 6** Click the **Settings** tab.
- 7** Put check marks in the **DMA** and **Auto insert notification** check boxes by clicking them. If the alert dialog appears, click **OK** to close it.
- 8** Click **OK**.
- 9** Click **Close** to close the “System Properties” window.  
The system settings change dialog appears.
- 10** Click **OK** to restart the system.



## Installing the DVD movie player program

To install the DVD movie player, do the following:

- 1** Insert the DVD Software CD-ROM into the DVD drive.
- 2** Click **Start** and **Run**.
- 3** Type `x:\DVDPLAYR\SETUP` and click **OK**.  
**Note:** x represents the drive letter of the DVD drive.
- 4** Follow the instructions on the screen.

## Selecting the region code

If you want to view a DVD movie on your computer, you need to set the DVD region code. You can set the region code when you start DVD Express for the first time.

### DVD region codes

Regional coding is part of the protection scheme for DVD content. The world is divided into six regions, so that specific content can be viewed only in the region where it is appropriate. For example, Region 1 (U.S. and Canada) content can be viewed only in Region 1. The DVD movie player application is also region-specific.

You must select a region to play DVD content. After you have selected a region, you can play content only from that region.

Make sure the first DVD content you play is from the appropriate region. You can verify the region code of the content by looking at the region code symbol on the back of the content packaging.

**Attention:** *If the first DVD you play is from a region other than the region you selected, your system will no longer play DVD content. Contact the IBM PC HelpCenter. See Appendix A.*

To select the region code, do the following:

- 1** Insert the DVD-ROM into the DVD drive.
- 2** Click **Start**.
- 3** Move the cursor to **Programs, Mediamatics Express**, and click **Mediamatics DVD Player**.
- 4** Click the play button (▶) of the “DVD movie player” window.  
The “Select DVD Region” window appears.
- 5** Select the region code and click **OK**.

<b>Region Code</b>	<b>Region</b>
1	U.S, Canada
2	Europe, Middle East, South Africa, Japan
3	Southeast Asia, Taiwan, Korea
4	Latin America, Australia, New Zealand
5	Former Soviet Union, the rest of Africa, India
6	People's Republic of China

Follow the instructions on the screen.

## Viewing a DVD movie

After you install the DVD drive and the programs, you can view a DVD movie by doing the following:

- 1** Insert a DVD into the DVD drive.  
If you want to watch a DVD movie on your TV, refer to the *User's Reference* of your computer.
- 2** Click **Start**, move the cursor to **Programs**, and click **Mediamatics DVD Express**.
- 3** Click **Mediamatics DVD Player**.

The “DVD movie player” window appears. For more information on how to play the DVD movie player, see the *Online User's Guide* of your computer.

### Notes:

1. Your computer has been configured to provide the highest quality audio and video playback based on the available system resources. You can alter the default settings by changing the video resolution setting within the **Control Panel** of Windows 95 or Windows 98. Some systems do not have enough resources to provide full-quality audio and video playback at all resolution settings. If you experience poor playback performance, adjust the resolution to a lower setting.
2. Audio or video streams are decoded in software. The audio and video subsystems need to be fully functional and enabled.
3. When you are viewing a DVD movie, the LCD resolution might be automatically set to 800 x 600, 256 colors.

## Troubleshooting

Problem	Cause and action
<p>If you play the DVD Express with Windows 98 or Windows 95, the “No valid Disk/Drive found” message appears.</p>	<p>This message appears when you reboot or restart your ThinkPad computer with the DVD-ROM left in the DVD drive. Remove the DVD-ROM from the drive and then reinsert it.</p> <p>If the problem persists, check the drive assignments. Assignments should not skip letters. Suppose, for example, that you have assigned the hard disk drive as the C drive and the DVD drive as the E drive, and nothing is assigned as the D drive. In this case, you would need to assign the DVD drive as the D drive. To change the drive letter from E to D, do the following:</p> <ol style="list-style-type: none"> <li>1. Click <b>Start</b>, move the cursor to <b>Settings</b>, and click <b>Control Panel</b>.</li> <li>2. Double-click <b>Device Manager</b>.</li> <li>3. Double-click the letter currently assigned to your DVD drive (for example, E).</li> <li>4. Click the <b>Settings</b> tab.</li> <li>5. Select <b>D</b> in “Start drive letter” under “Reserved drive letters.”</li> <li>6. Click <b>OK</b> and restart the computer.</li> </ol>
<p>The LCD resolution degrades when you play a DVD movie.</p>	<p>Reset the LCD size as follows:</p> <ol style="list-style-type: none"> <li>1. Click <b>Start</b>, move the cursor to <b>Programs</b> and <b>ThinkPad</b>. Then click <b>ThinkPad Configuration</b>.</li> <li>2. Click the <b>LCD</b> icon.</li> <li>3. Click <b>Enable</b> in “Screen Expansion.”</li> <li>4. Click <b>OK</b>.</li> </ol>

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## Part 2. Appendixes

### *Appendix A. Help and service information*

**Note**

This appendix provides general service information, and some descriptions might not apply to your particular computer or suit your situation.

If you have questions about your new Options by IBM product, or require technical assistance, visit the IBM Personal Computing Support Web site at <http://www.pc.ibm.com/support>. For information about IBM, IBM PC products, or Options by IBM, visit the IBM Personal Computing Web site at <http://www.pc.ibm.com>. Additionally, you can receive information from the IBM Automated Fax System at 1-800-426-3395 (in Canada, 1-800-465-3299), or from the Personal Systems Group Bulletin Board System (PSG BBS) at 1-919-517-0001. You can also get help and information through the IBM PC HelpCenter, 24 hours a day, seven days a week. Response time might vary depending on the number and nature of the calls received.

Marketing, installation, and configuration support through the HelpCenter will be withdrawn or made available for a fee, at IBM's discretion, 90 days after the option has been withdrawn from

marketing. Additional support offerings, including step-by-step installation assistance, are available for a nominal fee.

During the warranty period, assistance for replacement or exchange of defective components is available. In addition, if your IBM option is installed in an IBM computer, you might be entitled to service at your location. Your technical support representative can help you determine the best alternative.

#### **Step 1. Problem solving**

You might be able to solve the problem yourself. Before calling the HelpCenter, please prepare for the call by following these steps:

1. If you are having installation or configuration problems, refer to the detailed sections on installation found in this manual, and review any README.TXT files found on the installation diskettes.
2. Visit the Personal Computing Support Web site specific to the model of option you have purchased. Updated installation instructions, hints and tips, or updated system-specific notes are often published in this section. You might find that later device drivers are available that will improve the performance and compatibility for your new option.

If you are installing this option in an IBM computer, also visit the applicable support Web page for that computer model. These

pages might also contain useful hints and tips related to installation of this option and might refer to BIOS or device-driver updates required for your computer model. If you are installing the option in a non-IBM computer, refer to the manufacturer's Web site.

3. Uninstall and then reinstall the option. During the uninstallation process, be sure to remove any files that were installed during the previous installation. Many IBM options include uninstallation programs.
4. Check all cabling to be sure that it is correct as shown in this manual. When you connect a cable to a cable connector, pay close attention to the colored stripes along the edge of the cable, and ensure that they are matched with PIN 1 on both the computer connector and the option connector.
5. If your option contains jumpers or switches, be sure their positions and orientation match the instructions in this manual.

## Step 2. Preparing for the call

To assist the technical support representative, have available as much of the following information as possible:

1. Option name
2. Option number
3. Proof of purchase
4. Computer manufacturer, model, serial number (if IBM), and manual
5. Exact wording of the error message (if any)
6. Description of the problem

7. Hardware and software configuration information for your system

If possible, be at your computer. Your technical support representative might want to walk you through the problem during the call.

## Step 3. Placing the call to IBM

If you call 90 days or more after the date of withdrawal or after your warranty has expired, you might be charged a fee.

For the support telephone number and support hours by country, refer to the following table or to the enclosed technical support insert. If the number is not provided, contact your IBM reseller or IBM marketing representative.

<i>Support 24 hours a day, 7 days a week</i>	
Canada	1-800-565-3344
U.S.A. or Puerto Rico	1-800-772-2227

## Additional technical support resources

Online technical support is available during the life of your product. Online assistance can be obtained through the Personal Computing Support Web site, the PSG Electronic Bulletin Board System (BBS), and the IBM Automated Fax System.

<i>Online technical support</i>	
IBM Personal Computing Support Web site	<a href="http://www.pc.ibm.com/support">http://www.pc.ibm.com/support</a>
IBM PSG BBS	1-919-517-0001
IBM Automated Fax System	1-800-426-3395 1-800-465-3299 (in Canada)

## ***Appendix B. Product warranty***

The following warranty information applies to products purchased in the United States, Canada, and Puerto Rico. For warranty terms and conditions for products purchased in other countries, see the enclosed warranty insert, or contact your IBM reseller or IBM marketing representative.

International Business Machines Corporation

Armonk, New York 10504

### **Statement of limited warranty**

*The warranties provided by IBM in this Statement of Limited Warranty apply only to Machines you originally purchase for your use, and not for resale, from IBM or your reseller. The term "Machine" means an IBM machine, its features, conversions, upgrades, elements, or accessories, or any combination of them. Unless IBM specifies otherwise, the following warranties apply only in the country where you acquire the Machine. If you have any questions, contact IBM or your reseller.*

**Machine:** ThinkPad 390 DVD/FDD Bay Drive

**Warranty period\*:** One year

*\*Contact your place of purchase for warranty service information.*

### **Production status**

Each Machine is manufactured from new parts, or new and used parts. In some cases, the Machine may not be new and may have been previously installed. Regardless of the Machine's production status, IBM's warranty terms apply.

### **The IBM warranty for machines**

IBM warrants that each Machine 1) is free from defects in materials and workmanship and 2) conforms to IBM's Official Published Specifications. The warranty period for a Machine is a specified, fixed period commencing on its Date of Installation. The date on your receipt is the Date of Installation, unless IBM or your reseller informs you otherwise.

During the warranty period IBM or your reseller, if authorized by IBM, will provide warranty service under the type of service designated for the Machine and will manage and install engineering changes that apply to the Machine.

For IBM or your reseller to provide warranty service for a feature, conversion, or upgrade, IBM or your reseller may require that the Machine on which it is installed be 1) for certain Machines, the designated, serial-numbered Machine and 2) at an engineering-change level compatible with the feature, conversion, or upgrade. Many of these transactions involve the removal of parts and their return to IBM. You represent that all removed parts are genuine and unaltered. A part that replaces a removed part will assume the warranty service status of the replaced part.

If a Machine does not function as warranted during the warranty period, IBM or your reseller will repair it or replace it with one that is at least functionally

equivalent, without charge. The replacement may not be new, but will be in good working order. If IBM or your reseller is unable to repair or replace the Machine, you may return it to your place of purchase and your money will be refunded.

If you transfer a Machine to another user, warranty service is available to that user for the remainder of the warranty period. You should give your proof of purchase and this Statement to that user. However, for Machines which have a lifetime warranty, this warranty is not transferable.

#### **Warranty service**

To obtain warranty service for the Machine, you should contact your reseller or call IBM. In the United States, call IBM at **1-800-772-2227**. In Canada, call IBM at **1-800-565-3344**. You may be required to present proof of purchase.

IBM or your reseller will provide certain types of repair and exchange service, either at your location or at IBM's or your reseller's service center, to restore a Machine to good working order.

When a type of service involves the exchange of a Machine or part, the item IBM or your reseller replaces becomes its property, and the replacement becomes yours. You represent that all removed items are genuine and unaltered. The replacement may not be new, but will be in good working order and at least functionally equivalent to the item replaced. The replacement assumes the warranty service status of the replaced item. Before IBM or your reseller exchanges a Machine or part, you agree to remove all features, parts, options, alterations, and attachments not under warranty service. You also agree to ensure that the Machine is free of any legal obligations or restrictions that prevent its exchange.

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- b. secure all programs, data, and funds contained in a Machine, and
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#### **Extent of warranty**

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