

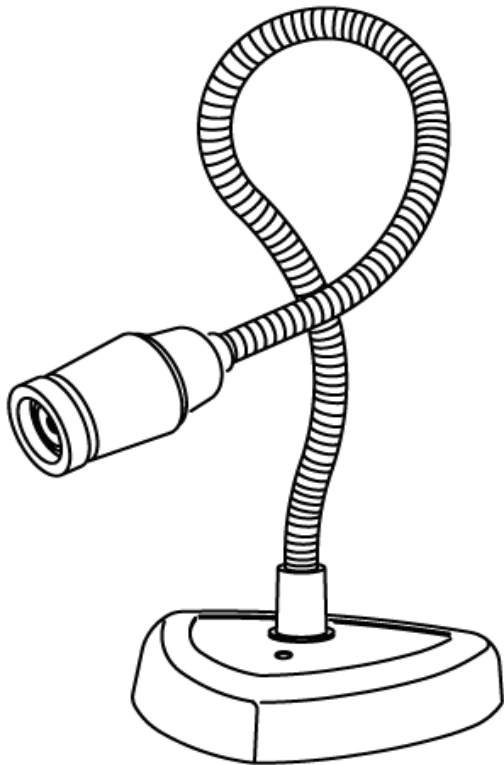


**ken-a-vision®**  
KNOWLEDGE THROUGH VISION

## **Video Flex 7000 Series**

Instruction Manual

Model: 7200HD





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## Introduction

Thank you for your purchase of a Ken-A-Vision Video Flex<sup>®</sup> 7200HD camera! 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 computer and through your computer to a Projector, DVR, Flash Drive or other digital device. The 7200HD is a high definition digital device designed to connect via a single USB cable.

## Package Contents

- Video Flex 7200HD Camera
- Pre-attached USB Cable
- 28mm Microscope Eyepiece Adapter
- Applied Vision™ Software CD
- Applied Vision Manual
- Video Flex Instruction Manual

If any components are missing, please contact your authorized Ken-A-Vision<sup>®</sup> dealer.

## Setting up your Video Flex 7200HD

### 1. Connecting the Video Flex to an Output 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 with the standard USB plug. Click on the Applied Vision desktop icon to launch the software, and follow on-screen instructions. The 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!

*Note*<sup>1</sup>: The USB connection alone provides enough power to operate the 7200HD, and no additional power is required.

## 2. Capture and store images:

Images may be recorded to a computer, DVR, Flash Drive, CD or similar digital unit using Applied Vision Software. Applied Vision allows you to capture still images, a sequence of time lapse images, a time lapse movie, or a full motion movie. Images may also be captured and retained using the camera function on an Interactive White Board (IWB). See the included Applied Vision software instruction manual for more information.

## 3. Picture quality adjustment

- Brightness/Contrast:

Brightness and contrast may be adjusted independently using Applied Vision™ Software. At the lower left corner of the image find a button entitled "Color Balance". Clicking on this button will open a set of sliding scales on bottom of image which will allow adjustment of Brightness, Contrast and Saturation. Slide these back and forth while watching the image to find the desired image quality.

- Positive/Negative Image:

The positive/negative image may be toggled on/off using the Applied Vision™ Software. (If your version of Applied Vision™ Software does not have this feature you may have an older version, download a newer version from the Ken-A-Vision web site).

- Fluorescent control:

Fluorescent control may be found in the Applied Vision™ Software. (If your version of Applied Vision™ Software does not have this feature you may have an older version, download a newer version from the Ken-A-Vision web site).

## 4. Video Flex® Lenses

Your Video Flex comes with a threaded C-mount 8mm lens. Optional lenses may be purchased separately from Ken-A-Vision, including a 4mm (VF4MM) for wide angle applications, 16mm (VF1614), 25mm (VF25MM) or 50mm (VF50MM) to increase focal distance. You can also use 35mm camera lenses, provided you have the appropriate adapter. An extension tube can be added for extra detail magnification. The C-Mount style camera lens provides a quick and easy method of changing from one lens to another.

- Changing the camera lens:

A standard 8mm lens is assembled on each camera. To change the lens, simply extend the lens by rotating in a counter-clockwise rotation until fully extended. Apply a small amount of additional force in this same direction to free the lens. Screw on the new lens, and as threading seems to reach end of natural course, apply a **small** amount of additional force to lock it in place. Rotate the lens back in a counter-clockwise direction to ensure it extends, rather than unscrew. If it unscrews, re-tighten in a clockwise direction, adding an additional amount of force to lock it in place.

## 5. Focusing:

The Video Flex<sup>®</sup> uses the patented Quick Focus<sup>®</sup> C-mount lens. The focusing ring, located on the camera head, is similar to that of a 35mm camera. The new ergonomic design makes focusing with one hand a snap. Just a 1/4 turn of the focus ring adjusts focus from close-up to infinity.

When using the standard 8mm lens, the light will automatically be adjusted for optimum viewing conditions, depending on the available light and options in use. When using the optional 16mm manual iris lens (VF16MM), open the iris until you have sufficient light to show the image on the monitor. Then, adjust the focus ring until your image is crisp. Once you have a crisp image, you may want to readjust your manual iris, to achieve the best image possible.

## 6. Optional Polarizing Adapter:

- The Microscope Polarizing adapter kit (VFEAPKO) allows you to turn any microscope into a polarizing microscope. Place the polarizing eyepiece adapter over the microscope eyepiece and connect the Video Flex, slip the polarizing film between the slide and the light source, and rotate the polarizing eyepiece to reveal the polarizing light spectrum.

## 7. Connecting the Microscope Eyepiece Adapter:

The Video Flex<sup>®</sup> as shipped includes a 28mm microscope eyepiece adapter that allows your Video Flex<sup>®</sup> to be coupled with microscopes or other objects which have eyepieces. The 28mm adapter included will fit most compound microscopes. Using the Video Flex<sup>®</sup> without the adapter will fit most stereo (dissecting) microscopes (34.5 mm).

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

1. Place the microscope eyepiece adapter over one 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 Video Flex<sup>®</sup> to the eyepiece adapter by gently sliding the Video Flex<sup>®</sup> camera head onto the eyepiece adapter, aligning the microscope adapter with the inside opening of the Video Flex<sup>®</sup> camera (inside the knurled focusing ring).

*Note: Use only genuine Video Flex<sup>®</sup> parts and accessories. All Ken-A-Vision parts provided are made specifically for the Video Flex<sup>®</sup> and failure due to use of non-Ken-A-Vision parts will void the warranty!*

## **8. Lighting:**

Your Video Flex<sup>®</sup> 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 Video Flex<sup>®</sup> 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.

### **Video Flex® Specifications**

Base	Triangular Poly-carbonate
Neck Length	25" (63.5 cm)
Head	Ball & Socket
Lens	8mm C-Mount 1/4 Quick FocusTM
Magnification	Approximately 50:1 at 1 (2.5cm) from object
Focal Distance	1/4" to infinity
Resolution	2592 x 1944 (5.0 megapixels)
Eyepiece Adapters	28mm & Built-in 34.5mm
Warranty	5 years

### **Video Flex® Accessories**

Expand the capabilities of your Video Flex with accessories. Additional accessories are available on our website at [www.ken-a-vision.com](http://www.ken-a-vision.com).

### **Replacement Parts**

- VFEA280.....28mm Eyepiece Adapter
- VF8MM.....8mm Lens



## **About Ken-A-Vision**

Ken-A-Vision has over 65 years of history providing quality products to institutions world wide. We stand behind our workmanship and offer an unbeatable warranty. We offer products for education, lesson plan ideas, technical support and certified microscope repair. If you have questions about how our repair facility could serve your repair needs, please contact Ken-A-Vision at (816) 353-4787 or e-mail us at [info@ken-a-vision.com](mailto:info@ken-a-vision.com).

To learn more about our company's products and services please visit our web-site: [www.ken-a-vision.com](http://www.ken-a-vision.com).

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

Use only Ken-A-Vision Video Flex parts. 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.



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COMPLIANT



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