



MultiProTM 2000

User's Guide

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For IBM Compatibles running Windows 95, 98 or Windows 2000

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Introduction

Welcome to the world of *MultiPro 2000*. This multimedia product is a convenient tool for business conferences, classroom presentations, multimedia demonstrations and home entertainment. It is capable of displaying your computer images onto the television you have at home, or any video product such as a VCR or camcorder that supports the NTSC or PAL* standards.

Product Features

***MultiPro 2000* offers the following features:**

- External VGA-to-TV digital scan converter
- Superior image quality with resolutions up to 1024x768 x 16.7 million colors. Wider horizontal and vertical (up to 85Hz) frequencies
- Simultaneous display on personal computer monitor (or laptop LCD) and TV screen
- Plug & Play. No settings to make in your system
- Patented Flic-Free™ filter technology for sharper flicker-free images on your TV screen
- 3 channel 10-bit output D/A converter
- Simultaneous composite and S-Video outputs
- Control buttons on IR remote mouse: 200% Zoom, Position, Freeze, Save, Recall, Reset, Flicker, On/StandBy
- The only consumer scan converter on the market offering the choice of the following output modes for international traveling professionals (*International version only):
 - Video or RGB
 - NTSC or PAL
- Default underscan
- FCC Class B certified and CE Conformance verified

Input

- 15-pin VGA analog RGB signal
- Multiple input frequencies
 - 640x480 @ 60-85 Hz
 - 800x600 @ 60-85 Hz
 - 1024x768 @ 60-70 Hz



Output

- S-Video (S-VHS) & Composite (RCA) (cables included)
- VGA bypass
- SCART RGB (optional cable for International version only)

Power Requirement

- 9 volts DC, 500 mA, center negative polarity (AC adapter included)

Minimum System Requirements

To use the *MultiPro 2000* scan converter and IR Remote Mouse successfully, the following are required:

- IBM AT or better PC, other PC compatible computer, or Mac computers
- PS/2 mouse port
- MS-DOS or any version of Windows
- VGA-Out port at 640x480 resolution and 16 colors
- Video input device such as video monitor, TV, or VCR

Package Contents

Depending on the version you buy, the following items are included in the *MultiPro 2000* package:

- *MultiPro 2000* scan converter unit
- IR Remote Mouse control
- CD containing the ReadMe file, User's Guides, AITech Display Enhancement Utilities and optional bundled application software (if included, it will be indicated on the external packaging box).
- Composite video (RCA) cable
- 4-pin S-Video cable
- VGA cable with 15-pin D connector and 8-pin Mini-DIN connector
- 6-pin PS/2 mouse cable
- SCART cable (optional, for International version only)
- 9V AC power adapter (center negative polarity)
- Warranty registration card

Warranty Registration

Please complete the warranty registration card and return it to AITech to guarantee efficient warranty service and new product notification. You may also choose to register on line at www.aitech.com.

Installing the *MultiPro 2000*

Since the *MultiPro 2000* is a totally plug-and play device, installation is simple and straightforward. There is no need to install a device driver. Just follow these steps:

1. Turn off your computer.
2. Disconnect your monitor's VGA cable from the VGA port on the rear of the computer.
3. Connect the 15-pin VGA connector of the included VGA cable to the VGA port where the monitor was connected, and the 8-pin Mini DIN connector to the VGA IN port on the *MultiPro 2000*. (You may choose to connect the PC monitor to the TO MONITOR port on the *MultiPro 2000* for simultaneous display on your PC monitor.)
4. Choosing the S-VIDEO* or RCA video cable, connect one end to the appropriate port on the *MultiPro 2000*, and the other end to the corresponding port on the TV. Take care not to mix up the S-Video cable (4-pins) with the PS/2 mouse cable (6-pin), and under any circumstances, never force the plug into the port. You may break the pins by doing so. AITech will not be responsible for broken pins on the cables and in the *MultiPro 2000*.
5. Plug one end of the PS/2 cable to the PS/2 MOUSE port on the side of the *MultiPro 2000*, and the other end to the PS/2 mouse port on your PC.
6. Plug in the power adapter.
7. Power on your PC.

That's all there is to it! You should now be able to see your computer image displayed on the TV screen, or any compatible device such as LCD projector, VCR, or video camcorder. There is no need to change any settings, unless your computer's VGA output is set at a refresh rate higher than 85Hz. You may want to use the included Display_Utility.exe utility to detect the refresh rate of your computer's VGA signal. Follow the instructions in the README file in the \Utility\Display folder on the CD-ROM to adjust the refresh rate to support your computer. We suggest that you use 60Hz for a 1024x768 resolution, and 75Hz for 640x480 and 800x600.

**Note: The S-Video connection is a newer video standard. This type of connection improves color, clarity, and resolution. We recommend using the S-Video connection whenever available.*

Using the IR Remote Mouse Control

The patented IR Remote Mouse Control is designed to give you maximum freedom and power when you are giving a presentation in a large room, or want to control your computer from the couch when you are watching a DVD movie comfortably in your living room.

Hold the IR Remote Mouse Control with your index finger at the trigger button on the bottom of the Remote, and your thumb on the round mouse cursor control button. Always remember to point the front of the Remote at the *MultiPro 2000* unit. The remote will work within 30 feet of the *MultiPro 2000* unit.



If the IR Remote Mouse does not function properly:

- Be sure to point the Remote at the front of the *MultiPro 2000*
- Check the batteries
- Shut off computer, check the mouse cable and connections, restart the computer.
- Make sure your computer uses the **Standard** PS/2 Port Mouse driver. Check your computer's owner's manual or Windows documentation for information on how to install a Standard PS/2 Mouse driver.

About the Different Versions of *MultiPro 2000*

The *MultiPro 2000* comes in the following versions:

- **NTSC-Only** version (for North America)
- **International** version (for people who need to use the unit in different countries using either NTSC or one of the PAL TV standards; comes in sub-versions for different PAL countries)

Note: Only the **International** version offers the choice of the following TV standards and output modes:

- NTSC or PAL
- Video or RGB

NOTE: For the NTSC-Only version, the buttons for TV Standard (NTSC/PAL) and Output Mode (VIDEO/RGB) are disabled. If you have a need for these modes, please make sure you purchase the International version of the *MultiPro 2000*.

Also, please note that there are more than a dozen formats under the PAL standard, e.g. D/K, M, etc. Be sure to purchase the PAL format that you can use in your country. Each International version *MultiPro 2000* supports only one PAL and NTSC version. The PAL format supported will be indicated on the outside packaging of the *MultiPro 2000* box. Please call AITech Sales Department for availability of the different versions.

Choosing an Output Mode when using the *MultiPro 2000* International Version

Just press the NTSC/PAL button on the *MultiPro 2000* to choose the TV output standard. A GREEN light shows that the NTSC standard has been chosen, and a RED light shows that PAL is chosen.

Press the VIDEO/RGB button on the *MultiPro 2000* to choose the output mode you want. The GREEN light shows that VIDEO (both composite and S-Video) is chosen, and a RED light shows that RGB is chosen. Choose RGB if you are using an *RGB-input* TV set. You must purchase an optional SCART cable from AITech to use this function.

Using the Other Buttons on the Unit

The SAVE button on the *MultiPro 2000* saves the current flicker and position settings for future use.

The RESET button on the *MultiPro 2000* lets you reset the *MultiPro 2000* to its default values of positioning, ZOOM, FREEZE and FLICKER without changing the NTSC/PAL or VIDEO/RGB choices. This button functions the same way as the RESET button on the IR Remote.

Using the Display Enhancement Utilities

To enhance your efficiency and pleasure using our product, we have included two utilities. The utilities may be run from the CD-ROM Browser, or can be manually copied from the CD-ROM to your hard drive for convenience when you do not have the CD-ROM handy.

The **TV Font Utility** makes menu functions, buttons, icons and sometimes the contents of Windows applications appear larger on your TV, so you can view the content comfortably from a distance. The utility may be run directly from the CD Browser, or if you wish, you may copy the entire `\Utility\TVFont` folder from the CD to your hard drive. This will allow you to run the TV Font Utility even when you don't have the CD handy. Simply double-click on **AITVFont.exe** anytime you want to use a larger display font under the Windows environment.

The **Display Utility** detects your system and allows you to choose an optimal refresh rate for maximum system compatibility. The utility may be run from the CD Browser, or if you wish, you may copy the entire `\Utility\Display` folder from the CD to your hard drive. This will allow you to run the Display Utility even when you don't have the CD handy. Simply double-click the **Display_UTILITY.exe** file to run the utility.

Using Bundled Third-party Application Software

AITech assumes no responsibilities for the functionality and reliability of the bundled third-party software, if they are included with the product version you purchased. The intellectual property rights of this software belong to their respective developers. The developer of the respective programs will provide technical support. Please check the software's user manual and Help file for contact information.

The programs may be installed directly from the CD Browser.

Also note that each software application may have its own system requirements. Check the software's user manual or Help file for the requirements. As a rule of thumb for powerful video processing related applications such as MediaShow, a minimum requirement for a Pentium II 233 CPU with MMX, 32 MB RAM and at least 4 MB of video RAM will be common.

Help! I Can't See Anything On My TV!

If you are having difficulty seeing your computer display on the TV, check the following:

Connections:

- Check the power connection to the scan converter.
- Check the connections from the scan converter to the PC.
- Check the connections from the scan converter to the TV.

TV (or VCR):

- RCA connections to a TV or VCR must be to the Video Input (yellow) connector.
- If you are connected directly to a **TV**, ensure that the TV has been configured to accept auxiliary video input.
- If you are connected to the TV through a **VCR**, ensure that the TV and VCR have been configured to accept auxiliary video input.

An **input button** on the TV or VCR's original remote control often sets the video input mode. This mode is needed for both S-Video and RCA video connections.

The button may be marked **Video, Video-1, Aux, Input, Vid, Line, Line-In, TV/VCR**, etc. On some TV's and VCR's this setting is made by selecting Channel 2, then pressing the Down Channel button. If this does not work, refer to your TV (or VCR) manual.

Settings: Check that the computer's Display Settings are set correctly.

- **640x480 at 60-85Hz**
- **800x600 at 60-85Hz**
- **1024x768 at 60-70Hz**

Laptops: Laptops must be set to **External-only or Simultaneous VGA display mode**. This is usually done with a hot-key combination (Fn + function key). Refer to your laptop manual for further details.

Contacting AITech Technical Support

You may find it most convenient to visit our website anytime at www.aitech.com. The Technical Support area of this site contains the very latest information on product usage and troubleshooting.

If you require our assistance to resolve problems with the product, call our Technical Support Hotline Monday through Friday between 9:00 am and 5:00 PM (PST) at 510-226-9246.

You may also contact us by email at tech_support@aitech.com.

For questions regarding installation and usage of the bundled application software, please visit the Website of the software developer indicated on the CD for technical support.

Placing a Call for Support

To enable our technicians to accurately and quickly resolve your problems, please have the following information available before you call:

- Your name
- Your company or organization name
- Address
- Email address
- Phone number
- Fax number
- Product name and serial number
- Software name and version number
- Your computer system configuration, including
 - Windows version
 - Video card manufacturer and device driver versions
 - Video and audio output being used
- Detailed description of your problem including
 - History
 - What you have tried to resolve the problem
 - Conditions under which this occurs
 - Number and exact wording of any software error messages

Warranty Information

- If it becomes necessary to forward the *MultiPro 2000* for repair or modification, first obtain a Return Authorization Number (RA) from AITech. Any product sent to AITech **without** an RA **will be returned** to the sender. Call or e-mail Technical Support to obtain a RA number.
- Outside the United States: Please contact your local distributor.

Please ensure your product is adequately cushioned to prevent damage during shipping. Please include all hardware and software that came with your *MultiPro 2000* in the original packaging, so the integrity of these items can be verified by AITech technicians.

It is recommended that you ship your *MultiPro 2000* fully insured. AITech is not responsible for loss or damage caused by shipping.

Software License Agreement

AITech International Corporation (AITech) grants the original purchaser a limited, non-exclusive license, without the right to sublicense, to use this copy of AITech software on a single computer at a time. AITech reserves all rights not expressly granted and retains title and ownership of the software including subsequent copies in any media. It is strictly prohibited to copy this software except to load the software from the supplied diskette(s) or compact disc (CD) onto the computer's hard disk solely for the purpose of executing the program and for backup purposes in support of your use of the software on a single computer. You are granted no other rights to copy, duplicate, sell or otherwise distribute this AITech software product.

Software Limited Warranty

As the only warranty under this agreement, and in the absence of accident, abuse or misapplication, AITech warrants, to the original licensee only, that the diskettes on which the software is recorded are free from defects in material and workmanship under normal use and service for a period of one year from the date of original purchase as evidenced by a copy of the purchase receipt. AITech's only obligation under this warranty is, at AITech's sole option, to replace the diskette that does not meet AITech's warranty, and which is returned to AITech, postage prepaid with a copy of the purchase receipt.

This warranty gives you limited specific legal rights. You may have other rights, which vary from state to state, except as expressly provided above, the software and accompanying written materials (including the User's Guide) are provided "as is" without warranty of any kind including the implied warranties of merchantability and fitness for a particular purpose. AITech specifically does not warrant the operation of the hardware and will not be liable for any direct, indirect, consequent or incidental damages arising out of the use or inability to use such product even if AITech has been advised of the possibility of such damages. Some states do not allow the exclusion or limitation of liability for consequential or incidental damage, so the above limitation may not apply.

Hardware Limited Warranty

AITech imaging products are warranted to be free from failures due to defects in material and workmanship for one year from the date of original purchase as evidenced by a copy of the purchase receipt. During the warranty period, AITech, at AITech's sole discretion, will repair or replace at no charge, the product which, in its opinion, is defective.

The original purchaser is responsible for packing the product for shipment and charges to ship the failed product to AITech. AITech is responsible for charges to ship the repaired or replaced product. If any charge to you is involved, the replacement product will be shipped C.O.D.

If the failed product has been modified in any way without the consent of AITech or if the failure is the result of misuse, abuse, or misapplication, AITech has no obligation to repair or replace the failed product.

Except as expressly provided above, the hardware and accompanying written materials (including the User's Guide) are provided "as is" without warranty of any kind including the implied warranties of merchantability and fitness for a particular purpose. AITech specifically does not warrant the operation of the hardware and will not be liable for any direct, indirect, consequent or incidental damages arising out of the use or inability to use such product even if AITech has been advised of the possibility of such damages. Some states do not allow the exclusion or limitation of liability for consequential or incidental damage, so the above limitation may not apply.