# **User Manual**





#### FCC NOTICE

This device has been tested and found to comply with the limits for a 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.

#### CAUTION ON MODIFICATIONS

To comply with the limits for the digital device, pursuant to Part 15 of the FCC Rules, this device must be installed in computer equipment certified to comply with the 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

This is a product, complied with the CE limits.

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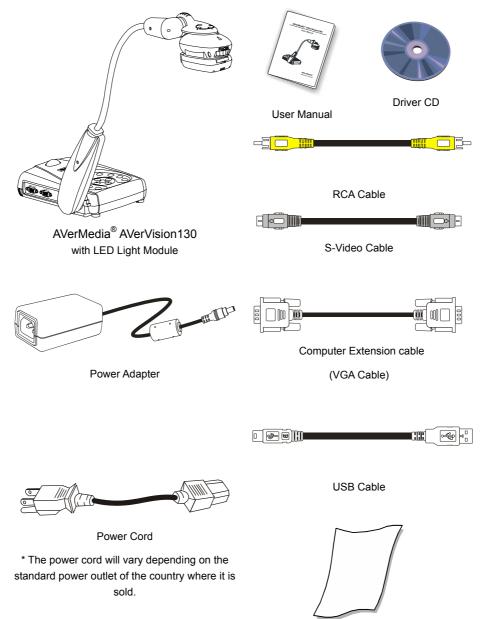
### Introduction

Thank you for purchasing the AVerMedia<sup>®</sup> AVerVision130. This document camera displays any documents, negatives, transparencies and 3D objects onto a TV, LCD or DLP projector making presentations a snap.

The AVerVision 130's advanced features, including 4 times (400%) digital zoom, negative to positive, B&W to color image, dynamic image capture and image freezing function, making presentation easy. When connect the AVerVision 130 to a PC via USB cable, you can capture and save still images and video clip to your PC. Come with a full featured control panel, AVerVision 130 is an ideal presentation tool for academic, business, medical and the scientific community.



# **Package Contents**



2

Anti-glare Sheet

# **Optional Accessories**



34mm Coupler





28mmCoupler



Light Box



(for MAC)

Computer Adapter

(for MAC)

3

# **Technical Specifications**

# Image

Sensor	1/2" CMOS
Effective Pixels	790K 1024 (H) x 768 (V)
Frame Rate	12 fps
White Balance	Auto / Manual
Exposure	Auto / Manual / Flicker
Image mode	Text / Graphics
Effect	Color / B/W / Negative;
Analog RGB output	XGA 75 Hz; SVGA 60 Hz; VGA 60 Hz
H Sync. Signal	60 K / 37.879 K / 31.469 KHz, TTL level
V Sync. Signal	75 Hz / 60Hz / 60 Hz, TTL level
Image Signal Level	0.7 Vpp
S-Video, Composite Video Output	NTSC / PAL
Image Capture	4 Frames Dynamic

### Optics

Lens	F3.0; fl=9.6mm
Focusing	Manual
Shooting Area	360mm x 270mm (max.);
Zooming	Digital: 4X
Power Source	100-220V ~ 1.8A, 50-60 Hz
Consumption	6 Watts (lamp off); 9 Watts (Lamp on)

# Lighting

# Input/Output

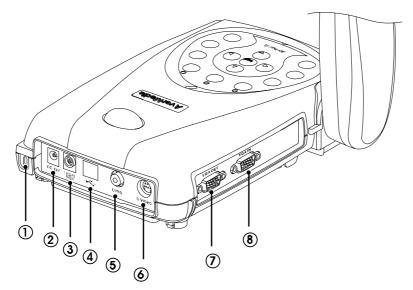
VGA Input	15-Pins D-sub (VGA)
VGA Output	15-Pins D-sub (VGA)
S-Video	Mini-DIN Jack
Composite Video	RCA Jack
USB	USB1.1
DC 6V Output (Light Box)	Power Jack

#### Dimension

Operating	220mm x 140mm x 570mm
Folded	380mm x 170mm x 55mm
Weight	3.8 lb

# Installing and Setting Up the Hardware

The ports on the back and side panel of the AVerVision130 enable you to connect the unit to a computer, graphics display monitor or LCD / DLP projector, TV or other device. Illustrated below are the ports that are located at the back and side panel of the AVerVision130 with their corresponding labels.



Port	Description
1.Security Slot	Use this port to connect a Kensington compatible security lock.
2.DC 12V (input)	Plug the power adapter into this port.
3.DC 6V (output)	Plug the optional light box into this port.
4.USB1.1 Port	This port enables you to use AVerVision130 as PC Camera, capture the images or video to your PC.
5.VIDEO Port	The VIDEO Port enables you to output your camera or playback a picture from the built-in dynamic memory on your TV.
6.S-VIDEO Port	The S-VIDEO Port enables you to output your camera or playback a picture from the built-in dynamic memory on your TV.
7.VGA OUT Port	Use this port to connect to a VGA/ Mac monitor, LCD/DLP projector for your camera, PC presentation, or playback a picture from built-in dynamic memory.
8.PC IN Port	Use this port to connect the AVerVision130 to the VGA output port of your computer. This enables you to input your computer video signal and pass it through to the VGA out port.

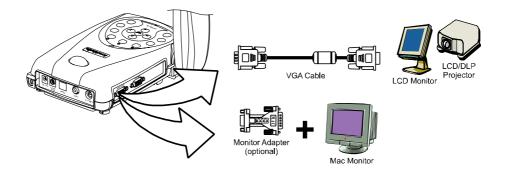
#### **Connecting the Power Adapter**

You can connect the power adapter to a standard 100V~240V AC power source.



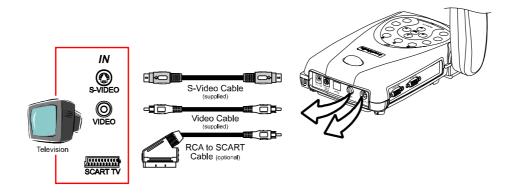
# Connecting a VGA, Mac Display Monitor or LCD/DLP Projector

AVerVision130 enables you to display a presentation on a VGA /MAC display monitor, or LCD/DLP projector with an outstanding video quality.



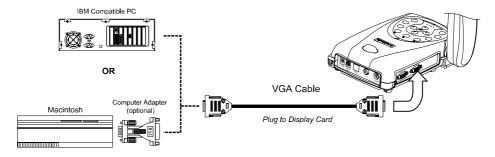
#### **Connecting a TV**

To display a presentation on TV, connect AVerVision130 and TV by using the Video Cable or S-Video cable, switch the output mode to TV system by pressing **VGA/TV** button on the control panel. If you are using a SCART RGB monitor, connect it by using the RCA to SCART Cable. (The SCART RGB Cable is provided as an optional accessory cable with AVerVision130.)



# Connecting an IBM Compatible PC or Macintosh Computer

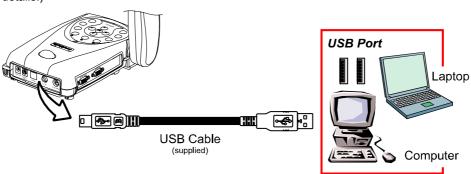
You can connect the AVerVision130 to an IBM compatible PC, Macintosh, or notebook (laptop) computer. After physically connecting the unit to your PC, you can display an image from your computer by pressing the **PC** button on the unit's control panel.



### **Connecting a Computer via USB connection**

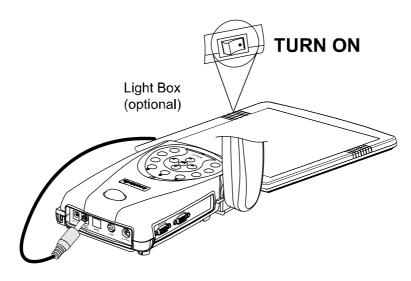
To access the software application as a PC Camera via the USB cable, just connect the USB cable to a computer. (Refer to the section, *using the AVerVision Application*, for more

details.)



### Installing the Optional Light Box

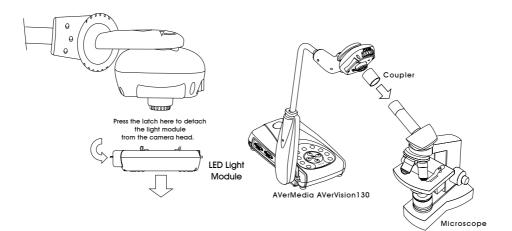
Connecting an optional light box enables you to view x-rays, transparencies and negative slides.



### **Connecting to a Microscope**

Connecting the AVerVision130 to a microscope enables you to examine microscopic

objects on a big screen without straining your eyes.

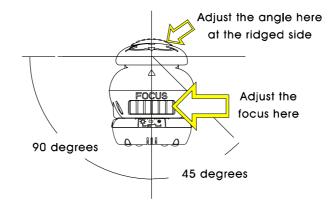


# **Adjusting the AVerVision130**

This section provides useful tips on how to adjust the *AVerVision130* to meet your needs.

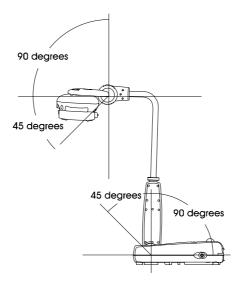
#### **Camera Head**

The camera head can be rotated 135 degrees from left to right. You can also manually adjust the focus from here to improve the quality of the pictures.



#### Flexible Gooseneck and Mechanical Arm

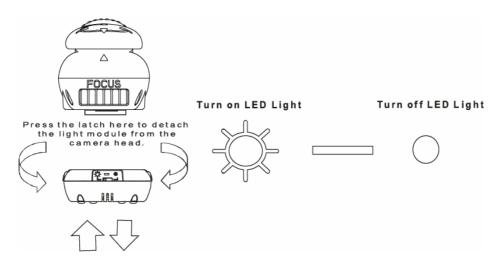
The flexible gooseneck and Mechanical arm design allows you to position the camera head from any angle.



#### LED Light Module

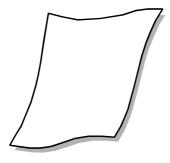
Then LED light module provides white light and it is best use when presenting in low

lighting condition.



#### **Anti-glare Sheet**

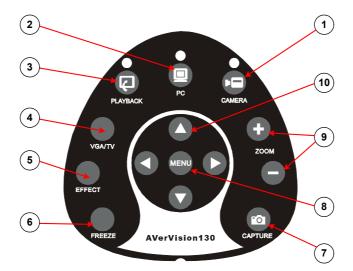
The anti-glare sheet is a special coated film that helps eliminate any glare you may encounter when you are displaying very shiny object or glossy surfaces such as magazines, pictures, etc. Simply place the anti-glare sheet on top of the shiny document to reduce reflected light.





## **Touch Button Control Panel**

The touch button control panel located on the top side of the AVerVision130 provides quick access to commonly used functions.



Function	Description
1 CAMERA MODE	Switches to Camera mode and displays the image from the AVerVision130's built-in digital video camera.
2 PC MODE	Switches to PC mode and displays the video signal coming from the PC IN port.
3 PLAYBACK MODE	Switches to PLAYBACK mode and displays 4-thumbnail images captured in AVerVision130's built-in memory.
4 VGA/TV	Switches between VGA (VGA Out) or TV (Composite Video/S-Video) output.
5 EFFECT	In Camera mode, press to convert and view the video in Black and White, Negative or Color.
6 FREEZE	Press this button to hold the image picked up by the camera and to release the image that has been retained.
7 CAPTURE	In Camera mode, press to capture an image. The captured image is automatically stored in the built-in dynamic memory at 1024 x 768 resolution. AVerVision130 could save up to 4 frames. In Playback Mode, press this button to delete the saved frame.

8 & 10 MENU/ ◀▲► ▼	<ul> <li>Press MENU to call the OSD menu and then use the ▲, ▶, ▼ and &lt; around the menu button to make a selection and adjustment.</li> <li>In playback mode, use the ▲, ▶, ▼ and &lt; to make a selection and then press PLAYBACK to display the image in full-size. You may also use PLAYBACK button to revert back to display 4-thumbnail pictures.</li> <li>In zoom-in mode, use the ▲, ▶, ▼ and &lt; to pan up , down , left and right</li> </ul>
9	Press "+" or "-" to digitally zoom in and zoom out the picture up to
ZOOM +/ -	400%.

# LED Panel

The LED on the front panel of AVerVision130 indicates the status of the unit.

Color	Description
Green	The unit is operated with VGA output.
Orange	The unit is operated with TV output
Red	The unit is in standby mode.

# Using the AVerVision Application

Use the AVerVision PC Camera applications provided to control the AVerVision130 to save any captured images or video clips to your PC, or send them via emails.

Note: When a USB cable is connected between the document camera and the PC, the document camera features are controlled by the application software directly instead on the control panel.

#### Installing the Software

Minimum System Requirements

- Pentium<sup>®</sup>-class processor
- Windows2000 Professional with Service Pack 2 or above, Windows XP Professional or Home, or Windows XP Tablet PC
- 32 MB of RAM (64 MB recommended)
- 60 MB of available hard-disk space

To install PC Camera Applications:

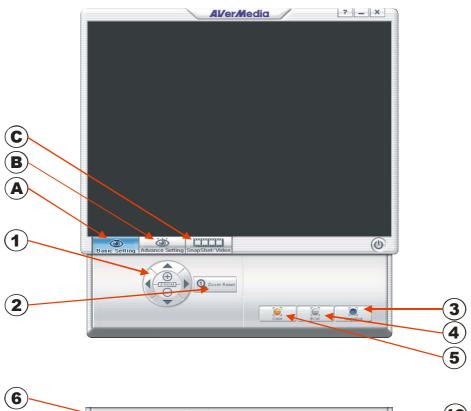
 Insert your Software CD into your CD-ROM drive, and click on "PC Camera Applications" and follow the instructions.



- 2. Click "Finish" to complete installation.
- 3. After the installation, connect the USB cable between the AVervVsion130 and

your PC. Open the applications by clicking "VisionAP" icon on your desktop.

### **Application User Interface**

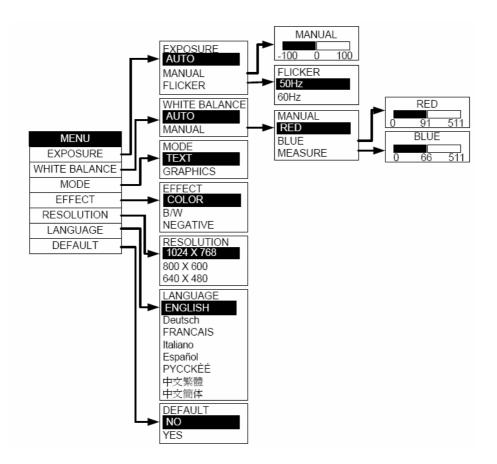






A. Basic Setting			
Function	Description		
1	Digital Zoom and Pan Control		
2	Return to normal view (1X)		
3	Convert the image to Negative		
4	Convert the image to Black and White		
5	Back to the original image		
B. Advance Setting			
Function	Description		
6	Restore to original factory setting		
7	Select between text and graphic image enhancement mode		
8	Display the image from AVerVision's camera or from the PC IN port		
9	Freeze image		
10	Adjust White Balance		
11	Adjust Exposure		
C. SnapS	C. SnapShot/Video		
Function	Description		
12	Control the video display by controlling bar		
13	Play and control the video display		
14	Record the video and save it into PC		
15	Capture a single picture and save it into PC		
16	Retrieve saved picture or video clips		
17	Setup for the picture snapshot or video recording.		

# **OSD Navigation Tree**



## **Menu Functions**

The MENU functions of AVerVision130 enhance fine-tuning your screen display, select OSD language and more. Press the **MENU** button to call up and exit from the main menu or sub-menu display. Then use ▲or▼ buttons to select the items in the menu list. Use ► button to enter sub-menu. To adjust the setting, press **⊲**or► buttons.

Main Menu	Sub-Menu OSD	Description
EXPOSURE	EXPOSURE AUTO MANUAL FLICKER MANUAL 0 50 100	Use ▲or▼ buttons to select between Auto and Manual. AVerVision130 allows you to automatically or manually adjust the camera to determine how much light is required. If you choose to manually adjust the exposure, press ► or ◄ buttons to adjust the exposure level.
	FLICKER 50 Hz 60 Hz	Use ▲or▼ buttons to select between 50Hz or 60Hz. Some display devices cannot handle high refresh rates. The image will flicker a couple of times as the output is switched to another refresh rate.
WHITE BALANCE	WHITE BALANCE	Use ▲or▼ buttons to select between Auto and Manual. AVerVision130 enables you to automatically or manually adjust the camera to suit the lighting condition or color temperature. If you select to manually adjust the white balance, you can adjust the Red, Blue or use the system to measure the color temperature.
	MANUAL RED BLUE MEASURE	To obtain a more accurate color balance, place a sheet of white paper under the camera. Select <b>MEASURE</b> then press ▶ button to calibrate the color temperature. Wait until a <b>"MEASURE OK"</b> appears at the lower right corner of the presentation screen.

Main Menu	Sub-Menu OSD	Description
MODE	MODE TEXT Graphics	Use ▲or▼ buttons to select between text and graphics image enhancement mode. In text mode, the AVerVision130 corrects the intensity of the adjacent pixel making it more uniform producing sharper and clearer images. While in graphics mode, the AVerVision130 adjusts the gradient of the adjacent pixel that appears to have a smooth image.
EFFECT	EFFECT COLOR B/W NEGATIVE	Use ▲or▼ buttons to display the image captured by the camera into negative, positive (true color), or monochrome (black and white) the image.
RESOLUTION	RESOLUTION           1024         x         768           800         x         600           640         x         480	Use ▲or▼ buttons to choose from 1024x768, 800x600 or 640x480 display resolution then press ► to make the selection. This selection will not be found in TV output (Composite/S-Video)
LANGUAGE	LANGUAGE ENGLISH DEUTSCH HERANEXIIS ITALIANO ESPANOL PYCCK/UЙ 日本語 中文繁體 中文簡体	Use ▲or▼ buttons to select from nine different languages then press ► to make the selection.
DEFAULT	DEFAULT No Yes	Use ▲or▼ buttons to select YES to restore to original factory default setting or NO to exit then press ► to make the selection.

# Troubleshooting

This section provides many useful tips on how to solve common problems while using the AVerVision130.

#### There is no picture on the presentation screen.

- 1. Check all the connectors again as shown in this manual.
- 2. Check the on/off switch of the display output device.
- 3. Verify the setting of the display output device.
- If you are presenting from a notebook or computer through the display output device, please check and switch the document camera source to PC Mode.

# I have set up the AVerVision130 and checked all the connections as specified in the manual, but I cannot get a picture on the preferred presentation screen.

- Once the power cords are connected, the LED light turns RED as standby mode. Simply switch the AVerVision130 "ON" by pressing the on/off switch until the LED light is blanking and turns GREEN.
- The default camera display resolution setting is on 1024x768. If your output device does not support this resolution; no image can be projected. Simply press the MENU and RIGHT or LEFT button to the increase or decrease the resolution setting.
- If your display output device is TV or any analog device, please click on the VGA/TV button to switch output mode.

#### The picture on the presentation screen is distorted or the image is blurry.

 Reset all changed settings, if any, to the original manufacturer default setting (Refer to the Menu Functions for more details and steps).

- 2. Use the Brightness and Contrast menu functions to reduce the distortion if applicable.
- 3. If you discover that the image is blurry or out of focus, adjust the focus ring on the camera head.

#### There is no computer signal on presentation screen.

- Check all the cable connections among the display device, AVerVision130 and your PC.
- 2. Connect your PC to the AVerVision130 first before you power on your computer.

#### I plug in the power of AVerVision130, but still couldn't see anything.

It will take 20~30 seconds for warming up AVerVision130.

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AVerVision DL, 100, 100 Pro: 1 Year Limited Parts and Labor

AVerVision110: 2 Year Limited Parts and Labor

AVerVision100 series, AVerVision280 & AVerVision300: 3 Year Limited Parts and Labor

AVerVision330, All other AVerVision300X series & 500 series: 5 Year Limited Parts and Labor

All other AVerMedia Products: 1 Year Limited Parts and Labor

All AVerVision Accessories: 1 Year Parts and Labor

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