

# **COBRACAM™ USB III**

***Portable Inspection Camera with USB Interface***

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***Instruction Manual***



** **TRIPLETT**  
*Test Equipment & Tools***

07/13

## CobraCam USB 3 Features:

- Low Cost Digital Inspection Camera Solution for use with PC, Laptop, and MAC
- Handheld 37" flexible 'snake' can be bent to numerous shapes
- SnapShot and Live Video function
- Snapshots and Video can be saved to memory on the PC or Laptop
- Full color image (settable to Black and White)
- Camera is only 21/64" (8.3mm) diameter, inserts in small places
- Camera has 4 adjustable white LEDs for illumination
- Camera is waterproof up to the handle
- Camera focuses at approx 2 1/2" (usable to infinity)
- No batteries needed (powered by USB connection)
- 6ft cable from Camera to computer
- Hard-Sided Carrying Case included
- Magnetic Pickup, Hook, and Mirror accessories included
- Works with Windows® 8, 7, XP, Vista™, Linux, and MAC with "Photo Booth"
- One Year Warranty

PC: Provided software allows capture of still images (JPEG) or video (AVI). Image properties are adjustable (brightness, contrast, hue, gamma, etc.) Depending on the Operating System (OS), various features like Zoom, Pan, Flip, Mirror, etc. may or may not be available.

MAC: Please use MAC's software "Photo Booth". Do not use Triplet software and do not insert Mini CD into Mac disc slot. "Photo Booth" comes pre-installed on later MAC OS's, or can often be downloaded from the web.

MAC software allows capture of still images (JPEG) or video (AAC H.264). Adjustments are limited, but various effects are available.

## Uses for the CobraCam USB 3:

- See plumbing and electrical installations in inaccessible places (wall, ceiling, etc.)
- See behind or beneath objects that are difficult to move (bookcase, desk, refrigerator, etc)
- See inside furnace ductwork or in and around the heat exchanger or 'A' coil
- See inside pipes
- See how cables are connected to the back of equipment
- See hidden leaks
- See Insect or Rodent infestations
- See lost jewelry
- See the part you dropped
- See hidden sensors on car engine
- See around corners or through small holes
- Retrieve small magnetic objects (nuts, bolts, washers, screws, etc.)
- Many other uses too numerous to mention . . . in industry, around the house, during surveillance, or just as a fun toy.

## Introduction:

The Triplett CobraCam USB 3 Inspection Camera is a hi-tech tool that uses the latest technology to see images of difficult to view locations. Its water resistant flexible shaft and miniature camera fit into awkward spaces, tight locations or through small holes. Bright LED headlights in the camera illuminate dark areas, allowing the camera to 'see' in total darkness. A magnetic probe, hook, and mirror enhance the usefulness by allowing the camera to pick up magnetic objects, hook onto small objects, or view objects located at right angles to the camera body.

The USB interface provides a low cost solution for users who already have a computer with a USB connection. The provided software allows the CobraCam USB 3 to display its images on computers running Windows® 8, 7, XP, Vista™, & Linux. CobraCam USB 3 can be used with MAC, but only with the pre-installed software "Photo Booth".

The CobraCam USB 3 requires no additional power source, and the software allows the user to conveniently save photos or video of anything the CobraCam USB 3 sees. Adjustable software controls allow the images to be enhanced or modified in various ways.

## Product Specifications

Size:	Flexible Snake: 9/32" dia x 37" long Camera: 21/64" (8.3mm) dia x 2" long USB Cable: 6ft
Camera:	648 x 488 pixels (316K) Full VGA 1/9inch VGA CMOS imager Focal distance 2 1/2". Usable to infinity 54 degree viewing angle F 2.8 lens Auto exposure Waterproof to 3ft
Snake:	Polyethylene covered steel flex. Minimum radius bend, 1 1/2"
Illumination:	4 adjustable brightness white LEDs in camera head
Interface:	USB 2.0
Operating System:	Windows® 8, 7, XP, Vista™, MAC, & Linux Kernel V2.6 or later
Provided Software:	ViewPlayCap on CD PC Only

## Installing the Software: (PC Only)

The details of software installation vary depending on the PC and Operating System used. These instructions are for a generic installation on a computer running Windows 7

Install the software before connecting the CobraCam USB 3 to the computer.

Insert CobraCam USB 3 CD into the computer.

Use only with 'tray' type CD drives. Do not use with 'slot' type. Mini CD may jam slot type drives. The computer may automatically start the software installation, it may open a dialog box showing the location of the software, or it may do nothing. If installation starts, follow the instructions to install the software. If a dialog box opens showing the files on the CD, click (or double click) on 'setup.exe'. When the "License Agreement" screen appears, click on 'Accept'. When 'The files as follows' screen appears, click on 'Extract'. After extraction completes, The ViewPlayCap icon should be visible on the Desktop. If nothing happens when the CD is inserted into the computer, locate the CD via Explorer or My Computer, then click on 'setup.exe'. Follow the steps previously described.

## Other Operating Systems:

When the CobraCam USB 3 software is installed on a Windows Operating System other than Win 7 (OS) or on a Linux based system, different but similar dialog boxes will appear. There may be some additional steps . . . or fewer steps. Generally, follow the instructions to complete the software installation.

## MAC Setup:

Do Not Use Included CD with MAC. To use the CobraCam USB 3 first open the software "Photo Booth". Second, plug in the CobraCam USB 3 into your computers USB port. Third, Go to the menu at the top and click on the "Camera" drop down menu and select "Digital Camera". Once selected the CobraCam USB 3 will start working.

## First use of the CobraCam USB 3: (PC)

Plug the CobraCam USB 3 into one of the computer's USB ports. Open the ViewPlayCap software by clicking on its icon on the Desktop. An image from the camera should appear in the application viewing window. If an image does not appear, click on the 'Devices' tab and select 'USB 2.0 PC Cam'. Click on the 'Options' tab and select 'Preview'.

The tabs at the top of the ViewPlayCap window allow various settings and adjustments to be altered. The user may change these experimentally and observe their effect upon the images.

In some cases, there may be 'software contention' between a PC's (or laptop's) pre-installed webcam software. If this happens, the CobraCam USB 3 may not operate normally or it may not operate at all. Often, when this occurs, the pre-installed software 'thinks' the CobraCam USB 3 is a webcam, and treats it as such. It is often possible to view the CobraCam USB 3 using the pre-installed software, usually by opening the webcam software and changing some settings. Perhaps the Device, Input, Source, etc setting can be changed, and the camera image viewed. When this method is used, the SnapShot button on the handle of the CobraCam USB 3 won't work, but there should be an equivalent button in the webcam application.

(PC & MAC)

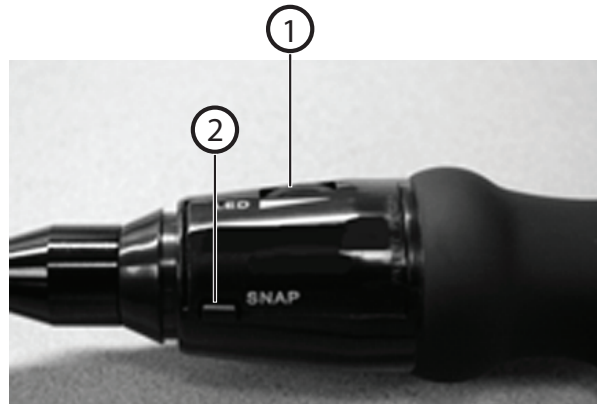
Many features of the CobraCam USB 3 are automatic. The camera adjusts itself to produce the best image obtainable. As with all video cameras, the image becomes more noisy as the light level is reduced. Since the CobraCam USB 3 is a digital camera, it produces digital noise (instead of analog noise) that looks like random horizontal lines in the image. These become less visible as the light level is increased.

The CobraCam USB 3 has relatively slow response time. If the camera is moved quickly, the image seen on the computer will blur. To obtain the best images, move the camera slowly and hold it steady.

The best image focus occurs several inches in front of the camera lens. Objects farther away are slightly out of focus but still easily viewable.

CobraCam USB 3 Controls:

- 1) Headlite Control (MAC & PC)
- 2) Snapshot Button (PC)



Using the CobraCam USB 3 Controls:

The proper use of the Headlite control (located on the handle of the CobraCam USB 3 is not obvious and requires some experimentation. It has little effect when there is adequate light for the camera, but has a dramatic effect when the light level is low or absent. The Headlites are intended to illuminate objects near the camera lens. They will not light up objects that are several feet or more away. The Headlite control is adjusted so that the best view of the desired object is obtained. If the adjustment is too bright, the image will 'glare' and obscure visibility. Generally, the lowest brightness that produces a usable image is best. It will often be found that a better image can be obtained by slightly repositioning the camera and adjusting the Headlite brightness. (PC & MAC)

### Saving Pictures: (PC Only)

After ViewPlayCap is running, take a 'snapshot' by pressing the Snapshot button on the CobraCam USB 3. The snapshot will appear in a viewing window. It may appear in the default photo editing application already installed on the computer. Additional button presses will snap additional photos. Edit and Save the photos using standard procedures.

### MAC Saving Pictures:

After "Photo Booth" is running, take a 'snapshot' by pressing the red /white camera icon in the "Photo Booth" software. Pictures will be automatically be saved to "Photo Booth", but can be exported to other areas by left clicking and selecting "Export". To view or play the files, find them in the locations that they were saved to, then click on them to open. "Preview" will be used for images and "Quick Time" will be used for Video.

### Saving Video: (PC Only)

Start ViewPlayCap. Click the File tab, select Set Capture File and the Set Capture File window will open. Choose a location to save the video. Give a name to the file. Click Open. The Set File Size window will open. Enter a maximum file size (Note: .avi files use about 10MB per second) Click OK. The window will close and the main ViewPlayCap window will be displayed. Click on the Capture tab then select Start Capture. The Ready to Capture window will open. To start recording video, click OK. The Ready to Capture window will close, displaying the main ViewPlayCap window showing the video image that is being recorded. The recording will stop when the file reaches the maximum size (or maximum time). To stop recording video, click the Capture tab and select Stop Capture.

Note: Video files can be very large. To reduce the size of the file, capture it a low frame rates and low resolution.

### MAC Saving Video:

After "Photo Booth" is running, take a 'video' by pressing the red /white film icon on the left in the "Photo Booth" software. The Icon should move to center, press again to start recording. Videos will be automatically be saved to "Photo Booth", but can be exported to other areas by left clicking and selecting "Export".

To view or play the files, find them in the locations that they were saved to, then click on them to open. "Preview" will be used for images and "Quick Time" will be used for videos

### Viewing Snapshots and Video:

ViewPlayCap does not contain viewers for the saved snapshots or video. Windows contains various 'viewers' and 'players' for these files. To view or play the files, find them in the locations that they were saved to, then click on them to open them with a Windows viewer or player. The snapshots can usually be viewed in Windows Explorer, and the video can usually be viewed in Windows Media Player.



## Removing CobraCam USB 3 Software

The CobraCam USB 3 uses 'green' software. It does not make any modifications to your computer registry or alter any existing files. To 'un-install' it, it is only necessary to delete its program file and the desktop icon. It typically installs in Program Files (X86) as a 'ViewPlayCap' folder. Delete this folder.

### CobraCam USB 3 Includes:

Magnetic Attachment

Hook Attachment

Mirror Attachment

Software CD (PC Only)

Instruction Manual

Carrying Case

### Maintenance:

No regular maintenance of the CobraCam USB 3 is required. In the event the product is defective or is damaged, please contact Triplett for repair information.

## Triplett One Year Limited Warranty

Triplett / Jewell Instruments warrants instruments and test equipment manufactured by it to be free from defective material or workmanship and agrees to repair or replace such products which, under normal use and service, disclose the defect to be the fault of our manufacturing, with no charge within one year of the date of original purchase for parts and labor. If we are unable to repair or replace the product, we will make a refund of the purchase price. Consult the Instruction Manual for instructions regarding the proper use and servicing of instruments and test equipment. Our obligation under this warranty is limited to repairing, replacing, or making refund on any instrument or test equipment which proves to be defective within one year from the date of original purchase.

This warranty does not apply to any of our products which have been repaired or altered by unauthorized persons in any way so as, in our sole judgment, to injure their stability or reliability, or which have been subject to misuse, abuse, misapplication, negligence, accident or which have had the serial numbers altered, defaced, or removed. Accessories, including batteries and fuses, not of our manufacture used with this product are not covered by this warranty.

To register a claim under the provisions of this warranty, contact Triplett / Jewell Instruments' Customer Service Department for a Return Authorization Number (RMA) and return instructions. No returned product will be accepted without an RMA number. Upon our inspection of the product, we will advise you as to the disposition of your claim.

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Triplett / Jewell Instruments reserves the right to discontinue models at any time, or change specifications, price or design, without notice and without incurring any obligation.

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