



**ken-a-vision®**  
KNOWLEDGE THROUGH VISION

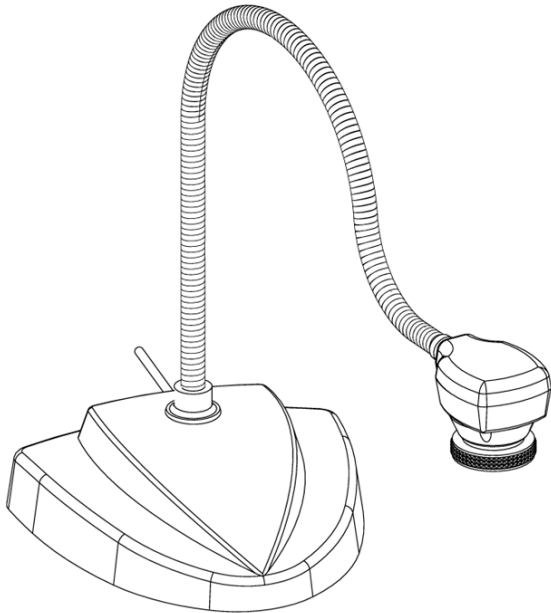
## Vision Viewer

Instruction Manual

7890B

7890P

7890UM





Thank you for your purchase of a Ken-A-Vision Vision Viewer™! You have acquired a high resolution solution to any presentation need, be it classroom or conference room. Images captured by your camera will be transmitted directly to your TV/Monitor, Projector, or VCR (7890B or 7890P) or through your computer to a Projector, DVR, Flash drive or other digital device (7890UM). All images can be shown at full screen!

**7890B includes:**

Formatted for NTSC  
Appropriate Power Supply  
Video/Power Cable Attached  
28mm Microscope Adapter

**7890P includes:**

Formatted for PAL  
Appropriate Power Supply  
Video/Power Cable Attached  
28mm Microscope Adapter

**7890UM includes:**

Attached USB Cable  
Powered by USB  
28mm Microscope Adapter  
Applied Vision™ Software  
Applied Vision™ Manual

## Connecting the Vision Viewer™ to Output Device

### **7890B and 7890P (Analog/Video Device)**

#### Connecting the Video/Power Cable

Your Video/Power cables are pre-attached to the Vision Viewer™ camera. Simply connect the video composite (RCA type) cable (yellow connector) into the "video-in" on your TV/Monitor, VCR or Projector (output device). Then connect the power supply to the power cable (black connector). Next connect the other end of your power supply to a 110 volt (or 220 volt) electrical outlet. Now push the "ON" switch to activate the camera. Video image from camera should appear on your output device.

#### TV/Monitor

Connect the composite (RCA type) yellow video cable from the Vision Viewer™ camera into the "Video In" connector of the TV/Monitor. If no "Video-in" is available, you may need an RF Modulator or a VCR recorder. See owner's manual of TV/Monitor for operating procedures. (Commonly TV/Monitor must be set on "AUX" for auxiliary).

#### VCR (Recorder)

Connect the composite (RCA type) yellow video cable from the Vision Viewer™ camera into the "Video-In" connector on the VCR. Connect VCR cables from your VCR to TV. See owner's manual of VCR for operating procedures.

#### Projector

Connect the composite (RCA type) yellow video cable from the Vision Viewer™ camera into the "Video-In" connector on the video projector. See owner's manual of video projector for operating procedures.

### **7890UM (Digital Video Device)**

Prior to connecting the USB cable, you must first install the supplied software. Please see the Applied Vision Software booklet provided with the enclosed software CD.

Once the software is loaded onto your computer, connect the USB cable to the computer. Click on the desktop icon for the software, follow simple instructions and camera should show an image on your computer screen. See Applied Vision Software Manual if there are any problems with an image. You are ready to go!

Output from computer to Projector, VCR, DVR, Flash drive, CD's and/or DVD will, most commonly, use VGA (15 pin) cables, but there are other possibilities dependent upon your computer set up. See the owner's manual of the computer for the operating procedures.

*Note: The USB provides ample power to the camera, no separate power supply needed*

**Focusing:**

The focusing ring located on the camera head is a rubber knurled focusing system with 6mm lens. Simply turn the focusing ring until you have obtained a crisp clear image.

*NOTE: The lens is permanently attached and may NOT be removed. Use care when reaching the optimal focal distance, do not use force, and avoid turning the focus ring to extremes in either direction.*

**Connecting the microscope eyepiece adapter:**

The Vision Viewer™ as shipped came with a 28mm microscope eyepiece adapter that allows your Vision Viewer™ to be coupled with microscopes or other objects which have eyepieces. The 28mm adapter included will fit most compound microscopes, but not stereo (dissecting) microscopes unless they have an unusually small outer diameter..

*NOTE: Before installing the microscope eyepiece adapter, measure the size of the outside diameter of the microscope eyepiece to be sure adapter will fit over the end of the eyepiece. Remove the rubber eyecup if present.*

1. Place the microscope eyepiece adapter over one (if Dual-Headed or Binocular) of the microscope's eyepieces. If there is a rubber eyecup on the microscope eyepiece, it should be removed first. If there are two eyepieces on your microscope, light entering the open eyepiece will not cause any problems with imaging.
2. Attach the Vision Viewer™ to the eyepiece adapter by gently sliding the Vision Viewer™ camera head onto the eyepiece adapter, aligning the narrow part of the microscope adapter with the inside opening of the Vision Viewer™ camera (inside the knurled focusing ring).

*Note: Use only genuine Vision Viewer™ parts and accessories. All Ken-A-Vision parts provided are made specifically for the Vision Viewer™ and failure due to use of non-vision viewer parts will void the warranty!*

**Lighting:**

Your Vision Viewer™ operates using ambient, room light. If using camera in a severely darkened room, supplement the light entering the camera by using a penlight, flashlight or small lamp near the camera, so that there is more local input light for the camera to work with.

Never point your Vision Viewer™ at direct sunlight. Subjecting the Camera "eye" to direct sunlight will discolor the filter over the CMOS chip causing aberrant colors and or permanent focusing problems. It may even destroy the camera's ability to capture an image.

**Camera complies with Class A and B, part 15 of the FCC Rules.**

Use only Ken-A-Vision Video Flex parts. The Power Supply and Charger are made exclusively for the Video Flex. Failure to use non-Video Flex parts will void your warranty.

**INFORMATION TO THE USER** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment 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 residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with instructions, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio 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 and/or increase the separation distance between the equipment and the receiver, and/or connect equipment into an outlet on a circuit different from that which the receiver is connected; and/or consult your dealer or experienced radio/ TV technician for help.



Ken-A-Vision reserves the right to make design improvements and other changes in accordance with the latest technology. There is no obligation to make changes in products already manufactured. Patents Pending Copyright 2010 Ken-A-Vision Corporation



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