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This device 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 commercial, industrial or business environment. This equipment can generate, use and radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause 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.

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.

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To comply with the limits for the Class B digital device, pursuant to Part 15 of the FCC Rules, this device must be installed in computer equipment certified to comply with the Class B limits. All cables used to connect the computer and peripherals must be shielded and grounded. Operation with non-certified computers or non-shielded cables may result in interference to radio or television reception.

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

## CE NOTICE

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# Chapter 1

## Introduction

Thank you for purchasing the **AVerKey550**. We are certain you will find this product a useful video presentation tool that is highly suitable for your business and multimedia applications.

This chapter gives you an overview of what the **AVerKey550** can do. You will also find a list of the system requirements needed to use the product.

## Features

### Display Computer Images on TV

The **AVerKey550** can convert computer images into video format (Composite, S-video or SCART RGB) and display them on any TV monitor or large-screen LCD projector. It is compatible with all IBM PCs, Macintosh computers, PCs, and Laptops. **AVerKey550** can support any application under DOS, all edition of Windows OS, and Macintosh OS.

The **AVerKey550** provides dual display on both your computer and TV monitors. (It supports all VGA monitors and MultiScan MAC monitors.)

### True Plug-and-Play

The **AVerKey550** is plug-and-play! No software drivers are required.

### Supports Up to 1600 x 1200

With Super-VGA compatibility, your applications can be converted up to 1600 X 1200 (PC) and 1600 X 1024 (Macintosh) !

### Remote Mouse and Remote Control in One

The remote control unit allows you to give your presentation from up to 7 meters (23 feet) away. With the built-in remote mouse, you can roam around the classroom or conference room freely and still be able to control your presentation.

## Touch-Button Panel Control

Just in case the remote control is lost, you can still operate the **AVerKey550** through the Touch Button Panel Control. All major control functions are available through touch button on the hardware case.

## Easily Highlight Key Points in Your Presentation

By simply using the remote, you can highlight important points in your presentation. Choose from 3 types of presentation highlight functions :

### **AVerMedia® POINTER**

Similar to a Laser Pointer, the *AVerMedia Pointer* is a 4 x 4 pixel square that lets you direct your viewers attention to key areas on the screen. Choose from an array of vibrant colors.

### **AVerMedia® SPYLIGHT**

Highlight part of your presentation and darken the rest of the screen. You can darken areas horizontally or vertically with the simple push of a remote control button.

### **AVerMedia® SPOT**

Highlight a certain area on the image by darkening external areas and creating a colored border within your area of interest. Create a highlight as large as 1/4th of your screen or as small as 1/64th of your presentation screen.

## Zoom into Any Area on the Presentation Screen

Enlarge any area of your presentation screen through one of these special zoom functions : (You can adjust picture sharpness while you are in any of the zoom modes.)

### **Traditional Zoom and Pan**

Users can zoom in (200%) the computer screen on TV and pan around freely to any part of the screen.

### **Linear Zoom and Pan**

Gradually magnify the computer screen on TV allowing you to fully control the magnification up to 200% and pan.

### **Area Zoom**

This function cuts the screen into 9 parts and allows you to select the desired part through the available buttons on the remote control.

### **AVerMedia® POINTER Zoom**

You can point to a key area in your presentation using *AVerMedia Pointer* and then enlarge that area.

### **AVerMedia® SPOT Zoom**

Once you have highlighted a certain area using *AVerMedia Spot*, you can zoom in and out of the highlighted area.

### **Up to 7 Sharpness Selections**

The **AVerKey550** gives you up to 7 flicker-filter selections which provide 100% flicker-free TV display.

### **Video Switcher**

Connect the **AVerKey550** with a computer and a video source such as a LaserDisc player or VCR. Select either source to be your final TV output.

### **Screen Freeze/Unfreeze**

Screen Freeze lets you pause the TV display and make changes to your presentation without your audience knowing it. You can also prolong the time of display when you are giving demos.

### **Linear Adjustment, Vertical and Horizontal Scale**

The **AVerKey550** allows you to adjust both the screen width and height. This is one very special feature not found in most video converters. A wide selection of sizes are available.

### **Full Screen Underscan/Overscan**

Full Screen Underscan/Overscan prevents your images from being "chopped out".

### **Picture Controls**

Controls like horizontal/vertical picture positioning, horizontal/vertical screen panning and TV brightness control are also provided.

### **Auto-Save**

The **AVerKey550** automatically saves your settings when you power off the unit.

### **Page Saver**

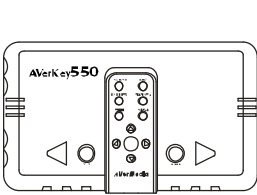
While giving presentations to an audience, you may need to return to a certain page and emphasize again some important ideas. **AVerKey 550's Page Saver** function allows you to save any page from your presentation. Just press a button to access and display the last page you saved.

### **Auto Power On**

**AVerKey 550** powers on automatically after you have connected the proper cables to your TV, PC & AVerKey550.

# What's in the Package

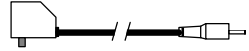
Your **AVerKey550** package includes the following :



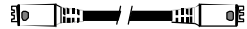
*AVerKey550 Scan Converter and Remote Control (batteries included)*



*This User's Manual*



*AC Power Adapter*



*S-Video Cable*



*AV Cable*



*Computer Extension Cable (for IBM PC and compatibles)*



*2 RS-232 Cables (for IBM PC and compatibles)*



*2 ADB Cables (for Macintosh)*



*2 PS2 Cables (for IBM PC and compatibles)*

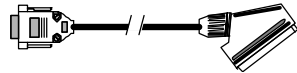
## Optional Accessories :



*Monitor Adapter (for MAC)*



*Computer Adapter (for MAC)*



*SCART Cable (optional on PAL version)*

## What You Can Do with the AVerKey550

- Business Conference Room Presentation
- Classroom Presentation
- Trade Show Presentation
- Software Training Tape Recording
- Advertisement
- Multimedia and Video Production

*And more!!*

## System Requirements

To use the **AVerKey550**, you will need :

- IBM® PC or compatibles; or
- Any Macintosh the support up to 1600 x 1024 display mode  
(MAC systems without the monitor output require a Power-R or Apple® adapter)

**NOTE:** **AVerKey550** should in theory support any computer and display systems with a vertical display frequency range of 56Hz to 120Hz and a horizontal display frequency of 31.5KHz to 108KHz. However, due to different custom hardware configurations and the wide variety of connectors used on various systems, we cannot guarantee that **AVerKey550** will function properly.



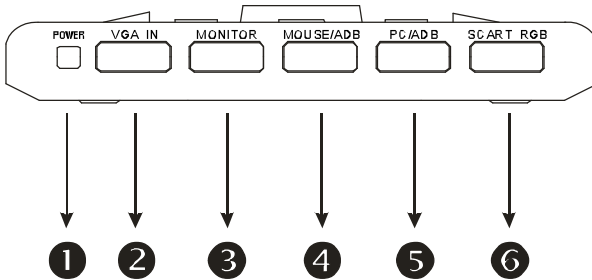
# Chapter 2

# Hardware Installation and Setup

This chapter will show you how to install the **AVerKey550** to an IBM compatible PC and Macintosh computer.

## The Back Panel

The ports on the back panel of the **AVerKey550** are for connecting the converter to the computer and graphics display monitor. The figure and descriptions below specify what device should go into each port.

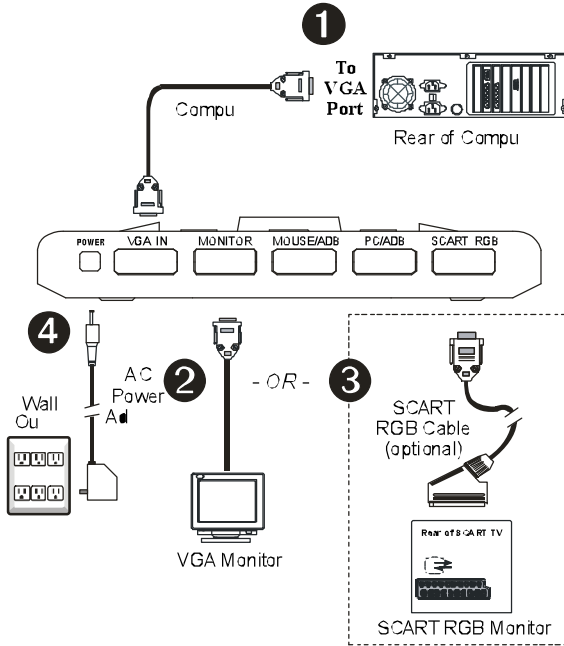


- 1 POWER :** Plug the *AC Power Adapter* to this port.
- 2 VGA IN :**
  - For IBM PC or compatible :*  
This port connects the **AVerKey550** to the IBM compatible PC's VGA port via the supplied *Computer Extension Cable*.
  - For Macintosh :*  
This port connects the **AVerKey550** to the Macintosh PC's display card via the *Computer Adapter* and *Computer Extension Cable*. (The *Computer Adapter* is provided as an optional accessory.)

- ③ **MONITOR** : Connect the VGA or Macintosh display monitor to this port. A *Monitor Adapter* is needed to connect the Macintosh display monitor. (The *Monitor Adapter* is provided as an optional accessory.)
- ④ **MOUSE/ADB** : *For IBM PC or compatible* :  
If you need to use your wired mouse, connect the mouse to this port.  
Use the supplied *RS-232 Cable* to connect a Microsoft compatible mouse to this port.  
*For Macintosh* :  
Connect the ADB devices (e.g. keyboard, mouse, etc.) from your Macintosh computer to this port.
- ⑤ **PC/ADB** : *For IBM PC or compatible* :  
Connect the supplied *RS-232 Cable* between this port and the serial port on your PC if you connected a Microsoft compatible mouse to the **AVerKey550**.  
*For Mac* :  
Connect the supplied *ADB Cable* between this port and the Macintosh computer's ADB port.
- ⑥ **SCART RGB** : If you want to use a SCART RGB monitor with your PC and the **AVerKey550**, connect it to this port using the *SCART RGB Cable*.  
(*Note* : The SCART RGB Cable is an optional accessory cable supplied with the **AVerKey550**.)

# Installing AVerKey550 to an IBM PC

Follow the setup diagram and procedure below to install the **AVerKey550** to an IBM compatible PC.



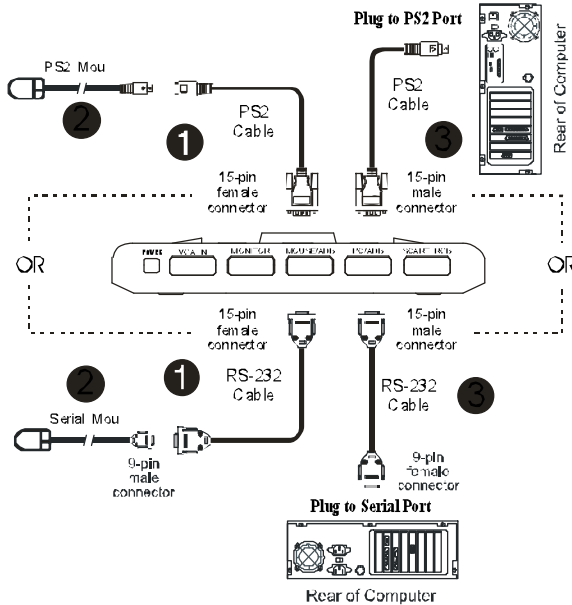
- 1 Connect the **AVerKey550** to the PC. Plug one end of the supplied *Computer Extension Cable* to the **AVerKey550** “VGA IN” port and the other end to the PC’s VGA port.
  - 2 Connect the VGA monitor to **AVerKey550**. Plug the VGA monitor cable to the **AVerKey550** “MONITOR” port.
  - 3 If you are using a SCART RGB monitor, connect it to the **AVerKey550** “SCART RGB” port by using the *SCART RGB Cable*.
- (Note : The SCART RGB cable is an optional accessory cable supplied with the **AVerKey550**.)
- 4 Plug the supplied *AC Power Adapter* into the **AVerKey550** “POWER” port.

## Connecting a Wired Mouse

The **AVerKey550** remote control already provides a remote mouse which allows you to control your presentations.

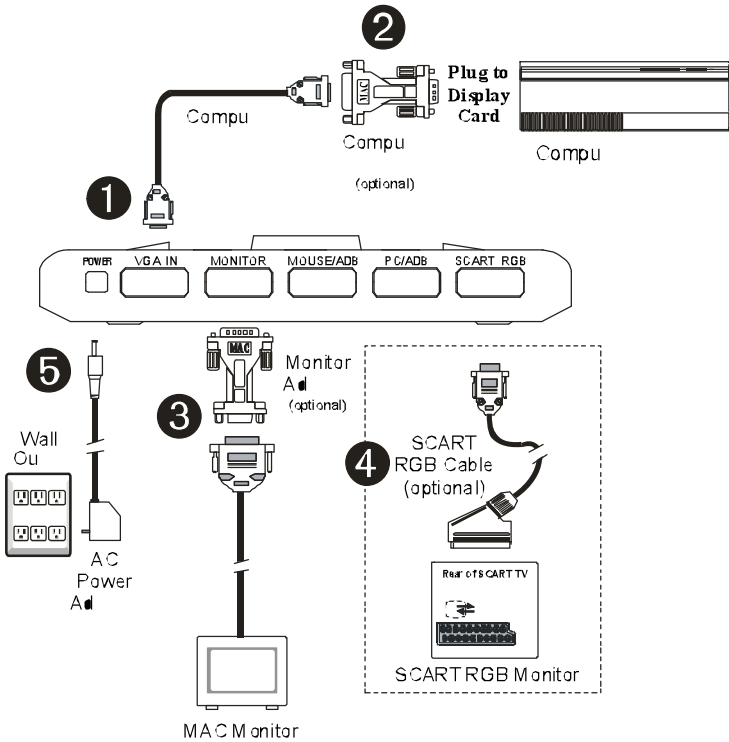
If you still need to use a wired mouse, make sure it is Microsoft compatible. If you have an IBM PC mouse or another mouse type, check if it can be switched to Microsoft mouse mode.

Follow the diagram and instructions below to connect a wired mouse to the **AVerKey550**.



- ❶ Plug the supplied *RS-232 Cable* to the **AVerKey550** “**MOUSE/ADB**” port.
- ❷ Disconnect your wired mouse from the PC and plug the mouse to the other end of the *RS-232 Cable*.
- ❸ Connect the other *RS-232 Cable* to the **AVerKey550** “**PC/ADB**” port and the PC's serial port.

## Installing AVerKey550 to a Macintosh or PowerPC



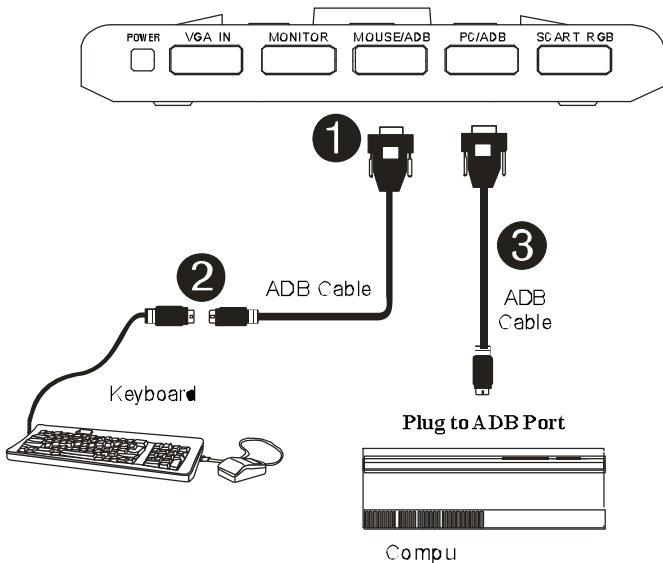
- 1 Connect the supplied *Computer Extension Cable* to the **AVerKey550** “**VGA IN**” port.
- 2 Attach the *Computer Adapter* to the other end of the *Computer Extension Cable*. Then, plug the *Computer Adapter* along with the attached *Computer Extension Cable* to the monitor port on the back panel of your Macintosh PC. (Note : The *Computer Adapter* is provided as an optional accessory.)
- 3 Attach the *Monitor Adapter* to your Macintosh monitor. Then, plug the *Monitor Adapter* with the attached monitor cable to the **AVerKey550** “**MONITOR**” port. (Note : The *Monitor Adapter* is provided as an optional accessory.)
- 4 If you are using a SCART RGB monitor, connect it to the **AVerKey550**

“**SCART RGB**” port by using a *SCART RGB Cable*.

(Note : The *SCART RGB Cable* is an optional accessory cable supplied with the **AVerKey550**.)

- 5 Plug the supplied *AC Power Adapter* into the **AVerKey550** “**POWER**” port.

## Connecting a Wired Mouse



- 1 Connect the supplied *ADB Cable* to the **AVerKey550** “**MOUSE/ADB**” port.
- 2 Disconnect the keyboard and other attached accessories from your Macintosh computer's ADB port and connect them to the other end of the *ADB Cable*.
- 3 Connect the second *ADB Cable* to the **AVerKey550** “**PC/ADB**” port and your Macintosh computer's ADB port.

## Connecting a TV Monitor and Video Source

Use the connectors at the side panel of the **AVerKey550** to connect a TV monitor (or any video monitor). If you have a video source such as a VCR, laserdisc player or video camera originally connected to your TV monitor, you can also connect the video source to the **AVerKey550**.

### To output your computer presentation to a TV monitor :

- ❶ **S-OUT** : If you have a TV monitor that uses the S-video standard, connect the supplied *S-Video Cable* to the **AVerKey550** "**S-OUT**" port and the TV monitor's "S-IN" port.
- ❷ **VIDEO-OUT** : If you have a TV monitor that uses the Composite video standard, connect the supplied *AV Cable* to the **AVerKey550** "**VIDEO-OUT**" port and the TV monitor's "VIDEO-IN" port.

Refer also to the setup diagram on the next page for the proper cable connections.

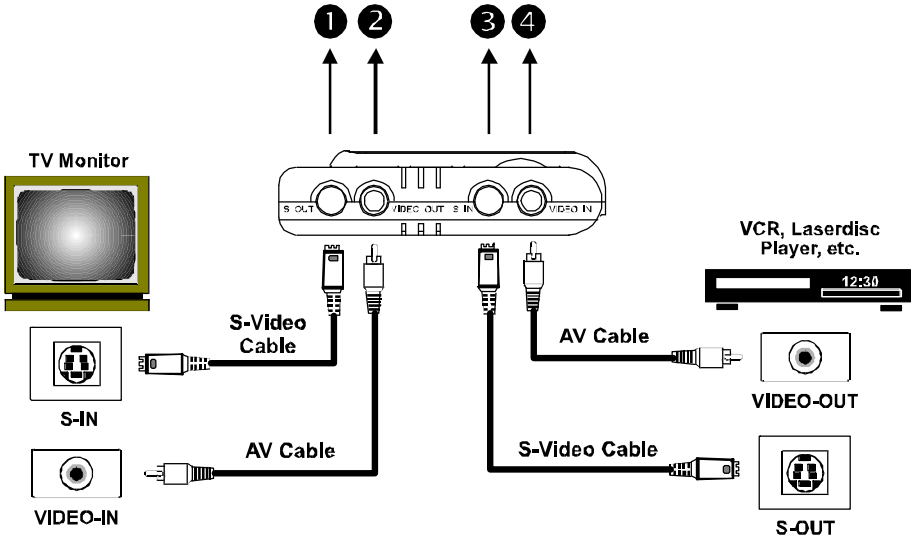
### To use the AVerKey550 as a Video Switcher :

The **AVerKey550** allows you to connect a computer and a video device such as the VCR or LaserDisc Player. You can then use the **AVerKey550** as a Video Switcher to select either source to be the final output. Environments such as classrooms and conference rooms usually require a TV to be connected to a VCR at all times. Now with the **AVerKey550**, you do not need to disconnect cables whenever you need to use the TV with either the computer or the VCR/LaserDisc.

To connect the **AVerKey550** to a VCR or any video source :

- ❸ **S-IN** : If the VCR (or any video source) is originally attached to your TV monitor and it uses the S-video standard, use an *S-Video Cable* to connect the VCR to the **AVerKey550** "**S-IN**" port and the TV monitor's "S-OUT" port.
- ❹ **VIDEO-IN** : If a VCR (or any video source) is originally attached to the TV monitor and it uses the Composite video standard, use an *AV Cable* to connect the VCR to the **AVerKey550** "**VIDEO-IN**" port and the TV monitor's "VIDEO-OUT" port.

Refer also to the setup diagram on the next page.





## Chapter 3

# Using the AVerKey550

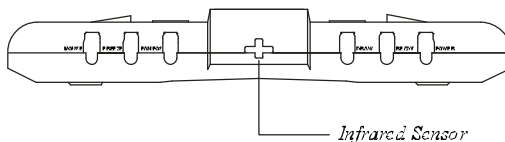
This chapter will show you how to use the *Remote Control Unit* and *Touch Button Control Panel* of the **AVerKey550**. Here, you will also learn how to operate the remote mouse, highlight important points in your presentation, and use the various zoom functions of **AVerKey550**.

## The Remote Control Unit

The **AVerKey550** Remote lets you control your presentation from over 7 meters (23 feet) away.

To use the remote control, first insert the supplied batteries (2 size “AAA” batteries) into the battery compartment at the back of the remote.

While using the remote, aim it at the *Infrared Sensor*. The infrared sensor is located at the front panel of the **AVerKey550**.



*AVerMedia AVerKey550 Front Panel*

The descriptions on the next page briefly explain what the remote control buttons are used for.

Continue reading the rest of this chapter for more information on using the remote control.



- POWER** : Switches the **AVerKey550** on/off.
- RESET** : Restores the **AVerKey550** to original factory settings.
- SHARPNESS** : Press the **+** button to increase the sharpness level.  
Press the **-** button to decrease the sharpness level.
- BRIGHTNESS** : Press the **+** button to increase the brightness level.  
Press the **-** button to decrease the brightness level.
- OVERSCAN** : Toggles between Underscan and Overscan. Overscan displays the computer image on TV to the fullest. The image will be chopped off at the borders when displayed this way.  
When you switch to *Underscan*, the computer image will be completely displayed on TV.
- MOUSE/ZOOM** : Toggles between the Remote Mouse and LinearZoom modes.
- L (Left Mouse Button)/ZOOM IN** : Works the same as the left mouse button of a wired mouse. To drag-and-drop, you must use this button with the **L.DRAW** or **R.DRAW** button. Refer to the section, *The Remote Mouse*, for more details.  
Gradually increase the magnification up to 200%

**R (Right Mouse Button)/ ZOOM OUT** : Works the same as the right mouse button of a wired mouse. To drag-and-drop, you must use this button with the **L.DRAW** or **R.DRAW** button. Refer to the section, *The Remote Mouse*, for more details.

Gradually decrease the magnification to normal size.

**MOUSE CONTROL** : The big round button on the remote is the **MOUSE CONTROL** button.

**Mouse Control Button In Remote Mouse mode:**



Use this button to move the mouse cursor or a selected object (e.g. icon or window).

**In AVerKey550 mode:**

Use this button to :

- Pan (move) around the computer image on TV.
- Move the AVerMedia Pointer (or line) around the TV screen.
- Highlight other areas of your presentation.

**L.DRAW** : Use **L.DRAW** with the **MOUSE CONTROL** button to drag an object, e.g. an icon or window. (This is just the same as dragging an object using the left mouse button of a wired mouse.) You can also use these two buttons to select a group of objects. Refer to the section, *The Remote Mouse*, for more information.

**R.DRAW** : Use **R.DRAW** with the **MOUSE CONTROL** button to drag an object, e.g. an icon or window. A menu with selectable options will then appear. (This is just the same as dragging an object using the right mouse button of a wired mouse.) Refer to the section, *The Remote Mouse*, for more information.

**HEIGHT** : Press ▲ to enlarge the height of the computer image on TV. Press ▼ to reduce the height of the computer image on TV.

**WIDTH** : Press ► to enlarge the width of the computer image on TV. Press ◀ to reduce the width of the computer image on TV.

**AREA ZOOM** : Provides quick selection of the screen area to magnify. The *Area Zoom* function divides the computer image on the TV into 9 parts and allows you to select the desired part to zoom. Refer to the section, *Different Types of Zoom*, for more details.



**POINT (AVerMedia Pointer)** : This button functions just like a laser pointer. Refer to the section, *Presentation Highlight Functions*, for more details.

**SPOT (AVerMedia Spot)** : Press this button to highlight a certain area in your presentation. The highlighted area will be surrounded by a colored frame and areas outside the frame will look dark. Refer to the section, *Presentation Highlight Functions*, for

- more details.
- SPYLIGHT (AVerMedia Spylight)** : Press this button to highlight a part of your presentation and darken the rest of the screen. Refer to the section, *Presentation Highlight Functions*, for more details.
- ZOOM** : Press this button to zoom in or out of the :
- Computer image on TV
  - An area on the presentation screen which you highlighted using the **SPOT** button (*AVerMedia Spot-Zoom*)
  - A key point on the presentation which you highlighted using the **POINT** button (*AVerMedia Pointer-Zoom*)
- FREEZE** : Freeze or unfreeze the computer image on TV.
- COLOR** : You can use this button to change the color of the *AVerMedia Pointer*. You can also change the color of the frame which surrounds a highlighted area (*AVerMedia Spot*). There are 8 available colors to choose from. Refer to the section, *Presentation Highlight Functions*, for more details.
- SAVE PAGE** : Press this button to save the current page shown on the TV screen.
- RECALL PAGE** : Press this button to access the last page you saved with the **SAVE PAGE** button.
- POSITION CONTROL** : Use these buttons to move the computer image on TV. You can move the image up, down, left, or right.



## Selecting Your Computer or a Video Source as the TV Output (Video Switcher Function)

**AVerKey550's Video Switcher Function** allows you to select your computer or a video source as the final output on TV. (Refer to the section, *Connecting a TV Monitor and Video Source*, in *Chapter 2* for details on how to connect a video source to the **AVerKey550**.)

If you want your computer to be the output on TV, simply power on the **AVerKey550** unit.

If you have a video source like a VCR, LaserDisc Player or Camcorder connected to the **AVerKey550** and you want the video source to be the output on TV, power off the **AVerKey550** unit.

When the **AVerKey550** is switched off, all your settings will also be saved automatically.

## Changing the Operating Mode of the Remote

The Remote Control operates in two types of modes: *Remote Mouse* mode and *Linear Zoom* mode. Use the **MOUSE/ZOOM** button to toggle between these two modes.

- **Remote Mouse Mode**

Check and see if the **MOUSE** LED on the **AVerKey550** front panel is ON. If it's not, press the **MOUSE/ZOOM** button to switch to *Remote Mouse Mode*.

Refer to *The Remote Mouse* section below for information on how to use the remote mouse.

- **Linear Zoom Mode**

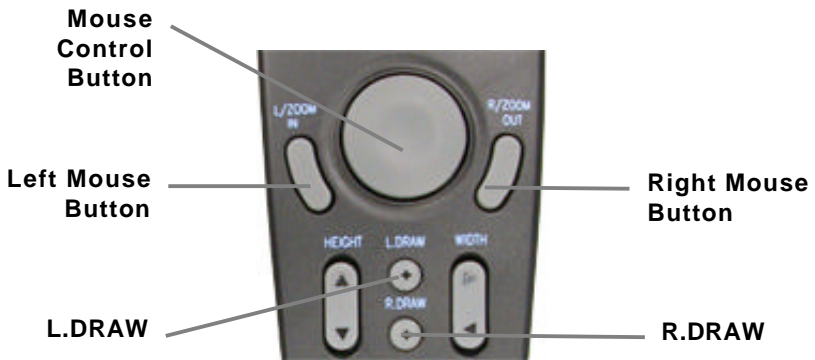
Check and see if the **MOUSE** LED on the **AVerKey550** front panel is OFF. If it's not, press the **MOUSE/ZOOM** button to switch to *Linear Zoom Mode*.

## The Remote Mouse

**AVerKey550**'s remote control has a built-in *Remote Mouse*. The Remote Mouse functions just like your ordinary mouse, except now, you can stand 7 meters (23 feet) away from your computer and simply use your fingers to scroll, point and click on your applications.

To use the remote mouse, you must set the remote control to operate in *Remote Mouse Mode*.

## Remote Mouse Buttons



The table on the next page provides detailed, step-by-step procedures on how to use the remote mouse on a Windows environment.

HOW TO ....	Procedure
How to move the mouse pointer/cursor	Hold down the <b>Mouse Cursor Button</b> and move the mouse pointer/cursor in any direction you want.
How to select an icon or window on the Windows desktop; How to "double-click"	<ol style="list-style-type: none"> <li>1. Position the mouse pointer on top of the icon or window you want. (Use the <b>Mouse Cursor Button</b>.)</li> <li>2. Press the <b>L (Left Mouse) Button</b>.</li> </ol>
How to select an option from a shortcut menu	<ol style="list-style-type: none"> <li>1. Press the <b>R (Right Mouse) Button</b> to open the shortcut menu.</li> <li>2. Hold down the <b>Mouse Cursor Button</b> and move the mouse pointer to your desired option.</li> <li>3. Press the <b>L (Left Mouse) Button</b>.</li> </ol>
How to select icons that are next to each other	<ol style="list-style-type: none"> <li>1. Place the mouse pointer at the proper position. (Use the <b>Mouse Cursor Button</b>.)</li> <li>2. Press the <b>L.DRAW Button</b>.</li> <li>3. Hold down the <b>Mouse Cursor Button</b> and drag a rectangle around the icons you want to select.</li> </ol>

<p>How to select text in a Windows application</p>	<ol style="list-style-type: none"><li>1. Place the mouse cursor at the start of the text you want to select. (Use the <b>Mouse Cursor Button</b>.)</li><li>2. Press the <b>L (Left Mouse) Button</b>.</li><li>3. Then, press the <b>L.DRAW Button</b>.</li><li>4. Hold down the <b>Mouse Cursor Button</b> and drag over the text you want to select.</li><li>5. When you reach the end of the text you want to select, press the <b>L.DRAW Button</b>.</li></ol>
<p>How to drag and drop</p>	<p>Use the <b>L.DRAW</b> or <b>R.DRAW</b> button.</p> <p><b>If you use the L.DRAW button :</b></p> <ol style="list-style-type: none"><li>1. After selecting an icon, window, group of icons, or an amount of text, press the <b>L.DRAW</b> button.</li><li>2. Hold down the <b>Mouse Cursor Button</b> and drag the icon(s), window or text to your desired destination.</li><li>3. Press the <b>L.DRAW</b> button again to drop the icon(s), window or text.</li></ol> <p><b>If you use the R.DRAW button :</b></p> <ol style="list-style-type: none"><li>1. After selecting an icon, window, group of icons, or an amount of text, press the <b>R.DRAW</b> button.</li><li>2. Hold down the <b>Mouse Cursor Button</b> and drag the icon(s), window or text to your desired destination.</li><li>3. A menu with available options will then appear. Select your desired option.</li><li>4. Press the <b>R.DRAW</b> button again to drop the icon(s), window or text.</li></ol>

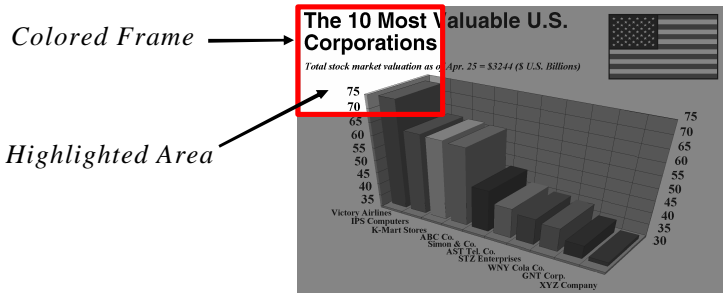
## Presentation Highlight Functions

The **AVerKey550** provides 3 special functions for highlighting key points in any presentation : *AVerMedia Spot*, *AVerMedia Pointer* and *AVerMedia Spotlight*. You can use these functions by pressing the corresponding buttons on the remote control.

## AVerMedia Spot

To highlight a certain area in your presentation, press the **SPOT** button on the remote.

A colored frame will appear around the highlighted area and the rest of the image will be darkened. The highlighted area will appear as if there is a "light" directed on it. The figure below shows an illustration.



### Changing the Color of the Frame

Use the **COLOR** button to select a color for the frame. Press this button repeatedly and select your desired color. There are 8 available colors to choose from.

### Changing the Size of the Highlight

Use the **WIDTH** and **HEIGHT** buttons to change the scope of the highlighted area. You can create a highlight as large as 1/4th of your screen or as small as 1/64th of your presentation screen.

### Highlighting Another Area

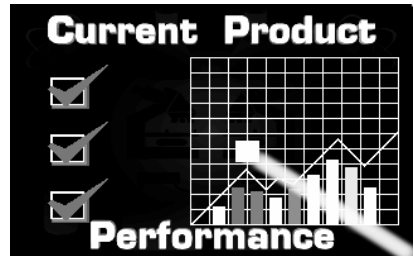
Use the **MOUSE CURSOR** Button to highlight another area in your presentation.



## **AVerMedia Pointer**

*AVerMedia Pointer* is very similar to the laser pointer. It is a 4 x 4 pixel square which lets you direct your viewer's attention to key areas in your presentation.

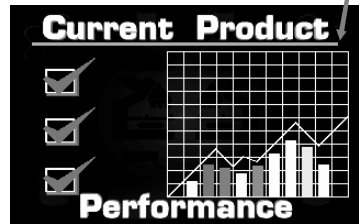
To point on a key area in your presentation, press the **POINTER** button on the remote.



### **Extending the AVerMedia Pointer into a Line**

If you have a very large audience, the *AVerMedia Pointer* on the presentation screen might not look obvious and clear enough. You can extend the *AVerMedia Pointer* into a *Line*.

Use the **WIDTH** button to extend the *AVerMedia Pointer* into a line or vice versa. At most, you can stretch the line up to the full extent of your screen width.



### **Moving the AVerMedia Pointer (or Line)**

Use the **MOUSE CURSOR Button** to move the *AVerMedia Pointer* (or line) up, down, left or right.

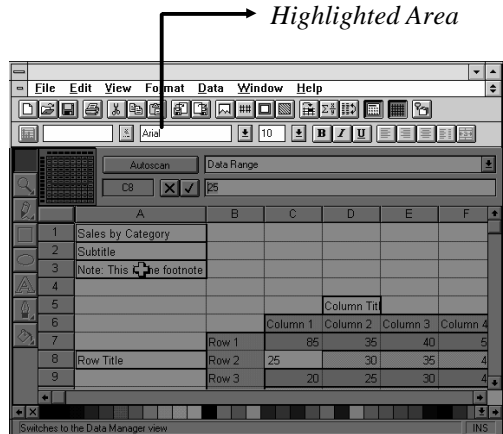
### **Changing the Color**

Press the **COLOR** button repeatedly and choose your desired color for the *AVerMedia Pointer* (or line). There are 8 available colors to choose from.

## AVerMedia Spotlight

The *AVerMedia Spotlight* function works somewhat the same as your regular overhead projector. With this function, you can highlight a part of your presentation and then "cover" the rest by darkening areas which you do not want to show to your audience.

When you press the **SPYLIGHT** button for the first time, the upper part of your presentation screen will be highlighted. (See the sample screen above.)



## Highlighting Areas Horizontally and Vertically

Use the **MOUSE CURSOR Button** to show or darken more parts of your presentation screen.

## Different Types of Zoom

The **AVerKey550** provides 4 types of zoom : *Normal Zoom*, *AVerMedia Area Zoom*, *AVerMedia Spot-Zoom*, and *AVerMedia Pointer-Zoom*.

### Normal Zoom

*Normal Zoom* allows you to zoom in and out of the computer image on TV. When you press the **ZOOM** button for the first time, the upper left side of your computer image will be enlarged and displayed on TV.

Once you have used other AVerMedia zoom functions (e.g. AVerMedia Area Zoom, Pointer-Zoom, etc.), you can press the **ZOOM** button to re-display the last zoomed image.

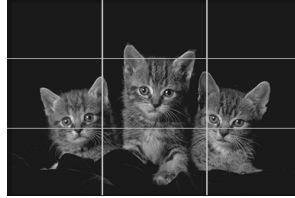
## AVerMedia Area Zoom

This function divides your screen into 9 parts and allows you to select the desired part to zoom through the available buttons on the remote control.

The directional buttons on the remote corresponds to 9 parts of your screen :



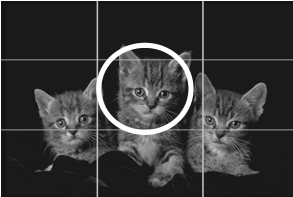
*Directional Buttons  
on the Remote Control*



*9 Parts of the Screen*

Press one of the 9 directional buttons which corresponds to the part of the screen you want to zoom.

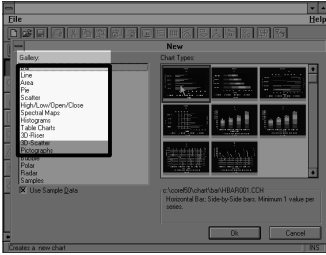
For example :



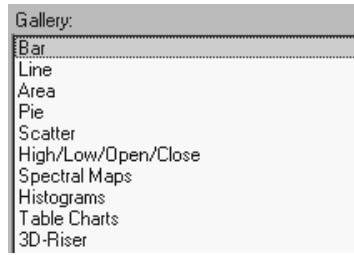
## AVerMedia Spot-Zoom

As described earlier in the section, *AVerMedia Spot*, under *Presentation Highlight Functions*, you can highlight a certain area in your presentation by pressing the **SPOT** button.

After pressing the **SPOT** button, press **ZOOM** to enlarge the highlighted area inside the colored frame. (The figure below shows an illustration.)



Press the **SPOT** button to highlight an area.



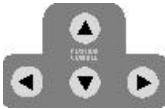
Then, press the **ZOOM** button to enlarge the highlighted area.

## AVerMedia Pointer-Zoom

After you press the **POINTER** button to point on a key area in your presentation screen, press the **ZOOM** button to magnify the area where you are pointing to.

## Panning and Positioning

You can pan (move) to other parts of the zoomed image by using the **MOUSE CURSOR** button.

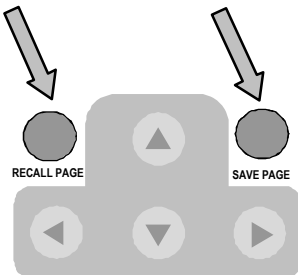


To shift the position of the zoomed image, use the **POSITION CONTROL** buttons of the remote control.

## Page Saver

**RECALL PAGE**  
button

**SAVE PAGE**  
button



AVerKey550's *Page Saver* feature allows you to store any page from your presentation and easily call out that page.

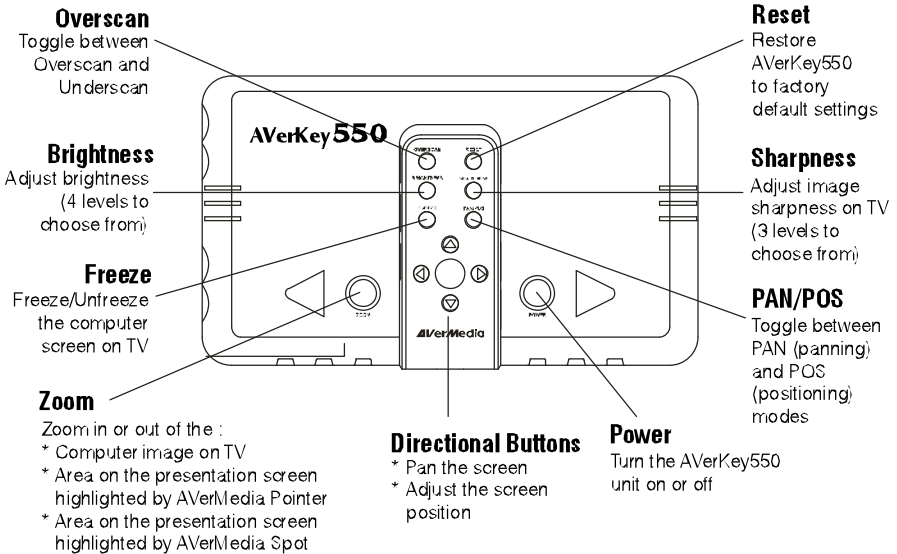
Press the **SAVE PAGE** button on the remote to save the current page on your presentation screen.

To access and display the last page you saved, press **RECALL PAGE**.

# Touch-Button Panel Control

The Touch-Button Panel Control on the **AVerKey550** unit gives you access to the most commonly used functions.

Some of the touch buttons work differently than the remote control buttons. These include **Brightness**, **Sharpness**, **PAN/POS**, and the **Directional Buttons**. Refer to the figure and descriptions below for the details.



## The PAN/POS Button

The **PAN/POS** touch button toggles between the **PAN** (*Panning*) and **POS** (*Positioning*) modes.

## Panning to Other Parts of the Zoomed Image

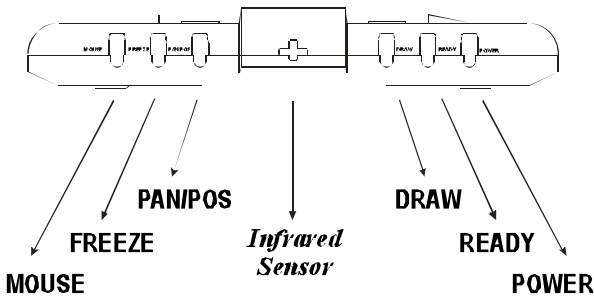
1. Check and see if the **PAN/POS** LED on the **AVerKey550** front panel is OFF. If it's not, press the **PAN/POS** button to switch to **PAN** mode.
2. Press on the **Directional Buttons** to view other parts of the zoomed image.

## Adjusting the Image Position

1. Check and see if the **PAN/POS** LED on the **AVerKey550** front panel is ON. If it's not, press the **PAN/POS** button to switch to **POS** mode.
2. Press on the **Directional Buttons** to move the image up, down, left, or right.

## The LED Panel

At the front panel of the **AVerKey550**, you will find the *Infrared Sensor* and several **LEDs**. Each LED shows you whether or not a particular function or operating mode is active. The figure and descriptions below explain what each LED represents.



### MOUSE :

This LED shows which type of mode the remote control is currently in.

If the LED light is off, it means that the remote is operating in *Linear Zoom mode*.

If the LED light is on, it means that the remote is operating in *Remote Mouse mode*.

### FREEZE :

This LED shows whether FREEZE or UNFREEZE is in operation.

If this LED light is on, it means that the user has paused, i.e., frozen the screen.

### PAN/POS :

This LED works in conjunction with the **PAN/POS**

button of the Touch-Button Control Panel.

If the LED is OFF, it means that the panning function is active.

If the LED is ON, it means that the positioning function is active.

**Infrared Sensor :**

The infrared sensor (at the middle of the front panel) receives incoming commands from the remote control.

**DRAW :**

This LED works in conjunction with the **L.DRAW** and **R.DRAW** buttons of the Remote Control. It lights up when you are selecting objects or performing a drag-and-drop.

**READY :**

If this LED light is on, it indicates that the **AVerKey550** is ready for use.

**POWER :**

This red LED is the power ON/OFF indicator. If this LED is on, it indicates that the **AVerKey550** has been powered ON.

# Chapter 4

## Troubleshooting

This chapter provides many useful tips on how to solve common problems while using the **AVerKey550**.

---

### **There is no picture on my TV.**

---

1. Check all the connectors again as shown in this manual.
2. Check your TV remote control on/off switch and channel setting.
3. Verify the setting of Composite Input or S-VHS Input of your TV set.
4. If you are using a SCART connector, check the SCART input of your TV set.
5. If you are using a notebook, you may have to switch to external VGA mode. (Refer to your notebook's manual.)
6. As specified by IBM, some systems may require that the monitor is present and connected when the system is powered up.

---

### **The picture on my TV is distorted.**

---

1. Before doing any adjustments, reset all the picture attributes to the factory default setting using the **RESET** button on the remote control.
2. Each VIDEO display device is slightly different from another. Use the Panning Control of **AVerKey550** to adjust the picture.
3. Use the Brightness and Sharpness picture attributes controls on the remote control to reduce the distortion.



---

**When the signal runs through a VCR, there is no picture on the TV.**

---

1. Check your TV/VCR input channel setting.
2. If your TV and VCR are connected to an AV Amplifier, please check the input/output selection.

---

**I have set up AVerKey550 and checked all the connections as specified in the manual, but I can only get a picture on the VGA monitor, not on the TV screen.**

---

**AVerKey550** is in "Ready" mode once power is connected. You need to switch **AVerKey550** "ON", either from the Remote Control or Touch-Button Panel Control to display both VGA and VIDEO.

---

**The picture on my TV is all messed up.**

---

When using **AVerKey550** with IBM PC compatible computers, only screen resolutions up to 1600 x 1200 (horizontal frequency less than 108KHz) are supported.

---

**While using the remote control or wired mouse, the PC does not respond. (The mouse cursor does not appear on-screen; the mouse cursor won't move.)**

---

1. Make sure that power is connected. Check and see if the **READY** LED on the **AVerKey550** front panel is on.
2. Check if the RS-232 cable is securely connected to the **AVerKey550** "PC/ADB" port.
3. Make sure that the mouse driver has been invoked successfully.
4. If you are using a wired mouse, **AVerKey550** can support the standard (two-button) MS mouse.
5. If you're using the remote control unit, make sure that the batteries have enough power.

---

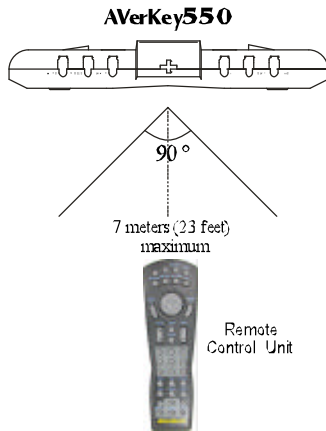
**The remote control is not performing well enough.**

---

This may happen when the **AVerKey550** is not getting a good reception from the remote.

To get a good reception :

1. The distance between the remote and **AVerKey550** must not exceed 7 meters (23 feet).
2. The remote control must be within a 90° angle with the **AVerKey550** infrared sensor (see the figure below).



The next paragraphs provide tips on how to prevent conflicts between the **AVerKey550** and the mouse.

---

**The mouse driver I'm using cannot work with AVerKey550.**

---

Basically, **AVerKey550** can be used with any mouse driver. But since different driver programs support different types of mouse devices, functions or settings, incompatibility problems may occur. To avoid such problems, we strongly suggest you use a mouse driver that is from a world-known mouse supplier.

# Appendix

## Supported Display Modes

The reference table below lists the various display resolutions which the AVerKey**550** can support.

Computer / Operating System	Display Resolution	Maximum Vertical Frequency	Maximum Horizontal Frequency	
IBM PC DOS/V	720 × 400	70 Hz	31.5 KHz	
		640 × 480	60 Hz	31.5 KHz
			72 Hz	37.9 KHz
			75 Hz	37.5 KHz
			85 Hz	43.3 KHz
			90 Hz	47.9 KHz
			100 Hz	52.2 KHz
	800 × 600	120 Hz	61.79 KHz	
		56 Hz	35.1 KHz	
		60 Hz	37.9 KHz	
		72 Hz	48.1 KHz	
		75 Hz	46.9 KHz	
		85 Hz	53.7 KHz	
		90 Hz	57.0 KHz	
	1024 × 768	100Hz	62.5 KHz	
		120 Hz	77.17 KHz	
		60 Hz	48.4 KHz	
		70 Hz	56.5 KHz	
		72 Hz	57.5 KHz	
		75 Hz	60 KHz	
		85 Hz	68.57 KHz	
100 Hz	81.42 KHz			
120 Hz	98.78 KHz			

<b>Computer / Operating System</b>	<b>Display Resolution</b>	<b>Maximum Vertical Frequency</b>	<b>Maximum Horizontal Frequency</b>
	1152 × 864	60 Hz 72 Hz 75 Hz 85 Hz	53.68 KHz 64.8 KHz 67.47 KHz 77.1 KHz
	1280 × 960	60 Hz 70 Hz 72 Hz 75 Hz 85 Hz	75.16 KHz 69.9 KHz 72.1 KHz 75.16 KHz 85.9 KHz
	1280 × 1024	60 Hz 70 Hz 72 Hz 75 Hz 85 Hz 100 Hz	63.96 KHz 74.6 KHz 76.8 KHz 80 KHz 91.30 KHz 108.4 KHz
	1600 × 1200	60 Hz 70 Hz 72 Hz 75 Hz 85 Hz	75 KHz 87.4 KHz 90.1 KHz 93.8 KHz 106.3 KHz
Macintosh	640 × 480 800 × 600 832 × 624 1024 × 768 1152 × 874 1280 × 1024 1600 × 1024	120 Hz 75 Hz 75 Hz 75 Hz 75 Hz 75 Hz 60 Hz	35 KHz 46.8 KHz 49.7 KHz 60 KHz 68.7 KHz 79.98 KHz 63.6 KHz
iMac DV	640 × 480 800 × 600 1024 × 768	117 Hz 95 Hz 75 Hz	60.8 KHz 59.98 KHz 59.97 KHz
Mac G3	640 × 480 832 × 624 1024 × 768	67 Hz 75 Hz 75 Hz	35 KHz 49.8 KHz 60 KHz

# LIMITED WARRANTY

## 1. Limited Warranty:

For a period of time beginning on the date of purchase of the applicable product and extending as set forth in Section 6 of this Limited Warranty (the “**Warranty Period**”), AVerMedia Technologies, Inc. (“**AVerMedia**”) warrants that the applicable product (“**Product**”) substantially conforms to AVerMedia’s documentation for the product and that its manufacture and components are free of defects in material and workmanship under normal use. “You” as used in this agreement means you individually or the business entity on whose behalf you use or install the product, as applicable. This limited warranty extends only to You as the original purchaser. Except for the foregoing, the Product is provided “AS IS.” In no event does AVerMedia warrant that You will be able to operate the Product with-out problems or interruptions, or that the Product is suitable for your purposes. Your exclusive remedy and the entire liability of AVerMedia under this paragraph shall be, at AVerMedia’s option, the repair or replacement of the Product with the same or a comparable product. This warranty does not apply to (a) any Product on which the serial number has been defaced, modified, or removed, or (b) car-tons, cases, batteries, cabinets, tapes, or accessories used with this product. This warranty does not apply to any Product that has suffered damage, deterioration or malfunction due to (a) accident, abuse, misuse, neglect, fire, water, lightning, or other acts of nature, commercial or industrial use, unauthorized product modification or failure to follow instructions included with the Product, (b) misapplication of service by someone other than the manufacturer’s representative, (c) any shipment damages (such claims must be made with the carrier), or (d) any other causes that do not relate to a Product defect. The Warranty Period of any repaired or replaced Product shall be the longer of (a) the original Warranty Period or (b) thirty (30) days from the date of delivery of the repaired or replaced Product.

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This warranty gives You specific legal rights; you may also have other rights granted under state law. These rights vary from state to state.

#### Section 6

Warranty Period of AVerMedia Product Purchased:

**AVerVision110:** 2 Year Limited Parts and Labor.  
**All other AVerVision Products\*:** 3 Year Limited Parts and Labor.  
**All other AVerMedia Products:** 1 Year Limited Parts and Labor.  
**All AVerVision Accessories:** 1 Year Parts and Labor.

\* Except AVerVision DL, 100, 100 Pro – 1 Year Parts and Labor.

## CONTACT INFORMATION

<http://www.avermedia.com>