

# AI Tech

---

*Vision for Multimedia*

## **WaveWatcher™ Net-TV 98**

### **User's Guide**

*for IBM Compatibles running Windows 95 or Windows 98*

© 1998 AITech International Corporation. Revision 2.0. All rights reserved

Information in this document is subject to change without notice. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, for any purpose without the prior written permission of AITech International Corporation.

WaveWatcher is a trademark of AITech International Corporation.

Pentium is a trademark of Intel Corporation.

IBM is a registered trademark of International Business Machines Corporation.

MS-DOS and Microsoft are registered trademarks and Windows is a trademark of Microsoft Corporation.

## **AITech International Corporation**

47971 Fremont Blvd.  
Fremont, CA 94538  
USA

Fax: 510-226-8996

BBS: 510-226-8267

Support: 510-226-9246

Internet: [tech\\_support@aitech.com](mailto:tech_support@aitech.com)

Website: <http://www.aitech.com>



# TABLE OF CONTENTS

## **Introduction vii**

- Product Features    **vii**
- Package Contents    **ix**
- System Requirements    **x**
- Document Organization    **xi**
- Document Conventions    **xii**

## **Getting Started 1-1**

- Installing the PCI Card    **1-1**
- Installing the Device Driver and Software    **1-4**
  - If You Are Using Windows 95    **1-4**
  - Installing the Device Driver—Windows 95 (non-OSR 2)    **1-5**
  - Installing the Device Driver—Windows 95 (OSR 2)    **1-8**
  - Installing the Device Driver—Windows 98    **1-11**
  - Installing the WaveWatcher Net-TV 98 Software Utilities    **1-16**
  - Verifying the PCI Card and Device Driver Installation    **1-20**
- Uninstalling the Product    **1-24**
  - Uninstalling the PCI Card    **1-24**
  - Uninstalling the Device Driver and Software    **1-25**

## **Using the WaveWatcher Net-TV 98 TV Program 2-1**

- Starting the Net-TV 98 Program    **2-1**
  - Remote Control Interface    **2-3**
  - Net-TV 98 Program Window Menus    **2-8**
- Special Considerations    **2-11**
  - TV Standards    **2-11**
  - Movie, Cabinet, and Browse Views    **2-11**



## **Video Capture and Playback 3-1**

- Video Capture 3-1**
  - Setting the Capture Options 3-2**
  - Lights, Camera, Action... 3-6**
- Playing AVI Files 3-8**
- Playback Options 3-11**

## **Specifications and Interface A-1**

- Specifications A-1**
  - TV Broadcast A-1**
  - Video A-1**
  - Full-Motion Video Capture A-1**
  - Still-Frame (Single-Frame) Video Capture A-2**
  - External Interface A-2**
  - Dimensions A-2**
  - Weight A-2**
  - System Requirements A-2**
- Signal Interface A-3**
- Considerations for Satellite and DSS Users A-4**

## **Troubleshooting and Support B-1**

- Troubleshooting Problems B-1**
  - Troubleshooting Display Problems B-2**
  - Troubleshooting Audio Problems B-6**
  - Troubleshooting Driver Problems B-8**
  - Troubleshooting IRQ Problems B-10**
  - Troubleshooting Memory Problems B-14**
  - Troubleshooting TV Standard Problems B-15**
- Technical Support B-17**
  - Placing a Support Call B-17**
  - Warranty Information B-18**
  - Repair Services B-18**



## **Configuration Utility C-1**

Overview    **C-1**

DMA Page Setting    **C-2**

Television Standard Selection    **C-3**

## **Glossary D-1**

## **Licensing and Warranties E-1**

Software License Agreement    **E-1**

Software Limited Warranty    **E-2**

Hardware Limited Warranty    **E-3**

FCC Radio Frequency Interference Statement    **E-4**

## **Index**





# INTRODUCTION

Welcome to the world of WaveWatcher Net-TV 98. This multimedia product is a convenient tool for business conferences, class presentations, multimedia demonstrations, and home entertainment. It is capable of supporting a wide variety of international television standards, and includes inputs for external audio and video sources.

With WaveWatcher Net-TV 98, you can view TV programs on your computer, capture video on-the-fly, and play videotapes, laserdiscs, or AVI files. Take advantage of your sound card to add CD-quality audio to displayed or captured video. The still-frame and full-motion video formats are ideal for incorporation into Web pages. WaveWatcher Net-TV 98 also allows you to enjoy videoconferencing over the Internet or any other TCP/IP network, with the addition of a camera, sound card, and conferencing software.

Enjoy clear, high-quality TV video through this powerful product without the need for an SVGA loop cable or feature connector. The jumperless Plug-and-Play design makes installation simple, even if you have never installed or configured peripheral devices before.

## Product Features

WaveWatcher Net-TV 98 offers the following features:

- PCI v2.1 compliance, with Plug-and-Play (PnP) capability
- 125-channel, built-in cable-ready tuner
- Support for NTSC, PAL, and SECAM television standards
- Accepts television, cable, external audio/video, and Super VHS (S-VHS) signals
- Full-motion and single-frame image capture
- CD-quality audio capture with compatible sound card
- Desktop remote control to change channels, make picture or sound adjustments, and capture and play video

See Appendix A, “Specifications and Interface,” for complete technical specifications.



## Product Features

WaveWatcher Net-TV 98 uses the DirectDraw standard supported by Windows 95 and Windows 98. DirectDraw works with display hardware ranging from standard SVGA cards to advanced hardware implementations, containing clipping, stretching, and non-RGB color format support. This standard, usually included with video SVGA drivers, accelerates the video and is necessary for smooth digital video playback.



**Note:** *Ensure your video drivers are current and DirectDraw-compliant. If your video drivers are not compliant with this specification, contact the video card vendor for an up-to-date driver.*

The DirectDraw standard provides the following benefits:

- Improved video playback quality, through access to YUV color formats
- Improved graphics and video quality, through access to image stretching hardware
- Support for double-buffered graphics
- Simultaneous access to standard and enhanced display device memory areas
- Smooth rendering of 3D graphics
- Text overlays in video windows

We hope you enjoy using WaveWatcher Net-TV 98, and that it enhances both your business and personal computing.





## Package Contents

Check that the following items are included in the WaveWatcher Net-TV 98 package:

- WaveWatcher Net-TV 98 PCI card
- CD containing WaveWatcher Net-TV 98 device driver and software utilities, as well as third-party software
- Stereo audio cable with 1/8-inch mini phone plugs on both ends
- User's guide
- Warranty Registration card

At this time, please complete the warranty registration card and return it to AITech to guarantee efficient warranty service and new product notification.



**Note:** *Retain product packaging to store product (especially the PCI card) if not installed in computer; or to return product to AITech should it become necessary to do so.*

**In addition to the package contents, the following is required:**

- Screwdriver for PCI card installation

**The following may also be required:**

- Composite video (RCA cable) or S-VHS cables should you want to view or record video from a VCR, laserdisc, or Digital Video Disc (DVD) player with video output.
- Coaxial cable for connecting to TV or cable TV input to watch TV with this product. If a cable connection for a cable modem is being used, a splitter cable is needed and possibly a filter to connect the modem to the WaveWatcher Net-TV 98 PCI card.
- RCA-to-Mini Stereo adapter to connect to audio from a VCR, laserdisc, or DVD player. Specified cables and adapters can be found at a computer or home electronics store.
- Flashlight to light back of computer when installing cables.



## System Requirements

To successfully use WaveWatcher Net-TV 98, the following is required:

- Pentium 90 MHz (or better) IBM PC or compatible system
- Microsoft Windows 95 or Windows 98
- Minimum 8 MB RAM
- Minimum 4 MB of available disk space
- One available PCI slot
- One available IRQ
- 1 MB PCI SVGA display card with DirectX support (DirectDraw video driver supporting 16-bit color or higher)
- Sound card optional but necessary for audio capture
- Camera, sound card, and conferencing software to use this product for videoconferencing



## Document Organization

This guide contains the following information:

- Chapter 1, “Getting Started,” describes how to get started using WaveWatcher Net-TV 98. Instructions for uninstalling the product are also provided.
- Chapter 2, “Using the WaveWatcher Net-TV 98 TV Program,” describes the basics of how to use the software (Net-TV 98 program) provided with WaveWatcher Net-TV 98.
- Chapter 3, “Video Capture and Playback,” describes how to capture and play back video.
- Appendix A, “Specifications and Interface,” provides specifications and signal interconnection information for WaveWatcher Net-TV 98.
- Appendix B, “Troubleshooting and Support,” describes basic troubleshooting to help solve problems you may have with WaveWatcher Net-TV 98. Technical Support information is also provided.
- Appendix C, “Configuration Utility,” describes how to use the Configuration utility to change the TV standard and DMA page settings.
- Appendix D, “Glossary,” provides definitions of terms used in this guide.
- Appendix E, “Licensing and Warranties,” documents the software license agreement, hardware and software warranties, and information about FCC radio frequency interference.



## Document Conventions

This guide uses the following standard AITech conventions to convey instructions and information:

- Numbered steps denote tasks you perform in the order listed.
- Bulleted lists denote features or options.
- Menu paths appear as selected, separated by a forward slash.  
*For example:*  
Choose **File** | **Exit**.

Special text formats use the following conventions:

- Values or parameters are *italicized*. *For example:*  
Enter a *file name* for your snapshot.
- Buttons, menu names, dialog box names, and other text that appears on the screen is **boldfaced**. *For example:*  
Choose **OK**.
- Path names, file names, and text to be entered appear in Monospace. *For example:*  
The default install folder is C:\Net-tv.
- Keyboard keys appears in UPPERCASE MONOSPACE. *For example:*  
Press ALT+A.

Notes, Cautions, and Warnings appear throughout the manual. Their format and content is as follows:



**Note:** *Applied when information is sufficiently important to require special attention.*



**Caution:** *Applied when information is sufficiently critical to avoid instrument damage or when the information is critical to product function.*



**Warning:** *Applied when information is sufficiently critical to avoid personal injury when electrical hazard is present.*



## GETTING STARTED

This chapter describes how to get started using WaveWatcher Net-TV 98. Topics include

- Installing the PCI card
- Installing the device driver and software utilities
- Uninstalling the product



**Note:** *The PCI card, device driver, and software utilities must all be installed prior to attempting to use the product.*

### Installing the PCI Card

This section describes how to install the WaveWatcher Net-TV 98 card into an open PCI slot in a Windows 95 or Windows 98 system.



**Warning:** *Ensure power to computer and all connected peripherals is off to prevent potential for electric shock.*



**Caution:** *Ground yourself to prevent damage to the card and computer from static electricity.*

#### To install the WaveWatcher Net-TV 98 PCI card

1. It is advisable to back up the Windows Registry and hard disk drive before installing the card. Contact the computer manufacturer for assistance if you are unsure of this procedure.
2. Turn off power to the computer and all connected peripherals (printer, external drive, modem, and so forth).
3. Ground yourself by touching the computer case, then remove the computer case cover.



## Installing the PCI Card

4. Prepare a PCI slot for installation. Locate an available PCI slot, remove the screw holding the slot cover, then remove the slot cover.



**Note:** *If there is no available PCI slot, remove the screw holding an existing PCI card and remove the card.*

5. With the backplane (underside) of the card facing up, press the WaveWatcher Net-TV 98 card firmly into the PCI slot until it snaps into place.

The card input and output connections (Figure 1-1) should now extend through the slot opening.

6. Secure the card by replacing the screw that held the slot cover.
7. For audio playback and capture, connect the **Line/Speaker Output** (the connection closest to the end of the PCI slot, labeled **AUDIO OUT**) of the WaveWatcher Net-TV 98 card to the **Line Audio Input** of an installed sound card, using the supplied stereo audio cable (Figure 1-2).



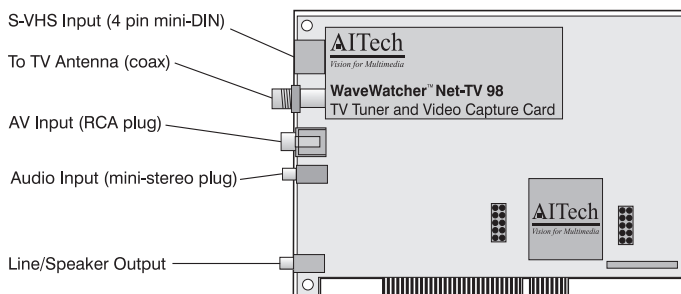
**Note:** *If the **Line Audio Input** of the sound card is connected to another card (such as an internal modem), remove the cable connecting the two cards, at both ends. If the cable remains connected to the other card, you may not be able to hear sound from the speakers once the WaveWatcher Net-TV 98 card is connected to the sound card. Otherwise, you can hook up to a pair of active speakers.*

8. **Optional**—Connect a TV or video signal to the appropriate input on the WaveWatcher Net-TV 98 card (**SVHS**, **ANT**, or **V-IN**) (Figure 1-2).
9. **Optional**—Connect any other video display device, using an S-VHS cable (to connection labeled **SVHS**) or RCA composite cable (to connection labeled **V-IN**) (Figure 1-2).
10. Replace the computer case cover and power on the computer.

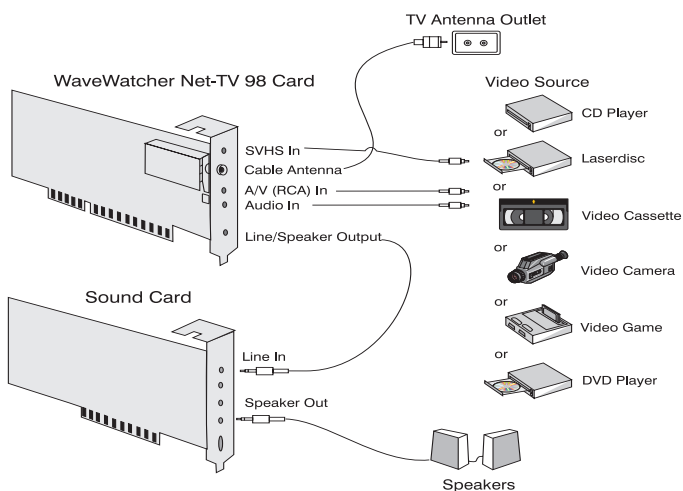
Figure 1-1 illustrates the inputs and outputs available on the WaveWatcher Net-TV 98 PCI card, as well as the component layout.



## Installing the PCI Card



**Figure 1-1** *WaveWatcher Net-TV 98 PCI card inputs, outputs, and component layout (not all card components shown).*



**Figure 1-2** *Connect the **Line/Speaker Output** of the WaveWatcher Net-TV 98 PCI card to the **Line Audio Input** of the sound card.*

## Installing the Device Driver and Software

The WaveWatcher Net-TV 98 package includes a CD containing the device driver and software utilities.

The WaveWatcher Net-TV 98 PCI card is a Windows 95/Windows 98 Plug-and-Play device, and *should* be detected as new hardware after restarting the computer. The Windows New Hardware Wizard or New Device Wizard (depending on Windows version) guides you through driver installation. The instructions assume you are using the product CD for the driver installation.



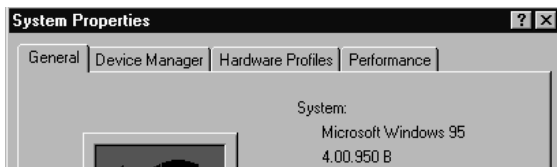
**Note:** *If you downloaded the device driver and software from our website, reference the drive letter of the Net-tv.inf file when entering the device driver path or SETUP.EXE program.*

### If You Are Using Windows 95

Most Windows 95 systems purchased after November, 1996, include OEM Service Release 2 (also called “OSR 2”), an operating system update with minor differences in hardware detection. Windows 98 includes more-advanced hardware detection features as well.

#### To determine which version of Windows 95 is installed

1. Press the secondary mouse button (typically the right-mouse button) over the **My Computer** icon on the Windows desktop.
2. Select **Properties** from the fly-out menu. Windows 95 is identified as follows:
  - *Version 4.00.950 if the original (August, 1995) release is installed*
  - *Version 4.00.950A if Service Pack 1 is installed*
  - *Version 4.00.950B if Service Release 2 is installed*



**Figure 1-3** *Checking the Windows 95 version level.*



## Installing the Device Driver—Windows 95 (non-OSR 2)

### To install the device driver for the WaveWatcher Net-TV 98 PCI card

1. After installing the WaveWatcher Net-TV 98 PCI card and powering on the computer, Windows 95 auto-detects the new hardware and displays the **New Hardware Found** dialog box (Figure 1-4).
2. Select **Driver from disk provided by hardware manufacturer**, then choose **OK**. The **Install From Disk** dialog box appears (Figure 1-5).
3. Insert the *WaveWatcher Net-TV 98 CD* into the CD-ROM drive, then choose **Next** to search for the driver. If necessary, enter the *drive letter* of the `Net-tv.inf` file (for example, `R:\`, where `R:\` is the drive letter of the CD-ROM drive).

Windows displays the **Select Device** dialog box when it successfully locates a driver (Figure 1-6).

4. Select **WaveWatcher Net-TV 98**, then choose **OK**. The **Add New Hardware Wizard** automatically installs the driver from the CD.
5. Choose **Next** to continue, then choose **Finish** when driver installation is complete (Figure 1-7).

Upon completing the installation, the **System Settings Change** dialog box appears stating Windows must be restarted to complete hardware setup (Figure 1-8).

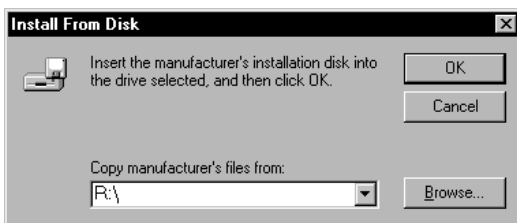
6. Choose **Yes** to restart Windows.



## Installing the Device Driver and Software



**Figure 1-4** *Select the option to install the driver from disk provided by the hardware manufacturer.*



**Figure 1-5** *Confirming device driver file location. If necessary, enter the drive letter of the Net-tv.inf file.*



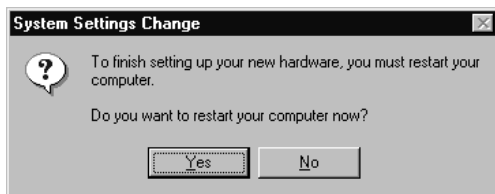
## Installing the Device Driver and Software



**Figure 1-6** *Windows has successfully located the device driver for the WaveWatcher Net-TV 98 PCI card.*



**Figure 1-7** *Installation of device driver by the New Hardware Wizard.*



**Figure 1-8** *Restart Windows to complete setup.*

## Installing the Device Driver—Windows 95 (OSR 2)

Windows 95 OSR 2 includes a New Device Wizard that further automates the installation of new hardware (as compared to previous releases of Windows 95).

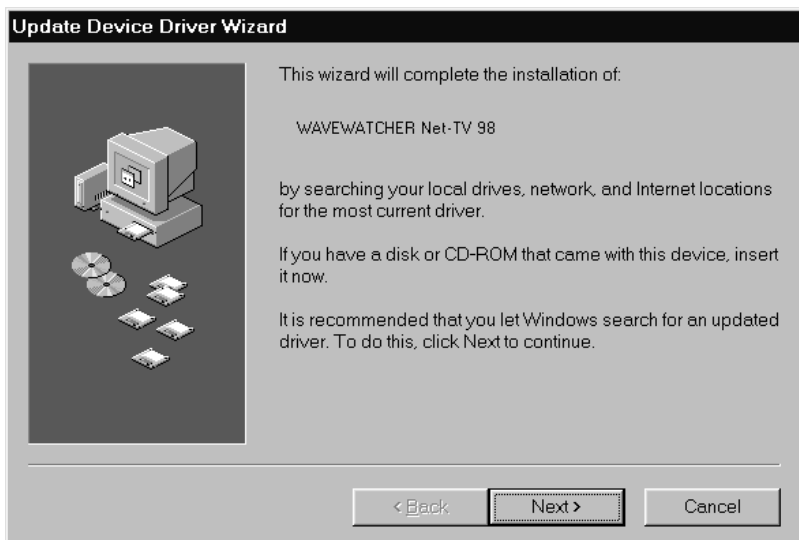
### To install the device driver for the WaveWatcher Net-TV 98 PCI card

1. After installing the WaveWatcher Net-TV 98 PCI card and powering on the computer, the New Device Wizard displays a message that Windows has located a new PCI Multimedia Video Device and is locating its driver. This is followed by the **Update Device Driver Wizard** dialog box (Figure 1-9).
2. Insert the *WaveWatcher Net-TV 98 CD* into the CD-ROM drive, then choose **Next**. Windows displays a dialog box when it successfully locates a driver (Figure 1-10).
3. To use the driver found in the Step 2 graphic, choose **Finish**. To use a different driver, choose **Other Locations...**, enter the *drive letter* of the `Net-tv.inf` file (for example, `R:\`, where `R:\` is the drive letter of the CD-ROM drive), then choose **OK** (Figure 1-11).

Upon completing the installation, the **System Settings Change** dialog box appears stating Windows must be restarted to complete hardware setup (Figure 1-12).

4. Choose **Yes** to restart Windows.



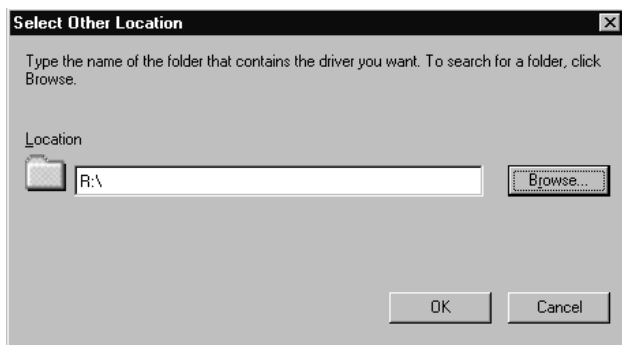


**Figure 1-9** *OSR 2 New Device Wizard simplifies the installation of new device drivers.*

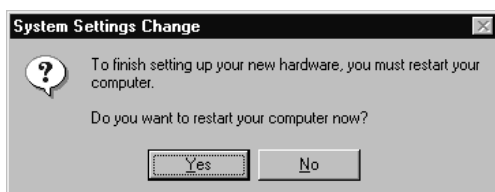


**Figure 1-10** *Windows has found what it believes to be the correct driver for the new device. If Windows cannot locate the driver, it prompts you to search for it in another location.*

## Installing the Device Driver and Software



**Figure 1-11** *Enter the drive letter of the Net-tv.inf file. If using the CD, enter the drive letter of the CD-ROM drive.*



**Figure 1-12** *Restart Windows to complete setup.*

## Installing the Device Driver—Windows 98



**Note:** *If the installation does not work as documented, please check our website for up-to-date installation tips.*

1. After installing the WaveWatcher Net-TV 98 PCI card and powering on the computer, the Add New Hardware Wizard displays a message that Windows has located a new PCI Multimedia Video Device. It then displays a dialog box stating the Wizard must search for a driver that supports the device (Figure 1-13).
2. Insert the *WaveWatcher Net-TV 98 CD* into the CD-ROM drive, then choose **Next**. Windows then displays a dialog box asking how you want to load the driver (Figure 1-14).
3. Select **Display a list of all the drivers...**, then, choose **Next**. A list of driver types appears (Figure 1-15).
4. Scroll to locate and select **Sound, video and game controllers**, then choose **Next**. A list of manufacturers and models for drivers already installed on the system appears (Figure 1-16).
5. Choose **Have Disk...**. The **Install From Disk** dialog box appears.
6. Enter the *drive letter* of the `Net-tv.inf` file (*for example, R:\*, where *R:\* is the drive letter of the CD-ROM drive), then choose **OK** (Figure 1-17). It is not necessary to specify the file name.

Windows displays the **Select Device** dialog box when it successfully locates a driver (Figure 1-18).

7. Select **WaveWatcher Net-TV 98**, then choose **OK**. Windows displays a dialog box, stating it is now ready to install the selected driver (Figure 1-19).
8. Choose **Next** to continue, then choose **Finish** when driver installation is complete.

Upon completing the installation, the **System Settings Change** dialog box appears stating Windows must be restarted to complete hardware setup (Figure 1-20).

9. Choose **Yes** to restart Windows.



## Installing the Device Driver and Software



**Figure 1-13** *Add New Hardware Wizard must search for the device driver.*



**Figure 1-14** *Choose Display a list of all the drivers... so Windows does not attempt to install the driver shipped with Microsoft Windows 98.*



## Installing the Device Driver and Software

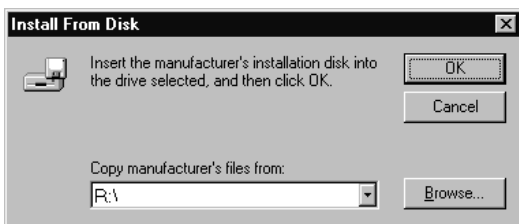


**Figure 1-15** *Scroll through the list to select **Sound, video and game controllers**.*



**Figure 1-16** *Windows displays a list of installed device drivers. Although **AlTeCh International Inc.** is listed, **do not select it if this is the first time you are installing the card**, as the device driver listed is a downlevel version shipped with Windows 98.*

## Installing the Device Driver and Software



**Figure 1-17** *Enter the drive letter of the Net-tv.inf file. If using the CD, enter the drive letter of the CD-ROM drive.*



**Figure 1-18** *Windows has successfully located the device driver for the WaveWatcher Net-TV 98 PCI card.*





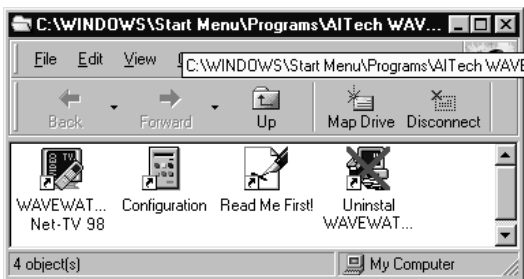
**Figure 1-19** *Device driver is located and ready for installation.*



**Figure 1-20** *Restart Windows to complete setup.*

## Installing the WaveWatcher Net-TV 98 Software Utilities

This section describes how to install the WaveWatcher Net-TV 98 Program (Net-TV 98 program), as well as the Configuration and Uninstall programs and a ReadMe file, on your computer. The instructions assume you are using the product CD for the installation.



**Figure 1-21** *Software utilities and file installed by setup program, as they appear in the **Start** menu.*

### To install the software utilities

1. Insert the *WaveWatcher Net-TV 98* CD into the CD-ROM drive.
2. Run the setup program. Choose **Start | Run...** (Figure 1-22), enter the *path* to `INSTALL.EXE` (for example, `R:\INSTALL.EXE`, where `R:\` is the drive letter of the CD-ROM drive), then choose **OK** (Figure 1-23).
3. Follow the instructions in the **Welcome** and **User Information** dialog boxes.
4. **Choose Destination Location** dialog box appears (Figure 1-24). Choose **Next** to install into the default folder, `C:\Net-TV`.
5. **Select Program Folder** dialog box appears, displaying the default program folder, **AITech WaveWatcher Net-TV 98** (Figure 1-25). Choose **Next** to proceed.
6. When prompted, choose **Next** to begin copying files.



7. Setup commences, after which the **Setup Complete** dialog box appears (Figure 1-26), prompting you to restart your computer before attempting to use the software. Choose **Yes...**, then **Finish** to restart the computer and complete installation.
8. Remove *WaveWatcher Net-TV 98 CD* from the CD-ROM drive.



**Note:** *WaveWatcher Net-TV 98* installs with the TV standard set to NTSC\_USA. If it is necessary to change the TV standard, refer to Table 2-2 on page 2-8 or Television Standard Selection on page C-3.



**Figure 1-22** Choose **Start | Run...** to open the **Run** dialog box.



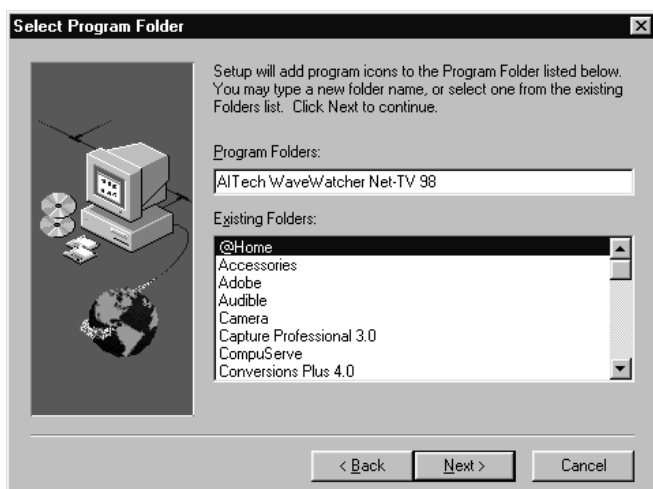
**Note:** *Suspend* appears in the **Start** menu of most laptop or notebook computers and some OEM desktop systems. The **Run** dialog box on your system may differ from Figure 1-23.



**Figure 1-23** Enter install program path.



**Figure 1-24** *Folder in which to install the software.*



**Figure 1-25** *Specify program folder name for software.*



**Figure 1-26** *Choose **Yes...**, then **Finish** to restart the computer and complete installation.*

## Verifying the PCI Card and Device Driver Installation

Once the PCI card, device driver, and software utilities are successfully installed, WaveWatcher Net-TV 98 is listed in the **System Properties Device Manager** control panel.

### To verify the card and device driver installation

1. Choose **Start | Settings | Control Panel | System | Device Manager**.



**Note:** *Device Manager can also be accessed from the Windows desktop. Press the secondary mouse button (typically the right-mouse button) over the **My Computer** icon on the desktop, then choose **Properties | Device Manager**.*



2. Expand the **Sound, video and game controllers** section. Confirm *WaveWatcher Net-TV 98* appears in the list of controllers and that an exclamation mark (!) does not appear in front of the entry (Figure 1-27).



**Note:** *If an exclamation mark appears in front of the entry, ensure you have installed the product software in addition to installing the device driver. The software must be installed for the device driver to work properly.*

3. Select *WaveWatcher Net-TV 98*, then choose **Properties | General**. The **Device Status** field should state *This device is working properly* (Figure 1-28).
4. Choose **Resources**. The **Conflicting device** list should state *No conflicts* (Figure 1-29). Choose **OK** to close the window.



**Notes:** *See Troubleshooting Driver Problems on page B-8 for information about resolving device conflicts if they exist after Plug-and-Play installation.*



**Caution:** *The WaveWatcher Net-TV 98 cannot use an IRQ shared by another device. Please note that Windows 95 or Windows 98 may assign the card to an IRQ currently used by another device. Because most Plug-and-Play devices can share an IRQ, Windows 95 or Windows 98 may state there are no conflicts. As a result, erroneous DMA page error messages may appear when trying to run the WaveWatcher Net-TV 98 TV software utilities. If Windows 95 assigns the card to a shared IRQ, see Troubleshooting IRQ Problems on page B-10 for resolution.*



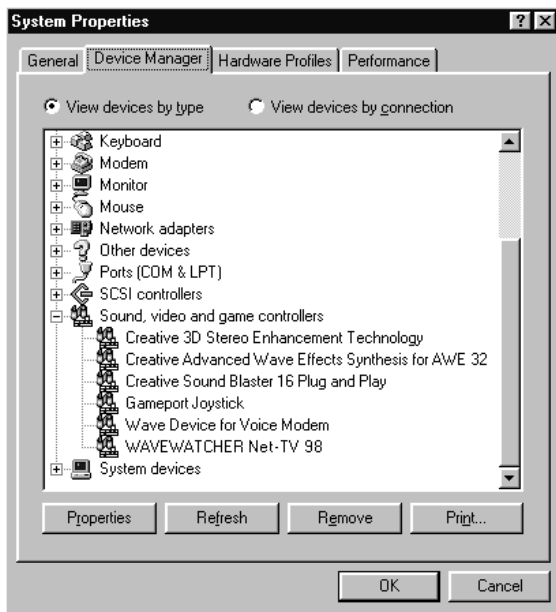


## Installing the Device Driver and Software

5. Choose **OK** to close the dialog box opened in Step 2.
6. Choose **Display | Settings** from within the **Control Panel** window (Figure 1-30). Ensure the color palette selected is set to a minimum of 16-bit high color, then choose **OK**.



**Note:** *Internet graphics creation and viewing is normally achieved with a 256-color palette, so you may want to reduce the color depth of the video card when not using WaveWatcher Net-TV 98.*



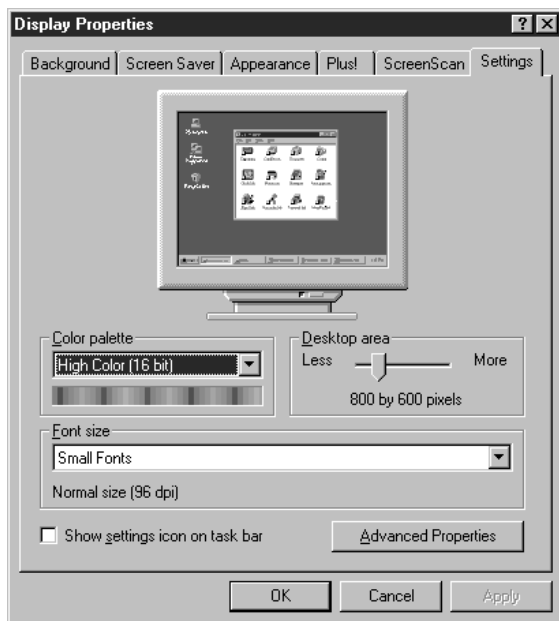
**Figure 1-27** *WaveWatcher Net-TV 98 appears in the Device Manager Sound, video, and game controllers list.*



**Figure 1-28** *WaveWatcher Net-TV 98 is working properly.*



**Figure 1-29** *WaveWatcher Net-TV 98 does not conflict with other hardware.*



**Figure 1-30** *Ensure the color depth of display is 16-bit high color or higher before running WaveWatcher Net-TV 98 program.*



**Note:** *The layout and text of the **Display** control panel varies by video card manufacturer; therefore, yours may differ from the sample shown above. Sample shown is from a Windows 95 video card.*

## Uninstalling the Product

Should it become necessary to remove WaveWatcher Net-TV 98 from your computer, uninstall all components—PCI card (hardware), device driver, and software.

### Uninstalling the PCI Card

Remove the card before uninstalling the device driver and software; otherwise, the Windows New Hardware Wizard or New Device Wizard (depending on Windows version) attempts to locate and install the device driver.



**Warning:** *Ensure power to computer and all connected peripherals is off to prevent potential for electric shock.*



**Caution:** *Ground yourself to prevent damage to the card and computer from static electricity.*

### To uninstall the WaveWatcher Net-TV 98 PCI card

1. Turn off the power to the computer and all connected peripherals (printer, external drive, modem, and so forth).
2. Ground yourself by touching the computer case, then remove the computer case cover.
3. Remove any cables connected to the WaveWatcher Net-TV 98 card. If the card is connected to a sound card, disconnect the stereo audio cable from the sound card as well.
4. Remove the screw holding the WaveWatcher Net-TV 98 card.
5. Gently remove the PCI card and immediately place it in the static-free bag included with the card packaging.
6. Replace the slot cover (removed when the card was installed).
7. Secure the slot cover by replacing the screw that held the card.
8. Replace the computer case cover and power on the computer.



## Uninstalling the Device Driver and Software

The Uninstall program removes the device driver and all software files installed for use with WaveWatcher Net-TV 98. AVI and BMP files created with the Capture function are *not* uninstalled. **Run Uninstall only after you have removed the PCI card;** otherwise, the Windows New Hardware Wizard or New Device Wizard (depending on Windows version) attempts to locate and install the device driver the next time you start Windows.



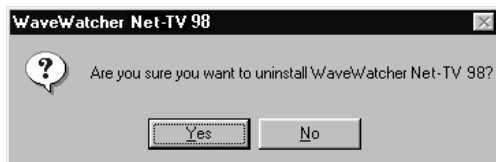
**Caution:** Do not remove the device driver or software with the Windows 95 or Windows 98 **Add/Remove Programs** control panel. Use only the **Uninstall** program in the **AItech WaveWatcher Net-TV 98** folder.

### To uninstall the device driver and software utilities

1. Choose **Start | Programs | AItech WaveWatcher Net-TV 98 | Uninstall WaveWatcher Net-TV 98**.
2. Choose **OK \ YES \ YES** (Figure 1-31 through Figure 1-33).

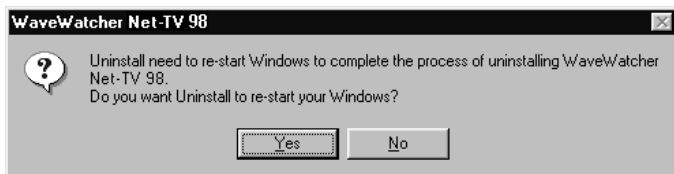


**Figure 1-31** Choose **OK** to continue with the uninstall.



**Figure 1-32** Choose **Yes** to uninstall the product.

## Uninstalling the Product



**Figure 1-33** Choose **Yes** to restart Windows.



# USING THE WAVEWATCHER NET-TV 98 TV PROGRAM

This chapter describes the basics of how to run the WaveWatcher Net-TV 98 program (Net-TV 98 program). Topics include first-time operation, configuration options, and program interface.

## Starting the Net-TV 98 Program

To start the Net-TV 98 program

1. Choose **Start | Programs | AlTech WaveWatcher Net-TV 98 | WaveWatcher Net-TV 98**.

A video window appears on the screen and a control panel—the remote control (resembling a television remote control)—appears on the screen (Figure 2-1). You can show or hide the remote control by pressing the secondary mouse button (typically the right-mouse button) over the screen in Movie and Cabinet view, or by selecting the **Show Remote | Hide Remote** setting in Window view.

2. See the instructions provided in this chapter and Chapter 3, “Video Capture and Playback,” regarding use of this program.



**Note:** *If you plan to use WaveWatcher Net-TV 98 often, you may want to include the WaveWatcher Net-TV 98 program in the Windows **StartUp** group so it always loads **before** other programs.*

## Starting the Net-TV 98 Program

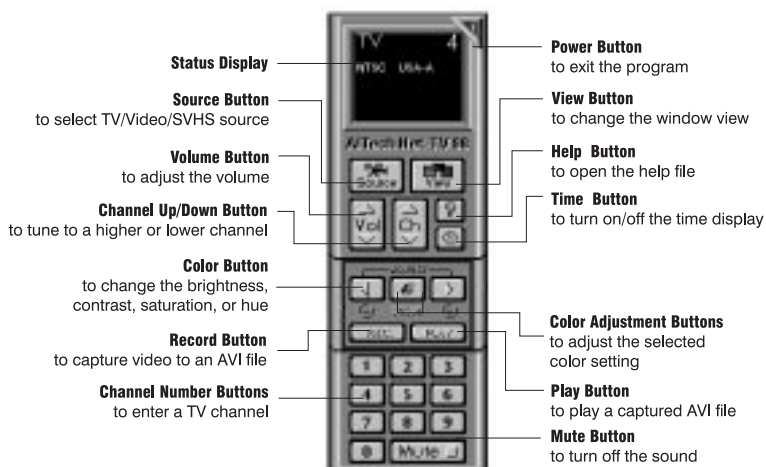


**Figure 2-1** *Windows desktop with Net-TV 98 program running.*



### Remote Control Interface

Most normal operating program functions are available from the remote control, as shown in Figure 2-2. The area above the buttons displays the status of the remote control functions.



**Figure 2-2** WaveWatcher Net-TV 98 remote control interface.














**Notes:** The status display shows what parameter is selected and the action caused by the selection.

The remote control layout and functions can be printed from the Help menu.









Audio settings changed with the Net-TV 98 program—volume increase, volume decrease, and mute—change the sound card settings used by your computer system. Be sure to return your system to the settings of your preference before exiting the Net-TV 98 program. If you have not changed the settings back while in the Net-TV 98 program, choose **Start | Programs | Accessories | Multimedia | Volume Control**, then reset the audio settings as necessary.

Table 2-1 lists the remote control interface actions, using remote control buttons or standard keyboard keys.

**Table 2-1**     *Remote Control Interface Actions*

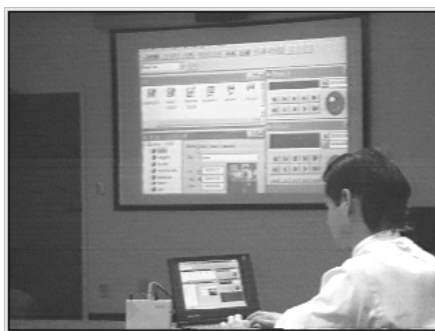
Action	Button	Keyboard Key(s)
Toggle between TV, video, and SVHS inputs		A
Increase volume (for Net-TV 98 program and all system sounds)		↑
Decrease volume (for Net-TV 98 program and all system sounds)		↓
Change to the next television channel		←
Change to the previous television channel		→
Cycle between Window, Movie, Cabinet, and Browse display views (see Figure 2-3 through Figure 2-6)		V
Open the online help file		F1
Toggle time display on and off		(none)
Select color parameter to be adjusted (brightness, contrast, saturation, or hue).		ALT+C
Increase color setting		+
Decrease color setting		-

**Table 2-1**     *Remote Control Interface Actions (Continued)*

Action	Button	Keyboard Key(s)
Capture incoming signal into an AVI file or to perform still-frame captures (capture settings are discussed in Chapter 3, "Video Capture and Playback")		(none)
Play back a captured or prerecorded AVI file (operation of the AVI player is discussed in Chapter 3, "Video Capture and Playback")		(none)
Enter television channel numbers	 through 	0 – 9 numpad keys
Display channel if no channel appears when first starting Net-TV 98 program	 through 	0 – 9 numpad keys
Toggle incoming sound on and off (for Net-TV 98 program and all system sounds)		M or SPACEBAR
Show or hide remote control while in Movie or Cabinet view.	Press secondary mouse button (typically right-mouse button) on Movie or Cabinet view window.	
Exit the program [prompt will appear, asking whether to keep audio in the background after closing program (see Figure 2-7)]		ALT+F4
Display the version number of the Net-TV 98 program	—	F2



**Figure 2-3** *Window view*



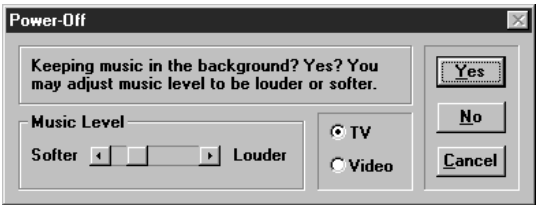
**Figure 2-4** *Movie view*



**Figure 2-5** *Cabinet view*



**Figure 2-6** Browse view



**Figure 2-7** Choose whether to keep audio in the background after closing the program.

## Net-TV 98 Program Window Menus

This section describes the **Window View** menus options available in the Net-TV 98 program. Some options duplicate functions available from the remote control; others are available only from the **Window View** menu.

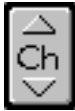
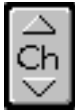


**Note:** Audio settings changed with the Net-TV 98 program—volume increase, volume decrease, and mute—change the sound card settings used by your computer system. Be sure to return your system to the settings of your preference before exiting the Net-TV 98 program. If you have not changed the settings back while in the Net-TV 98 program, choose **Start | Programs | Accessories | Multimedia | Volume Control**, then reset the audio settings as necessary.

**Table 2-2** *Window Menu Option Actions*

Action	Procedure
Exit program	Choose <b>File   Exit</b> .
Freeze current view	Choose <b>Effects   Freeze View</b> .
Unfreeze current view	Choose <b>Effects   Unfreeze View</b> .
Toggle window to remain on top or bottom	Choose <b>Effects   Stay On Top</b> .
Mute audio (for Net-TV 98 program and all system sounds)	Choose <b>Effects   Mute</b> .
Show remote control on the desktop	Choose <b>Settings   Show Remote</b> .
Hide remote control on the desktop	Choose <b>Settings   Hide Remote</b> .
Toggle between Window, Cabinet, Movie, or Browse views (Figure 2-1 through Figure 2-6)	Choose <b>Settings   View   setting</b> .
Cycle between TV, Video, or SVHS video sources	Choose <b>Settings   Video Sources   setting</b> .
Change to a different national television standard	Choose <b>Settings   TV Setting...</b> , select an appropriate <i>standard</i> from the drop-down menu, then choose <b>OK</b> (see Figure 2-8).

**Table 2-2**     *Window Menu Option Actions (Continued)*

Action	Procedure
Switch between off-air and cable TV signals	Choose <b>Settings   TV Setting...</b> , then choose <b>Air</b> or <b>CATV</b> , then choose <b>OK</b> (see Figure 2-8).
Cycle through all TV channels to "teach" WaveWatcher Net-TV 98 which channels are actively receiving signals from the tuner	Choose <b>Settings   TV Setting...</b> , then choose <b>Scan</b> (see Figure 2-8). Upon completion, choose <b>OK</b> .   Now  bypasses unused channels and displays only active channels.
Display live feed for selected input	Choose <b>Settings   View   Browse</b> .
Open the online help file	Choose <b>Help   Help</b> .
Display the version number of the Net-TV 98 program	Choose <b>Help   About</b> .



**Note for Satellite and DSS Users:** *The WaveWatcher Net-TV 98 TV tuner provided does not work as described for cable or air reception because satellite signals are carried on different frequencies than off-air signals. The following directions enable satellite or DSS video viewing, with some limitations:*

1. *Connect the cable from your satellite or DSS control box to the WaveWatcher Net-TV 98 card.*
2. *Set the TV tuner to channel 3 or 4 (that is, the channel on which you normally receive satellite or DSS system signals).*
3. *Use the satellite or DSS system remote control to manually change the channels as WaveWatcher Net-TV 98 cannot do this.*



**Figure 2-8** Use the **TV Setting** dialog box to change the TV standard to scan channels. This dialog box is only accessible if the current input source is “TV.”



**Caution:** When first scanning channels with the **Scan** button, allow the Net-TV 98 program to finish scanning before choosing **OK**. Otherwise, the program will lock up or close out.



## Special Considerations

This section discusses special considerations.

### TV Standards

WaveWatcher Net-TV 98 installs with the TV standard set to **NTSC\_USA**.

The television standard defaults to the NTSC\_USA television signal. Other NTSC options include cable signals, IRC and HRC (NTSC\_USA\_IRC or NTSC\_USA\_HRC, respectively). Standard and IRC are basically the same, but HRC is quite different signal-wise. WaveWatcher Net-TV 98 defaults to NTSC\_USA—if the Net-TV 98 program does not tune correctly and you are using cable TV input, try using the NTSC\_USA\_HRC standard to determine whether the problem is related to the TV standard.

If it is necessary to change the TV standard, refer to Table 2-2 on page 2-8 or Television Standard Selection on page C-3.

### Movie, Cabinet, and Browse Views

When watching video in Movie or Cabinet view (the views in which there is no menu bar), press the secondary mouse button (typically the right-mouse button) anywhere inside the video window to hide or show the remote control.

Browse view does not include a show or hide feature.



