

TRIPLETT

CobraCam 2 **Portable Inspection Camera** **& Video Monitor**

Instruction Manual



CobraCam 2 Features

- *Portable Self Contained Low Cost Inspection Camera*
- *Video Monitor displays video signals from cameras, DVR's, DVD's, etc.*
- *2.4" TFT LCD screen*
- *Displays full color image*
- *Image can rotate 180 degrees*
- *Camera is less than 13/32" diameter, inserts in small places*
- *Camera has 2 adjustable white LEDs for illumination*
- *Camera is waterproof*
- *Camera focuses at approx 2 1/2" (usable to infinity)*
- *6 foot flexible 'snake' can be bent to access hidden locations*
- *6 foot snake is small along entire length. No bulky connector to limit usefulness.*
- *Uses common batteries (AA x 4)*
- *Low Battery Indicator*
- *Carrying Case included*
- *Magnetic Pickup, Hook, and Mirror accessories included*
- *Interface cables (BNC for Video Input and RCA for Video Output) are included*
- *Replacement Cameras and Extension Cables available*
- *One Year Warranty*

Uses for the CobraCam 2

- *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 hidden nameplates*
- *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 under car seats*
- *See around corners or through small holes*
- *Retrieve small magnetic objects (nuts, bolts, washers, screws, etc.)*
- *View video camera output to adjust focus, zoom, positioning, etc.*
- *View DVR output to review programming or security video*
- *View any NTSC video signal to verify presence and quality*
- *Many other uses too numerous to mention . . . in industry, around the house, during surveillance, or just as a fun toy.*

Introduction

The Triplett **CobraCam 2** Inspection Camera and Video Monitor is a hi-tech tool that uses the latest technology to see images of difficult to view locations, and allows viewing of video signals from various video sources including cameras, DVRs, and DVD's. Its 2.4" TFT LCD screen displays full color images from its miniature video camera, or displays images from an external video source. The water resistant camera is mounted on a 6 foot long detachable flexible shaft, allowing it to fit into awkward spaces, tight locations or through small holes. Adjustable white LED headlights in the camera illuminate dark areas, allowing the camera to 'see' in total darkness.

The **CobraCam 2** is a self contained, battery operated, portable tool . . . useful on the jobsite, in the garage, on the road, or at home. In addition to inspecting hidden locations and viewing video signals, the camera includes a magnetic probe and retriever hook allowing the user to find and retrieve small objects, and a mirror attachment that allows the camera to see at right angles.

Product Specifications

Size: *Flexible Snake: less than 5/16" dia x 6 feet long*
 Camera: less than 13/32" dia x 1 11/16" long
 Handle: 9" x 2.5" x 3.5" (including LCD and connector)

Camera: *320 x 240 pixels*
 1/18" CMOS imager
 Focal distance: 1" to 3". Usable to infinity
 54 degree viewing angle
 F 2.8 lens
 Auto exposure and white compensation
 Water resistant (IP67)

LCD: *2.4" TFT LCD*
 320 x 234 pixels
 Full color

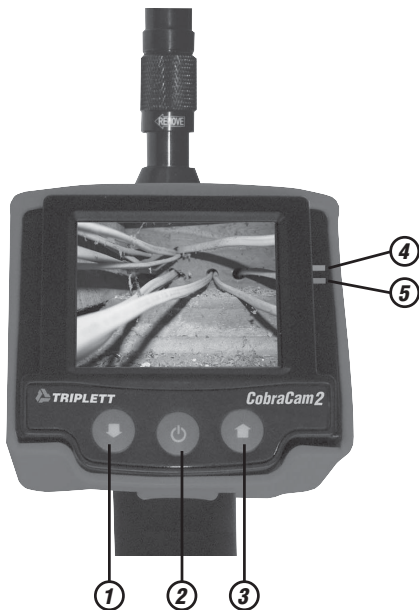
Snake: *Polyethylene covered steel flex. Minimum radius bend, 1.5"*

Illumination: *2 adjustable brightness white LEDs in camera head*

Video Input & Output: *Standard NTSC format (standard format used in the USA)*

Power: *Four AA Alkaline batteries*

CobraCam 2 Control Locations



CobraCam 2 Controls

- 1) Headlite Control - Down
- 2) Power Button
- 3) Headlite Control - Up
- 4) Power Indicator
- 5) Low Battery Indicator

Installing Batteries

There are 2 battery compartments located on the left and right sides of the LCD. Carefully pull the rubber sleeve down over the LCD screen to reveal the battery compartments. Use a screwdriver to remove the screws and compartment covers. Install 4 AA batteries. Replace rubber sleeve.

Note: The batteries are low when the red low battery indicator LED flashes.

Using the CobraCam 2

Connect the camera cable to the display unit by aligning the locator pin on the cable connector with the display connector and gently pressing the connectors together. Slide the screw collar on the display connector forward to engage the threads of the cable connector and tighten until snug. Do not crossthread. Do not over tighten.

Turn on the **CobraCam 2** by pressing the Power Button for about 1 second and then releasing it. The green power LED should light and the LCD should show whatever is in front of the camera.

The Headlite LEDs initially come on at full brightness. Use the Up and Down buttons to adjust their brightness. The proper setting of the LEDs is not obvious and requires some experimentation. The LEDs have little effect when there is adequate light for the camera, but have 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. Adjust the Headlite brightness 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 useable 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.

Rotating the Image

The image on the LCD can be rotated (flipped) by 180 degrees by simultaneously pressing and holding the Up and Down buttons for about 1 second.

Using the Magnet, Hook and Mirror

A magnet, hook, or mirror may be clipped to the camera head. These can be used to retrieve small objects from hidden locations, or to view objects to the side of the camera. Be careful not to apply too much pressure to these accessories, or they may come off in an inaccessible location. If this is a possibility, apply some tape to the camera head to keep the accessories tightly attached and prevent their loss.

Using the Video Output

The **CobraCam 2** outputs a standard NTSC baseband video signal from the base of its handle. Using the provided interface cable, this signal can be sent to a TV with standard video inputs. Any image on the **CobraCam 2's** LCD can then be viewed on a TV screen or sent to a video recorder. To use, simply put one end of the interface cable into the bottom end of the **CobraCam 2's** handle and the other end into the TV or video recorder.

Using the Video Input (Monitor Mode)

When the camera cable is detached from the display unit, the LCD can be used as a video monitor. Plug the provided BNC adaptor cable into the connector in the base of the handle. Use standard video cables or adaptors to connect to the video output of appropriate devices, like security cameras, DVR's, DVD's, etc.

CobraCam 2 Includes:

Magnet Attachment	PN: CC-MAG
Hook Attachment	PN: CC-HOOK
Mirror Attachment	PN: CC-MIR
Carrying Case	PN: 10-4304
Video Cable:	PN: CC-VOC
BNC Cable:	PN: CC2-VIC

CobraCam 2 Optional Accessories:

3 Foot Camera	PN: CC2-CAM3F
6 Foot Camera	PN: CC2-CAM6F
10 Foot Camera	PN: CC2-CAM10F
3 Foot Extension	PN: CC2-XC3F
6 Foot Extension	PN: CC2-XC6F
10 Foot Extension	PN: CC2-XC10F

Maintenance

No regular maintenance of the **CobraCam 2** is required. In the event the product is defective or is damaged, please contact Triplett for repair information.

TRIPLETT PRODUCT RETURN INSTRUCTIONS

In the unlikely event that you must return your Triplett equipment for repair, the following steps must be taken.

- 1) Call 1-800-TRIPLETT to obtain a Return Material Authorization (RMA) number from Customer Service.*
- 2) Enclose a copy of the original sales receipt showing date of purchase.*
- 3) Clearly print the RMA number on the outside of the shipping container.*
- 4) Return to: Triplett / Jewell Instruments
850 Perimeter Road
Manchester, NH 03103
ATTN: Repair Dept.*

Triplett One Year Limited Warranty

Triplett 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's 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.

ALL WARRANTIES IMPLIED BY LAW ARE HEREBY LIMITED TO A PERIOD OF ONE YEAR FROM DATE OF PURCHASE, AND THE PROVISIONS OF THE WARRANTY ARE EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES EXPRESSED OR IMPLIED.

The purchaser agrees to assume all liability for any damages and bodily injury which may result from the use or misuse of the product by the purchaser, his employees, or others, and the remedies provided for in this warranty are expressly in lieu of any other liability Triplett may have, including incidental or consequential damages.

Some states (USA ONLY) do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. No representative of Triplett or any other person is authorized to extend the liability of Triplett / Jewell Instruments in connection with the sale of its products beyond the terms hereof.

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

This warranty gives you specific legal rights, and you may have other rights which vary from state to state.



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