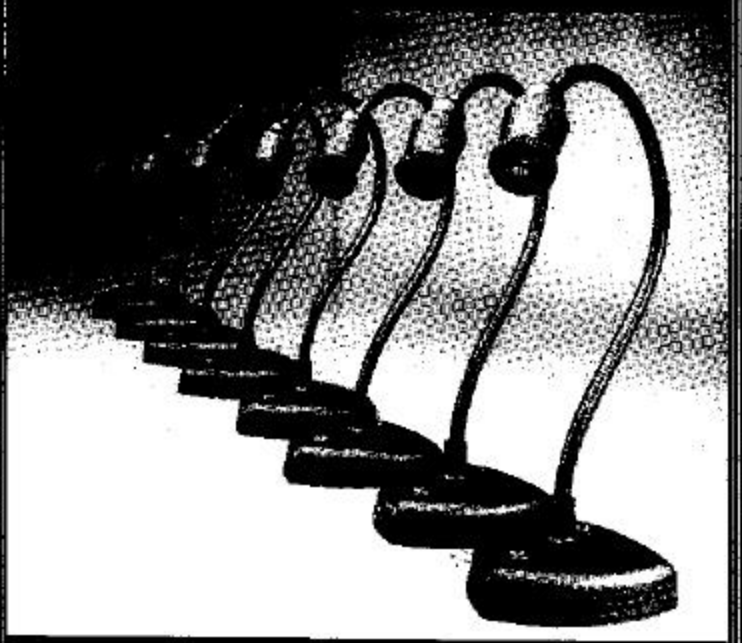
Video Flex®

by ken-a-vision

7000 Series

Instruction Manual



Knowledge Through Vision

Using your Video Flex® is as easy 1, 2, 3...

1. Remove the Video Flex® from the shipping carton.
2. Connect the Video, Audio and Power cables.
3. Explore the World Around You!

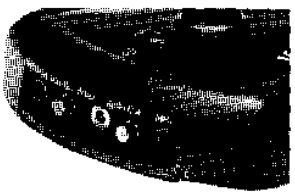
Professor K T Vision®

Thank you for your purchase of a Ken-A-Vision Video Flex®! IT'S READY TO GO, NO ASSEMBLY REQUIRED!

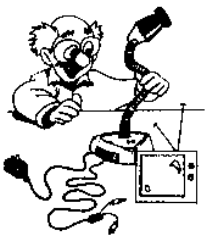
CONNECTING THE VIDEO CABLE:

Simply connect one end of the supplied video cable into the "Video Out" connector on the base of the Video Flex. Connect the other end of the cable into the "Video In" connector of the TV/Monitor, VCR, Video Projector or computer.

CONNECTING THE AUDIO CABLE:



Simply connect the audio cable into the "Audio Out" connector on the base of the Video Flex. Connect the other end into the "Audio In" connection of the VCR or computer. The audio signal is already amplified, so there is no need to connect through an amplifier. The microphone located at front of base is amplified and designed for recording (or storing) purposes.



NOTE: *Consult your owner's manual when using any of these components for operating procedures to accept a video or audio signal.*

CONNECTING THE POWER SUPPLY:

Simply connect the end of the power supply in the "Power" connector located on the back of your Video Flex. The other end connects to a 110/220-Volt electrical outlet. The "On/Off" button is located on the top of your Video Flex, power is indicated by an illuminated RED light.

- ***Do Not use other power supplies (even if they fit).*** **They will produce improper voltage or reversed polarities. This will seriously damage your Video Flex® and void your Warranty. Should you need a replacement power supply, contact Ken-A-Vision or your dealer. When using internationally, be sure to use the correct voltage. (110V or 220V-power supply)**

CONNECTING THE S-VHS CABLE

(The S-VHS signal hook-up applies to the 7300, 7500, and 7600 models)

When using S-VHS connection, connect one end of the S-VHS cable into the "S-VHS Out" connection on the base of the Video Flex. Connect the other end of the S-VHS cable into the "S-VHS IN" connection for the TV/Monitor, VCR, Video Projector or computer. For best results, use either the "S-VHS" connector or the "Video-Out" connector. Using both connections at the same time may diminish picture quality. S-VHS video will provide sharper definition and truer color than NTSC.

CONNECTING THE USB CABLE

(The USB signal hook-up applies to the 7600 USB only)

Prior to connecting the USB cable, you must first install the supplied software (directions on page 3). When connecting the USB cable, insert the square end of the cable into the USB port on the Video Flex. Next, insert the rectangular end into the USB port on your computer. Turn on the Video Flex®

7500 WIRELESS VIDEO FLEX®

The 900MHz Transmitter operates up to 50 feet from the monitor, without the use of cables. Rechargeable battery pack adds to mobility. This unit can be used with standard power supply and cable hook-ups. Simply follow the standard set-up on previous pages.

INFORMATION TO THE USER ABOUT WIRELESS OPERATION

Changes or modifications not expressly approved by the party responsible for compliance could void the users authority to operate the equipment.

This equipment has been tested and found to be 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 frequency energy to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

*** Video interference is inherent to wireless products, please try the following options to increase picture quality.**

1. Reorient or relocate the receiving antenna.
2. Increase the separation distance between the equipment and receiver.
3. Connect equipment into an outlet on a different circut from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

7600 USB VIDEO FLEX®

To load the USB software:

In the **Run** dialogue box type **A:/setup** and follow instructions.

Do not plug in the USB cable until prompted by the instructions. When this prompt appears, plug the cable from your **Video Flex®** to the USB port on the computer and turn on the **Video Flex®** so the software can be located. The USB port will supply ample power to run the **Video Flex®** without the power supply, unless you are connected to more than one Video-Out source. Wavey, irregular video indicates a need for the additional power supply.

Video Flex® 7600 USB can be connected simultaneously to your computer and a TV or monitor. The video signal can be received and "frozen" in the computer for editing, while live action continues on the second monitor.

- **When using a USB hub, make certain it's alternately powered.**

●TV/Monitor Connect video cable from the "Video-out" connector of the Video Flex into the "Video In" connector of the TV/Monitor. If no "Video-in" is available, youmay need an RF Modulator or a VCR recorder. **See owner's manual of TV/Monitor for operating procedures.**

●VCR (Recorder) Connect video cable from the "Video-Out" connector of the Video Flex into the "Video-In" connector on the VCR. Connect audio cable from the "Audio-Out" connector on the Video Flex into the "Audio-In" connector of the VCR. For VCR with stereo sound the audio can be connected into either right or left "Audio-In" . **See owner's manual of VCR for operating procedures.**

●Video Projector Connect video cable from the "Video-Out" connector of the Video Flex into the "Video-In" connector on the video projector. **See owner's manual of video projector for operating procedures.**

●Computers To connect the Video Flex to a computer, the computer must have a "Video-In" connector. Should your computer not be so equipped, you must then purchase a video digitizing board. **See the owner's manual of the computer for the operating procedures.**

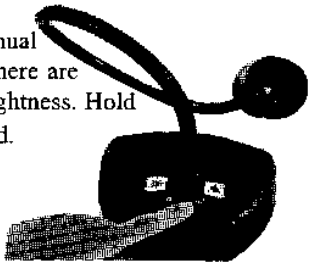
LIGHTING

Never point your Video Flex at direct sunlight.. The Video Flex iris is very sensitive and requires minimal light to operate. Subjecting the Video Flex "eye" to direct sunligfht will discolor the filter over the CCD chip and create an adverse picture. Under prolonged flourescent lighting conditions, color may slowly change. When using the Video Flex for viewing through a flourescent microscope, simply set the disc diaphragm on the smallest diameter hole, or close the iris diaphragm.

(VFDS)

CONTRAST ADJUSTMENT

(For models 7300, 7500, and 7600)



The amount of light can be adjusted using the manual contrast controls on the base of the Video Flex®. There are two sunburst buttons that allow you to adjust the brightness. Hold the desired button until maximum clearity is acheived.

POSITIVE/NEGATIVE

(Applies to the 7300, 7500, and 7600)

The positive/negative switch allows the video image to be reversed, like film negatives or the Darkfield control on microscopes. This feature is excellent for multi-media applications and use in forensics.

FLUORESCENT CONTROL

(Applies to the 7300, 7500, and 7600)

The fluorescent control switch on the base of your Video Flex® will disable the automatic iris control. This will eliminate the flicker found with certain fluorescent lighting conditions. When using this feature with a microscope, it may be ncessary to adjust or filter the light on the microscope, for the correct amount of light. This can be accomplished with the iris on the microscope-5 hole diaphragm or by using frosted filters. Turning off the unit will return the settings to factory default. ***Please note that touching either contrast control button will disable this capability.***

Video Flex®LENSES

Your Video Flex® comes with a threaded C-mount 8mm lens. Optional lenses include a 4mm for wide angle applications, and 16mm, 25mm or 50mm to increase focal distance. Extension tubes can be added for extra detail magnification.You can also use 35mm camera lenses, provided you have the appropriate adapter. An optional 8mm manual Iris lens (VF8MM-MI) may can be purchased to use when manually adjusting lighting conditions is preferred.

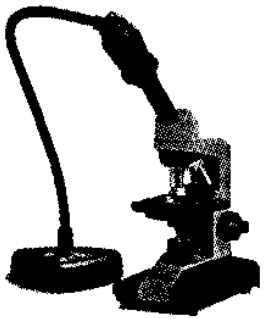
FOCUSING DIRECTIONS

The Video Flex® uses the patented QuickFocus® C-mount lens. The focusing ring, located on the camera head, is similar to that of a 35mm camera. The new ergonomics 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 a manual iris lens, open your iris until you have sufficient light to show your 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 acheive the best image possible.

USING YOUR MICROSCOPE EYEPIECE ADAPTERS

The two (2) included Microscope Eyepiece Adapters will allow your Video Flex® to be coupled with microscopes, stereomicroscopes, gemscopes, telescopes or other objects with an eyepiece. The 28mm adapter included with your Video Flex® will fit most compound microscopes, and the built-in 34.5mm adapter will fit most stereomicroscopes, telescopes and gemscopes. Other sizes are available through Ken-A-Vision.

Before installing a Microscope Eyepiece Adapter, measure the size of the outside diameter of the microscope eyepiece. (You must first remove the eyepiece cup if one is attached to the eyepiece.)

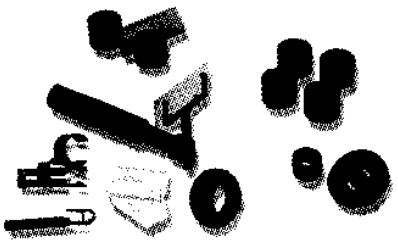


1. Fully extend the lens. Gently rotate the lens counter-clockwise until it is extended out, for maximum magnification.
2. Attach the Microscope Eyepiece Adapter. To install the eyepiece adapter, gently slip the adapter over the Microscope eyepiece. If it does not slide on easily, use the built-in 35.5mm found in the 8mm lens. Additional sizes are available through Ken-A-Vision.
3. Attach the Video Flex to the Eyepiece Adapter. Next, gently slide the Video Flex camera head onto the eyepiece adapter, aligning the grove around the lens on the Video Flex with the edge of the eyepiece adapter.
4. Power up. After checking to be sure that the Video Flex is situated securely, plug in the power supply and the TV/Monitor or other video device.
5. Use it. Put a slide on the microscope stage. Focus the picture on the TV/Monitor by first adjusting the microscope then Video Flex lens.

Optional Polarizing Adapters

Polarizing accessories are used for geology, petrology, mineralogy, toxicology, chemistry, pharmaceuticals, medicine, pulp/paper, atmospheric pollution, ceramics technology, forensic medicine and more.

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.

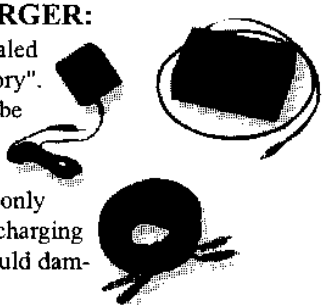


The Discovery Scope Polarizing Filter (VFDCPF) is used with the Discovery Scope Kit to create a Polarizing Video Microscope. The polarized analyzer is press fitted into the inner ring of the C-mount camera lens, and the polarizing film is positioned in-between the guides on the discovery scope holder and behind the specimen slide. When the analyzer is rotated, the Video Flex® will reveal the polarized spectrum, all without the use of a microscope!

ACCESSORIES

Use only genuine Video Flex parts and accessories - Power supply & Charger. They are made specifically for the Video Flex. Failure due to use of non-Video Flex parts will void the warranty!

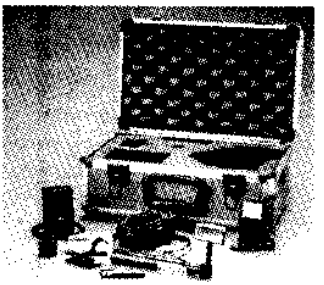
OPTIONAL BATTERY PACK & CHARGER:



The Battery Pack (standard on the 7500) is a sealed lead acid battery, meaning it does not have a "memory". When you charge the battery, it does not have to be completely drained. It takes approximately four (4) hours to fully charge a drained battery. You do not have to worry about overcharging the battery. Use only the battery charger supplied. Using any other charging source (even if it will fit the battery connection) could damage the battery and ***void*** the warranty.

Accessories are available on request at our website www.ken-a-vision.com

- Aluminum Case (VFCARRY)
- Battery Pack/Charger (VFBAT)
- 23mm eyepiece adapter (VFEA230)
- 25mm eyepiece adapter (VFEA250)
- 28mm eyepiece adapter (VFEA280)
- 33mm eyepiece adapter (VFEA330)
- Composite 24' video cable(VF24)
- Composite 12' video cable (VFC12)
- Composite 12'A/Vcable(V12AVC)
- Composite 24'A/Vcable(VF24A)
- S-VHS 12' Cable (VFC12-S)
- S-VHS 24' Cable (VFC24-S)
- Composite 24' A/V/Power Cable (VFC24AVP)
- Power Supply/regulated (VFAO3650)
- Microscope polarizing adapter kit (VFEAPKO)
- Kensington Lock (VFLOCK)
- Variable Intensity single halogen lamp(VFLLIT1)
- Wireless Video kit (VFCLIPKIT)
- Video Digitizer for PCT BUS (VFCEPCI)
- Video Digitizer for PCMCIA (VFCENB)
- Explorer Clamp for Discovery Scope Kit & fixed applications (VF2CLAMP)
- Video Frame Grabber Digitizer for PARRAU Port (VFCELPT)
- Discovery Scope Polarizing Filter (VFDSPF)
- Video Flex Case (VFCASE)
- 4mm wide angle lens (VF4MM)
- 8mm manual iris (VF8mm-MI)
- 16mm lens (V1614W)
- 25mm lens (VF25MM)
- 50mm lens (VF50MM)
- Mini phone jack (VFMICJACK)



Protect Your Investment with a padded case.

- Discovery Scope Kit

Kensington Lock System

To prevent your investment from taking wings, the Video Flex® 7000 series comes with a slot in the base that accepts the Kensington Lock system. This system employs a multiple-strand, stainless steel cable, secured by a keyed, tab locking mechanism. Theft resistant design does not inhibit maneuverability or function. The Kensington Lock (VFLOCK) can be purchased as an accessory on our website www.ken-a-vision.com.

Ken-a-Vision has a forty year history of providing quality products to institutions world-wide. We stand behind our workmanship and offer an unbeatable warranty. We offer product 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. To learn more about our company's products and services please visit our website: *www.ken-a-vision.com.*

WARRANTY

To activate the five (5) year limited warranty on your new Video Flex, simply fill out the enclosed warranty page, and return it to Ken-A-Vision Inc. ***Failure to return your warranty card will limit your Video Flex warranty to 90 days.*** Returns and repairs may be handled through your local dealer or directly with Ken-a-Vision. **Ken-a-Vision is an established repair facility for all brands of microscopes.** The warranty will not apply if your serial number has been removed or if the product has been tampered with, disassembled or damaged by misuse, accident, modification or unauthorized repair. To contact Ken-A-Vision please call 1-816-353-4787.

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