

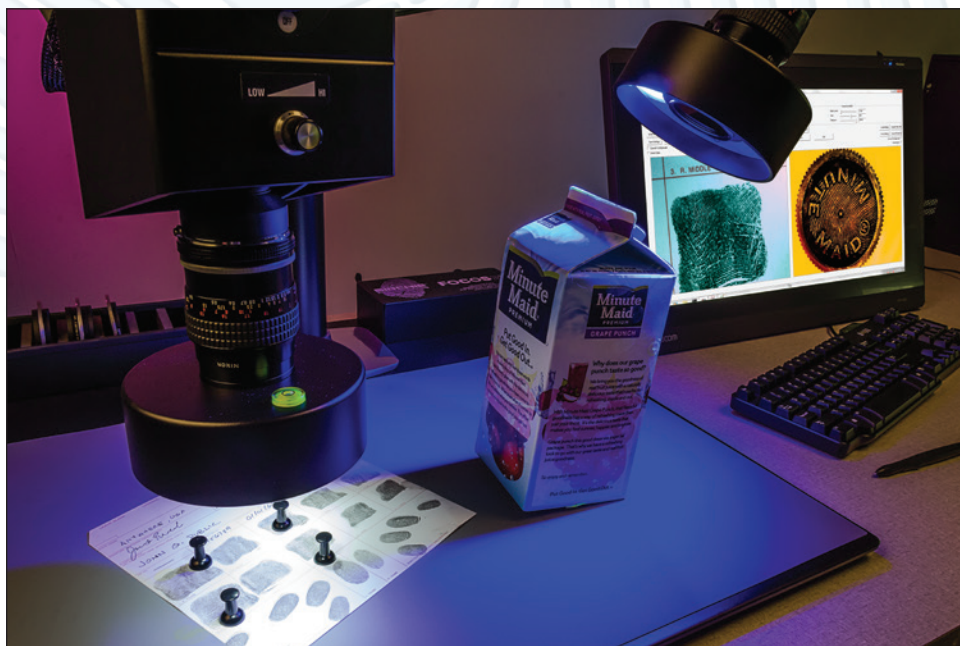
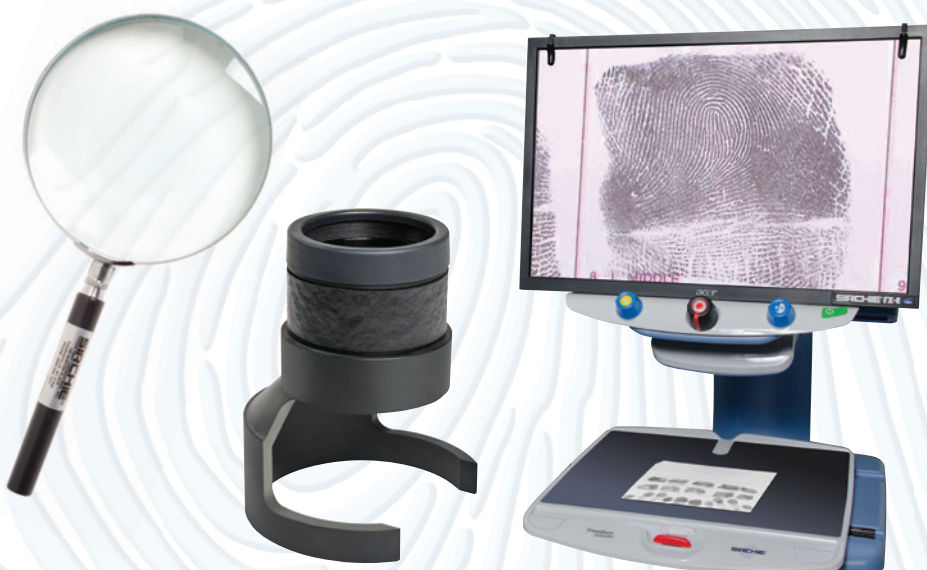
# Introduction to Magnifiers and Comparators

Classification and comparison of fingerprints, inspection of footprints, and analysis of trace evidence remain valuable and necessary processes for identifying perpetrators and linking them to crimes. To achieve the most accurate and relevant results from the classification and comparison process, only the highest quality optical enhancement tools should be utilized.

**SIRCHIE®** remains the leader in providing high-quality optical enhancement tools through:

- Continuous product development and improvement
- Incorporation of high-quality materials
- Utilization of technological advances in manufacturing.

Our Optical Enhancement products offer a wide variety of magnifying and image capturing devices. From simple hand-held magnifiers to our advanced video-based optical comparators, SIRCHIE has the products law enforcement needs to accomplish evidentiary classification and comparison.



## Magnifiers & Comparators

*At SIRCHIE, our number one goal is customer satisfaction! SIRCHIE provides only the highest quality products to our customers. We are dedicated to meeting the varying requirements of the many different law enforcement agencies and identification departments in the United States and around the world.*

### EDUCATION OPPORTUNITY!

*We offer several onsite, 40-hour training courses in fingerprint identification and comparison.*



*For more information see the Training Section of this catalog or visit our website at [www.sirchie.com](http://www.sirchie.com)*

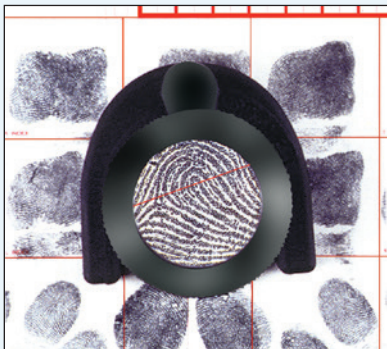
*The Professional Fingerprint Magnifier and its compatible classification discs are a rugged, high-quality magnifying system which provides optimum performance for the examination and classification of fingerprint evidence.*

### JC100P SPECIFICATIONS:

- Optical black wrinkle finish with stainless steel base and nickel-plated brass lens housing
- Two-lens optics: doublet and plano-convex 1.4" (3.6cm) dia., 4.5X magnification
- 1.375" (3.5cm) dia. aperture
- Threaded focus, lock ring optional
- Positive lock disc mount
- 1.438" (3.65cm) viewing field
- Dimensions: 2.75" x 2.5" x 3" (7cm x 6.35cm x 7.6cm)
- Weight: 11.8 oz. (334g)



No. JC100P Professional Fingerprint Magnifier is pictured in use.



Actual view of standard rolled impression with No. JC100P Magnifier.



### PROFESSIONAL FINGERPRINT MAGNIFIER

The Professional Fingerprint Magnifier is sturdy and rugged, cast in solid stainless steel—ensuring years of wobble-free performance. The optics assembly consists of precision-machined, nickel-plated brass that houses the 4.5X magnification, two-element optical glass lens system. Precision-focusing is accomplished by raising or lowering the optics assembly on its threaded focusing mount. The optional JC101LR locking ring ensures that the setting is maintained.

The JC100P, and the four classification discs designed specifically for use with the magnifier offer the user a superior examination tool.

CATALOG NO.	DESCRIPTION	PRICE
JC100P	Professional Fingerprint Magnifier, 4.5X	
JC101LR	Black Anodized Knurled Locking Ring	

### COMPATIBLE CLASSIFICATION DISCS FOR JC100P

These discs are designed for use exclusively with the JC100P Professional Fingerprint Magnifier. The discs utilize optical-quality glass with quality precision silk-screened lines. The housing is machined from tempered aluminum and finished with an optical black anodization.



No. JC101H



No. JC101B



No. JC101HB



No. JC101M

CATALOG NO.	DESCRIPTION	PRICE
JC101H	Henry Disc	
JC101B	Battley Disc	
JC101HB	Henry/Battley Disc	
JC101M	Miracode Palm Disc	



# Fingerprint Magnifiers

## Magnifiers & Comparators



No. PFP100 M1 Professional  
Fingerprint Magnifier

No. PFP200 M2 Professional  
Fingerprint Magnifier

### M1 AND M2 PROFESSIONAL FINGERPRINT MAGNIFIERS

The M1 Professional Fingerprint Magnifier features a two-element lens system that provides 4.5X magnification with a 1.4" field of view. It delivers superb image clarity and sharpness and features coarse and fine focusing adjustments as well as a lock ring to set focus for extended use.

The M2 is an excellent fingerprint magnifier that provides 4.5X magnification using a two-element glass optics system which provides great clarity with a minimum of distortion. The magnifier's height adjustment knob allows for easy positioning of the optics.

The M1 and M2 Professional Magnifiers are constructed of precision-machined aluminum with an optical black anodized finish. The base is designed for use with the PF series of classification discs and features spring-loaded ball bearings allowing full 360° rotation of the classification discs.

*The M1 Professional Fingerprint Magnifier delivers superb image clarity and sharpness and features coarse and fine focusing adjustments. The M2's Glass Optics System provides great clarity with a minimum of distortion.*

#### PFP100 SPECIFICATIONS:

- 100% black anodized aluminum
- Two-lens optics, 4.5X magnification
- 1.375" (35mm) aperture
- Thumbscrew coarse focus, threaded fine focus, locking ring included
- 1.438" (3.65cm) viewing field
- Positive lock disc mount
- Dimensions: 3" x 3" x 3" (7.6cm x 7.6cm x 7.6cm)
- Weight: 7.5 oz. (213g)

#### PFP200 SPECIFICATIONS:

- 100% black anodized aluminum
- Two-lens optics, 4.5X magnification
- 1.375" (35mm) aperture
- Thumbscrew focus
- Positive lock disc mount
- 1.438" (3.65cm) viewing field
- Dimensions: 3" x 3" x 3.75" (7.6cm x 7.6cm x 9.5cm)
- Weight: 7.5 oz. (213g)

CATALOG NO.	DESCRIPTION	PRICE
PFP100	M1 Magnifier	
PFP200	M2 Magnifier	



No. PFH10



No. PFB11



No. PFHB12



No. PFM13

### CLASSIFICATION DISCS FOR THE M1 AND M2 MAGNIFIERS

The PF series of classification discs is designed for use with the M1 and M2 magnifiers. Optical-quality glass with precision silk-screened lines is set in tempered aluminum with optical black anodized finish.

CATALOG NO.	DESCRIPTION	PRICE
PFH10	Henry Disc	
PFB11	Battley Disc	
PFHB12	Henry/Battley Disc	
PFM13	Miracode Palm Disc	

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## Magnifiers & Comparators

### JC200 SPECIFICATIONS:

- Optical black anodized aluminum base, Delrin® lens housing
- Two-Lens optics, 4.5X magnification
- 1.375" (3.5cm) aperture
- Rack-and-pinion focus
- Threaded disc holder
- 1.438" (3.65cm) viewing field
- Dimensions: 2.625" x 4" x 3.25" (6.7cm x 10.2cm x 8.2cm)
- Weight: 10.4 oz. (295g)



No. JC201H

No. JC201B



No. JC201HB

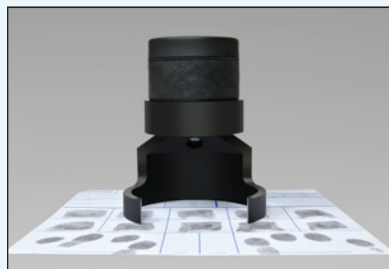
No. JC201M

### RPM350 SPECIFICATIONS:

- **Optics**
  - Two Element Optic (50mm dia.)
  - Field of View: 2.36" (60mm)
- **Construction:** Acetal plastic body, aluminum, and rubber

### RPM350 FEATURES:

- High quality, minimal distortion, precision ground glass lenses
- Fixed focal distance
- 3X magnification
- Large field of view
- Light weight, rugged construction
- Port for pen-light usage



*The Ridge PRO delivers the best user experience of any magnifier available.*

## Fingerprint Magnifiers

### PROFESSIONAL FINGERPRINT MAGNIFIER

This professional fingerprint magnifier features a smooth rack-and-pinion focusing mechanism. A two-element 4.5X magnification optical system ensures sharp, clear images and a threaded disc holder allows for secure attachment.

### CLASSIFICATION DISCS FOR JC200

Quality classification discs designed exclusively for the JC200 fingerprint magnifier. Optical-quality glass with precision silk screened lines mounted in tempered aluminum frame.

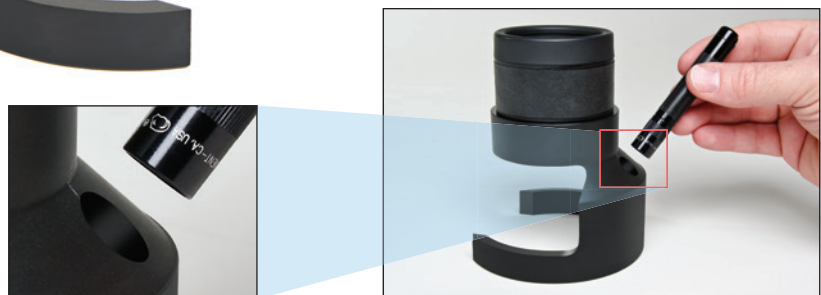


CATALOG NO.	DESCRIPTION	PRICE
JC200	Fingerprint Magnifier	
JC201H	Henry Disc	
JC201B	Battley Disc	
JC201HB	Henry/Battley Disc	
JC201M	Miracode Palm Disc	



### RIDGE PRO FINGERPRINT MAGNIFIER

The Ridge PRO Fingerprint Magnifier is our premium offering in our magnifier line. Features include a 3x magnification, 2" wide lens that is essentially distortion free, and a wide base design that offers a large unobstructed field of view. The magnifier is crafted from cutting-edge materials making this unit lightweight even for its size, but rugged and strong enough to not be damaged easily. Designed with the user in mind, this rugged unit offers a textured rubber barrel for easy maneuvering and a soft rubber guard to protect the eye and face. This magnifier delivers the best user experience of any magnifier available.



*The Ridge PRO comes equipped with a Docking Port for Stylus® Pen Lights.*

ORDER NO.	DESCRIPTION	PRICE
RPM350	Ridge PRO Fingerprint Magnifier, 3X	

# Fingerprint Magnifiers

## Magnifiers & Comparators

### WIDE-FIELD PROFESSIONAL FINGERPRINT MAGNIFIER

This magnifier allows the user to study a much larger field of view than standard fingerprint magnifiers. A thumbscrew allows fast and simple focus adjustments. Images appear sharp, clear and focused over the entire viewing area. This 3.2X magnification wide-field magnifier is constructed with a sturdy aluminum frame. See below for optional classification discs.

CATALOG NO.	DESCRIPTION	PRICE
JC300	Wide-Field Professional Fingerprint Magnifier	

### CLASSIFICATION DISCS FOR JC300

These quality classification discs are designed exclusively for the No. JC300 wide-field magnifier. They utilize optical-quality glass with quality precision silk screened lines in an anodized aluminum frame.



CATALOG NO.	DESCRIPTION	PRICE
JC301H	Henry Disc	
JC301B	Battley Disc	
JC301HB	Henry/Battley Disc	
JC301M	Miracode Palm Disc	

### SUPER-WIDE-FIELD PROFESSIONAL FINGERPRINT MAGNIFIER

This high-quality fingerprint magnifier features an exceptionally wide field-of-view. This is an ideal fingerprint comparison magnifier due to the quality optics and the super-wide viewing area. Focusing is a quick and simple matter of using the convenient thumbscrew locking adjustment. The solid, all-aluminum frame construction of this 3.5X magnification unit ensures stability and longevity.

CATALOG NO.	DESCRIPTION	PRICE
JC400	Super-Wide-Field Professional Fingerprint Magnifier	\$139.95

### CLASSIFICATION DISCS FOR JC400

These classification discs are intended exclusively for the JC400 magnifier. They utilize optical-quality glass with quality precision silk-screened lines in an anodized aluminum frame.



CATALOG NO.	DESCRIPTION	PRICE
JC401H	Henry Disc	
JC401B	Battley Disc	
JC401HB	Henry/Battley Disc	
JC401M	Miracode Palm Disc	



#### JC300 SPECIFICATIONS:

- 100% black anodized aluminum
- Two lens optics, 3.2X magnification
- 2.31" (5.87mm) aperture
- Thumbscrew focus
- Threaded disc holder
- 2" (5.08cm) viewing field
- Dimensions: 4.5" x 4.375" x 3" (11.4cm x 11.1cm x 7.6cm)
- Weight: 11.5 oz. (326g)



#### JC400 SPECIFICATIONS:

- 100% black anodized aluminum
- Two-Lens optics, 3.5X, magnification
- Thumbscrew focus
- Threaded disc holder
- 2.845" (7.2cm) aperture
- Dimensions: 4.5" x 4.775" x 3.5" (11.4cm x 12.1cm x 8.9cm)
- Weight: 14.4 oz. (448g)





The JC5214 features a large viewing aperture with convenient tilt for easy viewing.

## JC5214 FEATURES:

- Light-weight ABS construction
- Unique Tilting Head
- Wide, undistorted 4X magnification

## JC5214 SPECIFICATIONS:

- Dimensions: 4.25" x 3.75" x 4.375" (10.8cm x 9.5cm x 11.1cm)
- Weight: 4.48 oz. (127g)

## JC4206 SPECIFICATIONS:

- Lens Diameter: 2" (5.1cm)
- Dimensions: 3.1875" x 2.375" x 2.75" (8.1cm x 6cm x 7cm)
- Weight: 1.6 oz. (45g)

## JC4208 SPECIFICATIONS:

- Lens Diameter: 1.75" (4.4cm)
- Dimensions: 3.1875" x 2.375" x 2.75" (8.1cm x 6cm x 7cm)
- Weight: 1.6 oz. (45g)



## 4X ASPHERIC STAND MAGNIFIER

The need for a magnifier with a swivel head is apparent because all physical evidence isn't found on flat surfaces. The JC5214 is the perfect aid to the latent print examiner for those hard to visualize situations. The hard coated magnifying lens offers 4X magnification with a wide undistorted viewing field for less eyestrain. Images are always in focus for hands-free use. Lightweight, heavy-duty molded plastic design for years of trouble-free use.

CATALOG NO.	DESCRIPTION	PRICE
JC5214	4X Aspheric Stand Magnifier	



## 6X AND 8X ASPHERIC STAND MAGNIFIERS

These high power, Aspheric Stand Magnifiers offer distortion-free viewing using hard coated acrylic lenses and tough, long lasting ABS frames. The JC4206 has a magnification capability of 6X and 8X magnification is afforded with the JC4208.

Either of these Aspheric Stand Magnifiers are the perfect tool for busy identification bureaus, as well as in the classroom.

CATALOG NO.	DESCRIPTION	PRICE
JC4206	6X Aspheric Stand Magnifier	
JC4208	8X Aspheric Stand Magnifier	

## REVERSIBLE RIDGE COUNTER

A long-time favorite of latent print examiners is back by popular demand! This virtually indestructible ridge counter features a reversible point that stows neatly inside of the body when not in use.



CATALOG NO.	DESCRIPTION	PRICE
RC221	Reversible Ridge Counter	

## RETRACTABLE RIDGE COUNTER

This ridge counter features a push-button retractable point that can be replaced when worn.



CATALOG NO.	DESCRIPTION	PRICE
GL004	Ridge Counter	
GL0051	Replacement Points	

### MAGNIFIERS/FINGERPRINT READERS

These magnifiers feature high-grade, optically ground and polished glass lenses for maximum detail. They are ideally suited for the examination of latent prints and other physical evidence.



No. 320M



No. 319M



No. 318M



No. 317M



No. 316M

CATALOG NO.	DESCRIPTION	PRICE
316M	2 1/2" (6.3cm) Magnifier, 3X	
317M	3" (7.6cm) Magnifier, 2X	
318M	3 1/2" (8.9cm) Magnifier, 2X	
319M	4" (10.2cm) Magnifier, 2X	
320M	4 1/2" (11.4cm) Magnifier, 1.75X	

### MAGNIFIERS/FINGERPRINT READERS

These lightweight magnifiers feature precision ground and polished biconvex glass lenses and are mounted in a plastic frame with an easy-to-grip handle.



No. 317P



No. 318P

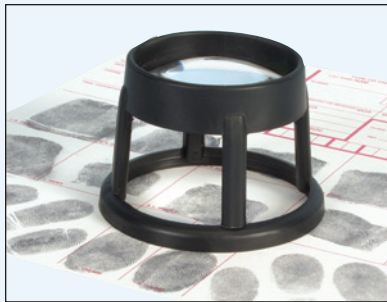


No. 319P

CATALOG NO.	DESCRIPTION	PRICE
317P	3" (7.6cm) Magnifier w/10" (25.4cm) focus, 2X	
318P	3.5" (8.9cm) Magnifier w/10" (25.4cm) focus, 2X	
319P	4" (10.2cm) Magnifier w/10" (25.4cm) focus, 2X	

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## Magnifiers & Comparators



No. JC5428 Stand Magnifier



No. JC350M Acrylic Magnifier



No. 313M Professional Folding Magnifier

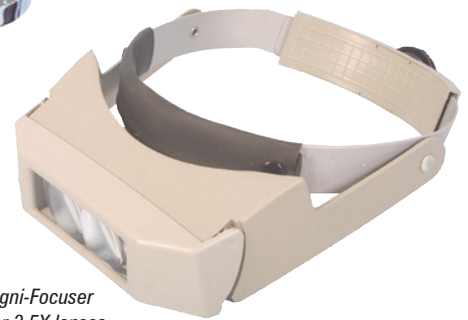


No. 379M Attached Case Magnifier

## Miscellaneous Magnifiers



No. 322M Gooseneck Magnifier



No. JC110 Magni-Focuser features binocular 3.5X lenses.

### GOOSENECK MAGNIFIER

The gooseneck magnifier features a 4" (10.2cm) optically ground and polished lens that is mounted to a flexible neck for versatility in handling. The unit's base is black cast iron. Surrounding ferrule and support are chromium-plated brass. Weight: 3.5 lbs. (1.6kg).

### MAGNI-FOCUSER

Conduct eye-level inspection of physical evidence using the JC110 binocular 3.5X lenses fashioned from shatter resistant acrylic material. The adjustable, contoured, padded vinyl headband affords a perfect fit—and it's washable, too. Can be worn over eyeglasses. Front lens unit flips up during non-use. Viewing distance is 4" (10.2cm).

### STAND MAGNIFIER

This 4X Stand Magnifier is the right tool for identification bureaus and classrooms. The low cost, highly effective, hard coated fixed focus lens makes this magnifier a good all-round choice. The lens size of 1.85" (47mm) offers wide-field viewing.

### ACRYLIC MAGNIFIERS

These unique magnifiers gather surrounding light and concentrate it on the area below the magnifier base. They feature pre-focused 4X magnification, and are constructed of optical-grade cast acrylic. They feature a non-scratch base and wide-field viewing—several people may view evidence being examined at the same time. Choose from 2.5", 3.5" or 4.5"

### PROFESSIONAL FOLDING MAGNIFIER WITH CASE

This high-quality, 5X, fixed-focus magnifier folds up into a compact unit for storage in its vinyl case. The lenses are fine-quality, optically ground and polished glass. The base is clearly marked with graduation lines on 4 sides.

### ATTACHED CASE MAGNIFIER

This is a conveniently sized, inexpensive, fold-up magnifier with a 1.75" (44mm) diameter lens. It is the perfect size for kits or to carry in your pocket.

CATALOG NO.	DESCRIPTION	PRICE
322M	Gooseneck Magnifier, 3.5 diopter focus	
JC110	Magni-Focuser, 3.5X	
JC5428	Stand Magnifier, 4X	
JC349M	Acrylic Magnifier 2.5" (6.35cm), 4X	
JC350M	Acrylic Magnifier 3.5" (8.9cm), 4X	
JC351M	Acrylic Magnifier 4.5" (11.43cm), 4X	
313M	Professional Folding Magnifier with case, 5X	
379M	Attached Case Magnifier, 3X	



### RETRACTABLE MAGNIFIER

This handy, retractable magnifier gives full 2X magnification over a 2 3/4" x 1 1/2" (6.98cm x 3.81cm) viewing area, yet retracts to only 3 1/4"—allowing it to easily fit in a pocket (extended length is six inches). The lens is mounted in a body of high-impact plastic that keeps it safe and clean when closed. Weight: 1.4 oz. (39.68g)

CATALOG NO.	DESCRIPTION	PRICE
325M	Retractable Magnifier	



No. 325M Retractable Magnifier

### RECTANGULAR ILLUMINATED MAGNIFIER

This professional-size 2X magnifier with a 4" x 2" lens (10.16cm x 5.08cm) is an excellent aid for examining fingerprints and other evidence. An ON/OFF switch is provided for the battery-supplied illumination. The unit is supplied with 2-AA Alkaline batteries. Weight: 4.8 oz. (136g)

CATALOG NO.	DESCRIPTION	PRICE
326M	Rectangular Illuminated Magnifier	



No. 326M Rectangular Illuminated Magnifier

### FLASHLIGHT FINGERPRINT MAGNIFIER

This 5X flashlight magnifier is a handy tool that features optically ground and polished lenses useful for classifying fingerprints and examining evidence. The unit operates on (2) D-cell batteries (not included).

CATALOG NO.	DESCRIPTION	PRICE
314M	Flashlight Fingerprint Magnifier	



No. 314M Flashlight Fingerprint Magnifier

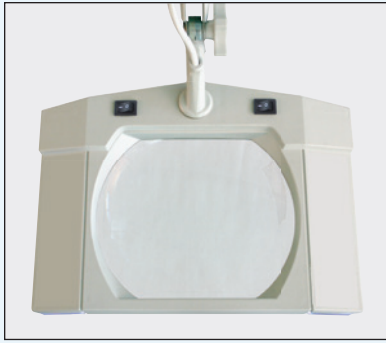
### ILLUMINATED FINGERPRINT MAGNIFYING GLASS

This pocket-sized magnifier is equipped with a built-in illuminator and a powerful 4X lens. Slip it in a shirt or jacket pocket—always ready when you need it. Housed in a tough, lightweight, plastic case. The JC7538 is the go-anywhere tool for locating evidence at the crime scene. Requires 2-AA batteries (not included).

CATALOG NO.	DESCRIPTION	PRICE
JC7538	Illuminated Fingerprint Magnifying Glass	



No. JC7538 Illuminated Fingerprint Magnifier



The extra large magnifying lens of the 465M offers 3 diopters of magnification.

## ILLUMINATED SWING ARM MAGNIFIER

The 360° lamp head/swing arm assembly, designed to stay parallel to the viewing surface, comes equipped with an extra-large glass magnifier offering 3 diopters of magnification. Two individually controlled light banks each house one 9-watt cool white lamp. It easily mounts to most laboratory tables for the examination of a variety of evidence.



The extra large magnifying lens of the No. 465M Illuminated Swing Arm Magnifier and mountable bracket system allow you to examine varied sizes of evidence from almost any desk or table top.

CATALOG NO.	DESCRIPTION	PRICE
465M	Illuminated Swing Arm Magnifier, 3 diopters, 110V AC	

## ILLUMINATED COMPARATOR

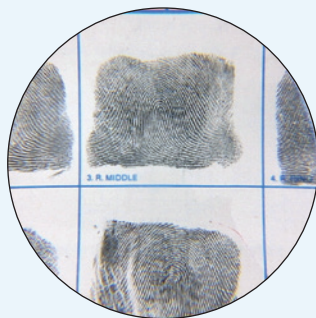
This Illuminated comparator reduces eyestrain with its 4" (10.2cm) dia. wide-field view glass magnification lens and permits examination of larger areas than most systems. The combination magnifier/lamp head is attached to a flexible gooseneck assembly capable of rotating more than 180°.

This unit features an enlarged viewing base measuring 12.25" x 18" (31.1cm x 45.7cm) with a maximum viewing height from base to lens of approximately 9" (22.9cm). Illumination is provided by a 4-watt cool white fluorescent lamp.

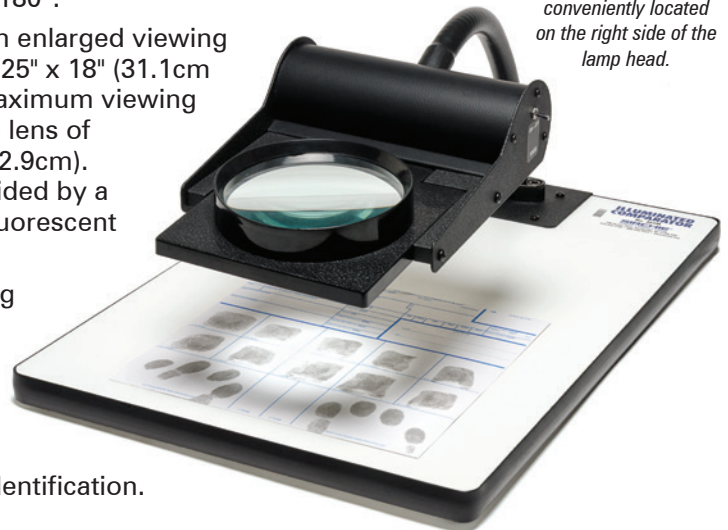
It is ideal for locating hairs and fibers on clothing, questioned document analysis, and fingerprint classification and identification.



ON/OFF Switch is conveniently located on the right side of the lamp head.



View of 10-print fingerprint card through the magnifying lens of the No. 365M.



CATALOG NO.	DESCRIPTION	PRICE
365M	Illuminated Comparator, 110V AC	
365M220	Illuminated Comparator, 220V AC	
KCP218	Replacement Bulb, 4-watt, cool white, 1 each	

### COLOR FORENSIC VIDEO MAGNIFIER

The FX9XL is the top choice in its class. Designed not only for fingerprint classification with 3X magnification, the large work area accommodates a standard 8" x 8" (20.3cm x 20.3cm) record card and permits easy examination of a variety of physical evidence. With a 4" (10.2cm) LCD monitor, the FX9XL is the ideal tool for examining fingerprints, questioned documents, fragments (i.e., glass, metal, paint and plastic), various kinds of fabric and much more.

The FX9100 Classification Disc Holder provided facilitates classification of 10-print record cards and accommodates any PF-series of classification discs (optional). See *Classification Discs for the M1 and M2 Magnifiers*.

Reduce and eliminate eyestrain and fatigue with simplified controls offering ease-of-use. A Video Out Jack permits connection to video monitors, recorders or computers with video capture capability.



The FX9XL includes 4 pin-style magnets for securing evidence on the evidence platform.



### FX9XL SPECIFICATIONS:

#### HI-RES COLOR VIDEO CAMERA

- TV System: NTSC
- Image Sensor: .25" (6mm) Interline Transfer CCD
- Resolution: 470 lines
- S/N Ratio: > 50dB
- Min. Illuminance: < 2.0 Lux @ f/1.2
- Gamma: 0.45
- Video Output: 1.0Vp-p/75Ω
- White Balance: Auto Tracking
- Lens: 12mm; f/1:1.4 CS mount

#### LCD MONITOR 4" (10.2cm)

- Format: NTSC
- Resolution: 234H x 383V pixels
- Backlight: Cold cathode fluorescent lamp
- Size: TFT 4.1" x 3.3" (10.4cm x 8.4cm) LCD

#### HOUSING

- Brushed nickeloid and aluminum

#### AC POWER ADAPTER

- Universal Adapter: 110V/220V

#### DIMENSIONS:

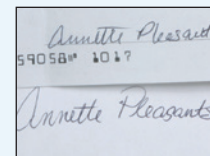
- 11"H x 14.5"D x 8.875"W (27.9cm x 35.6cm x 22.5cm)
- Weight: 8.22 lbs. (3.7kg)

### FX9XL CONTENTS:

- 1- Color Forensic Video Magnifier
- 1- FX9100 Classification Disc Holder only
- 1- FXMAG4 Magnets, pin-style, set of 4 each



Easily match paint fragments.



Analyze questioned documents.



Match torn fibers.

CATALOG NO.	DESCRIPTION	PRICE
FX9XL	Color Forensic Video Magnifier	
FXMAG4	Magnets, pin-style, set of 4 each	



### FX8B SPECIFICATIONS:

- Dual projection screens
- Quartz halogen projection lamps
- Fine-focus platforms
- Matched f/3.5 objective lenses (6.5X and 10X)
- 110V or 220V
- Sliding turret w/pre-focused illumination
- 4" (10.2cm) internal cooling fan
- Viewing screen 6.5" x 15" (16.5cm x 38.1cm)
- Sliding ambient light shield
- Dimensions: 20.5" x 18" x 20.25" (52.1cm x 45.7cm x 51.4cm)
- Weight: 48 lbs. (21.8kg)

### FORENSIC OPTICAL COMPARATOR

The examination of physical evidence demands a critical eye. Normally, such examination is a tedious, eye-straining chore since it usually requires hours of peering through a microscope or magnifier at evidence.

The Forensic Optical Comparator takes the tedium and eye-strain out of evidence examination and comparison. The Forensic Optical Comparator puts the work up front, providing a clear, crisp, magnified image without requiring the examiner to peer through a lens. This unit is ideal for close, careful examination and comparison of physical evidence.

The Forensic Optical Comparator is designed for operator convenience and performance. The unit features two projectors for a full-screen, side-by-side display of two images—without image overlap. Latent fingerprints may be compared with recorded prints; suspected counterfeit money may be compared with legal tender; and questioned documents and signatures may be compared with genuine articles.

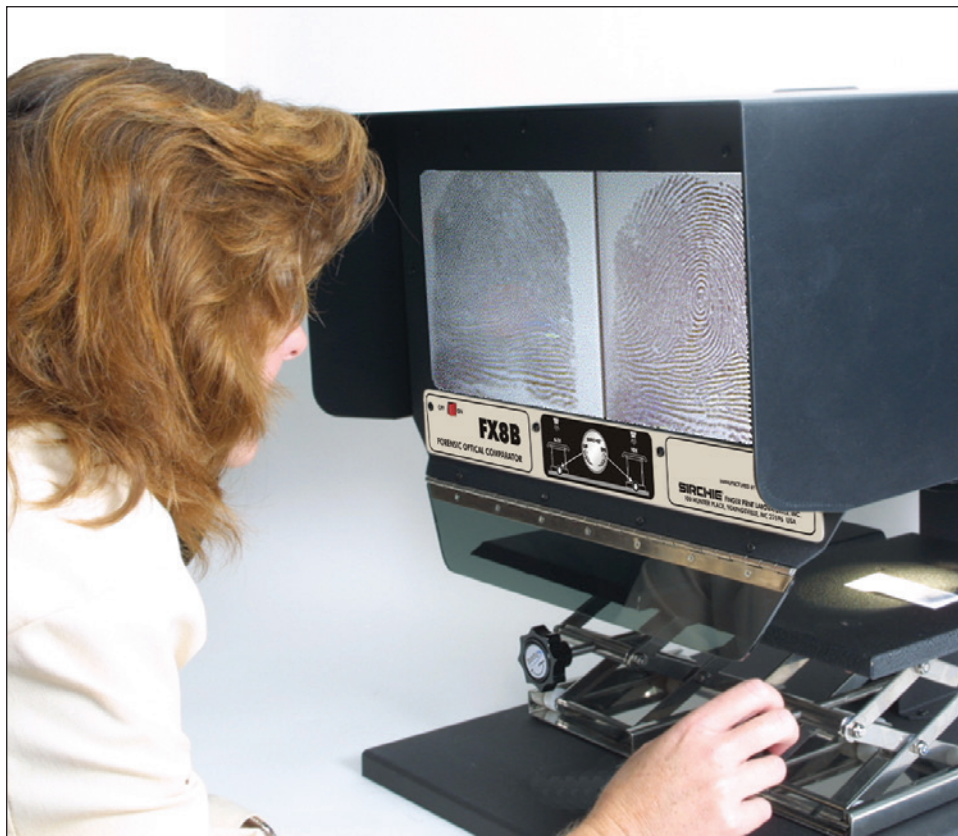
Two quartz halogen projection lamps are controlled by individual front-panel switches for dual or single unit usage. Optics carried by the turret automatically provide appropriate surface illumination. Each lamp compartment is monitored by a thermal switch which allows the silent-run fan to continue to operate even after shut off. A matched pair of color-corrected, side-by-side f/3.5 objective lenses provide 6.5X and 10X magnification. Control knobs raise and lower the unit's two stainless steel surface platforms for image focusing.



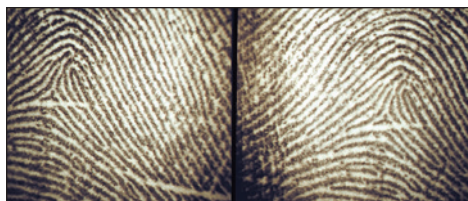
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# Optical Comparators

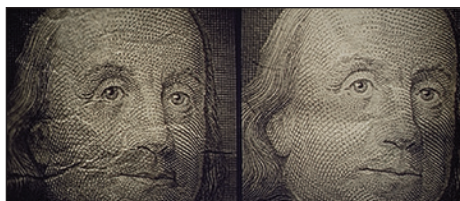
## Magnifiers & Comparators



*The FX8B features convenient, accessible projector controls for the user.*



*Two fingerprints compared side-by-side under 10X magnification. Superior ridge definition is free from distortion over the entire screen area.*

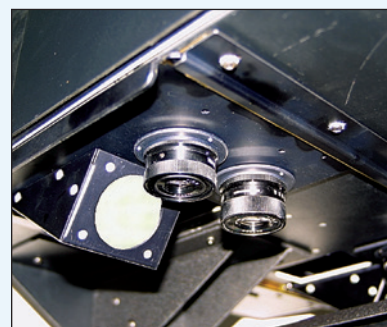


*The picture above illustrates fine, clear and sharp detail in the comparison of currency.*

*The FX8B includes 8 pin-style magnets for securing evidence on the evidence platforms.*



*One of the key components of the FX8B is the smooth, fine-focus, stainless steel constructed focusing platforms.*



*Dual quartz halogen projection lamps provide appropriate surface illumination. The side-by-side f/3.5 objective lenses offer 6.5X and 10X magnification.*



*Bulb replacement is simplified with the easy-access rear panel.*

CATALOG NO.	DESCRIPTION	PRICE
FX8B	Forensic Optical Comparator, 110V	
FX8B220	Forensic Optical Comparator, 220V	
FX8BHSL	Replacement Heat-Absorbing Lens	
FX8BSW	Replacement Toggle Switch	
FX8BVS	Replacement Viewing Screen	
SFL1091	Replacement Projection Lamp, 300-watt	
FXMAG4	Magnets, pin-style, set of 4 each	



## FXE350 FEATURES

- Auto Focus creates the clearest view without any need to make adjustments.
- Adjust pre-set video modes for high contrast viewing that is most comfortable for the operator's individual eyesight.
- Increase or decrease brightness using camera gain control, regardless of direct or ambient light.
- Use the Position Locator beam to mark the center of the image for easy evidence placement and recording.
- 16 magnification levels up to 50X with a crisp, sharp image let you precisely adjust the image to the size you need.
- Lock the focus onto an object you want to view while repositioning it. The camera stays focused on the object and not your hand.
- Two LED light banks on either side of the camera provide object illumination, which is diffused to prevent glare and reflections when viewing shiny or reflective objects. LEDs never need replacement: 100,000 hours of operation.
- The large low-friction work table moves a full 16 inches from left to right for easy examination of large objects.
- The work table's braking mechanism lets you lock the table movement down tight when you want it to hold steady.
- The 22" LCD display adjusts up and down and swings a full 60 degrees in each direction allowing the user to easily view from any angle.
- The included software allows the user to capture images as well as operate key features with the click of a mouse.

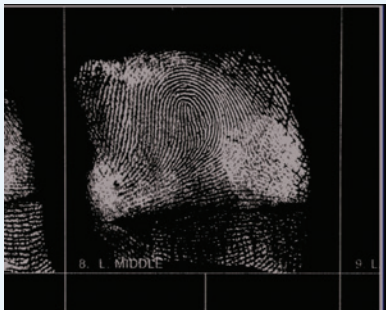


Image reversal in black and white

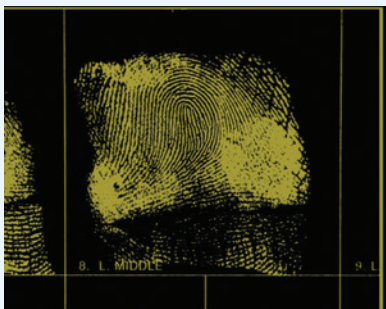
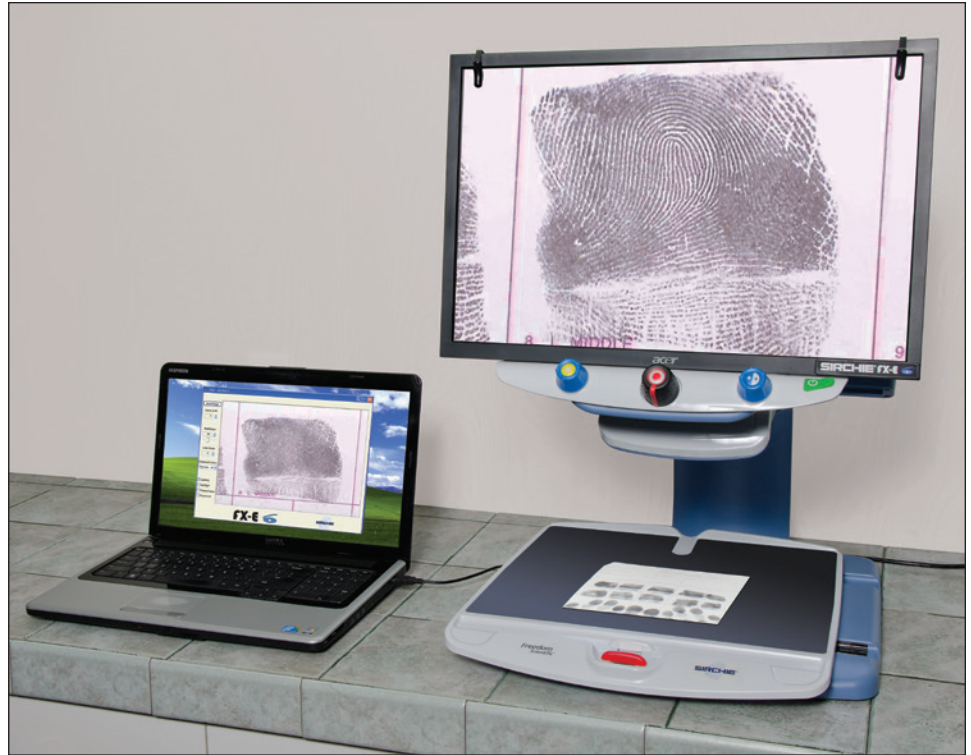


Image reversal with color variation



FXE350 Digital Forensic Evidence Examination Station w/ Digital Screen Capture. Laptop computer not included.

## DIGITAL FORENSIC EVIDENCE EXAMINATION STATION

The **SIRCHIE®** Digital Forensic Evidence Examination Station, FXE350, makes evidence examination a far simpler task than ever before. It facilitates viewing small details with its moveable viewing table and fully adjustable magnification—up to 50X. The FXE350 features a wide range of color correction, brightness, and contrast on the oversize 22-inch LCD, high-resolution (1680 x 1050 pixels) viewing screen. In short, the FXE350 opens many new doors for forensic examination of the many forms, shapes and sizes that physical evidence may take.

Digital technology affords first generation sharp, clear, high-resolution images regardless of the subject matter.

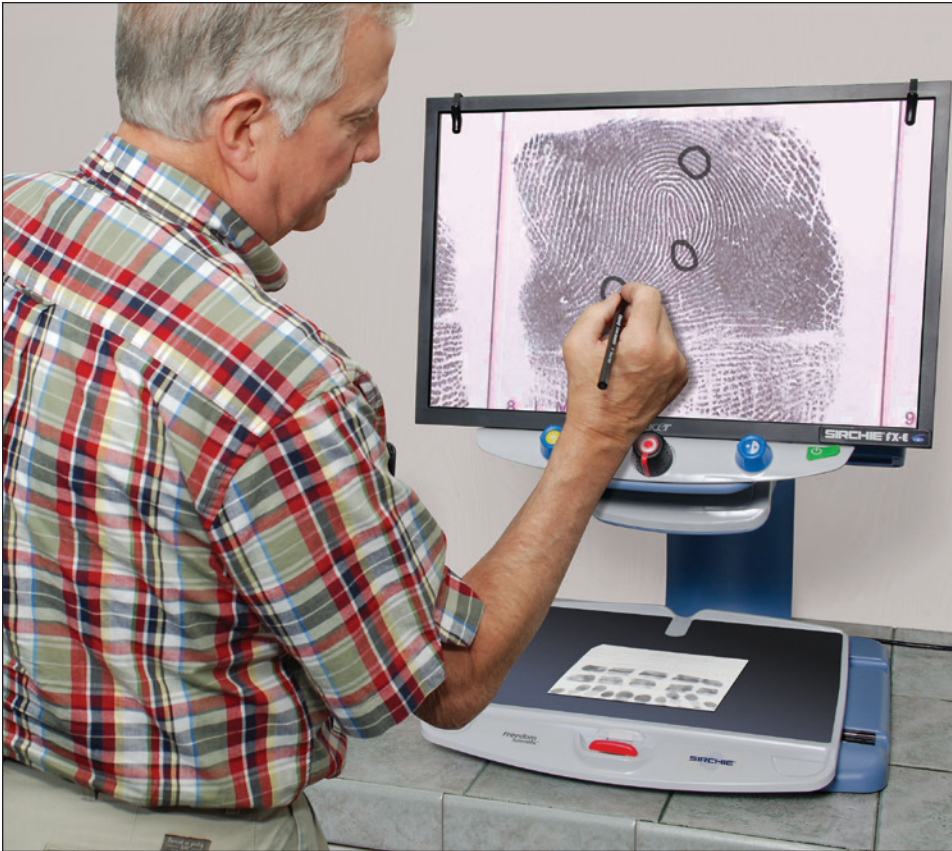
The forward-mounted camera is high above the table, so you have plenty of room to work with three-dimensional objects. This entire unit requires the use of a single 110-120V AC power receptacle (also available in 220V).

### The FXE350 is the perfect tool for examining:

- Tools and toolmarks
- Fingerprint/palmprint record cards and latent prints
- Footprint evidence
- Trace evidence: hair, fibers, glass fragments, soil, etc.
- Documents: printed and handwritten
- And much more

The FXE350 is at home in virtually any size laboratory. It adds a new level of sophistication to the whole process of evidence examination and identification.





Unit includes clear acetate screen protectors (10 each) with holding clips.

## PHYSICAL MARK-UP

The FXE350 has two clips to support acetate sheets (included) so that the print or document examiner can mark items of interest. With the use of a dry erase marker or china marking pencil, the sheets can be written on, erased, and used again. This is an excellent tool when comparing latent prints to rolled prints side by side or examining details of evidence.

## VIDEO CAPTURE

The FXE350 includes improved software which allows the user to capture the on-screen images, but also control the FXE350 right from your computer (not included). Simply by clicking on the menu selections, the lights can be toggled on and off, the screen colors can be changed, the camera can be paused, and the brightness can be adjusted. There is also no need for additional equipment; just load the software on a PC, plug the USB cable into the FXE350 and the computer and start the software to immediately begin controlling the FXE350 and capture images.

The FXE350 includes 8 pin-style magnets for securing evidence on the evidence platform.

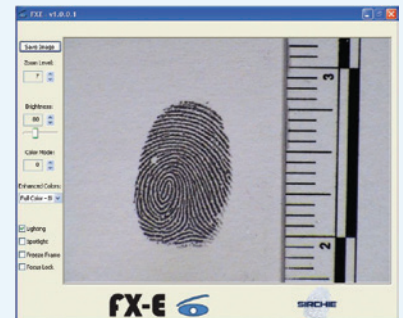


CATALOG NO.	DESCRIPTION	PRICE
FXE350	Digital Forensic Evidence Examination Station w/Video Capture Unit & Software	
FXE100	Acetate Sheets, 11.6" x 18.6" (29.5cm x 47.2cm), 10 each	
FXMAG4	Magnets, pin-style, set of 4 each	

Phone: +1.919.554.2244 Fax: +1.919.554.2266



Moveable work table is fully adjustable.



User-friendly capture software included.

## FXE350 SPECIFICATIONS:

### SCREEN

Diagonal Size: 22" Display  
Dynamic Contrast Ratio: 50,000:1  
Contrast Ratio: 10,000:1  
Image Max H-View Angle: 170 Image  
Interface: VGA and DVI  
Max Resolution: 1680 x 1050 pixels  
Response Time: 5 ms Signal Input

### CAMERA

Type: CCD 1/4" sensor  
F: 1.4-3.0  
Zoom: 12x Optical (216x digital)  
Resolution: 0.38 MP  
Gain: -3 to 28 Db  
Power: 6V - 12V 60Hz

### UNIT

Power: 110-120V AC 60Hz  
Dimensions: 17" x 19" x 27" (Fully extended) (43.2cm x 48.2cm x 68.5cm)  
Weight: 44 lbs.

## FXE350 SOFTWARE PC REQUIREMENTS:

- Operating System: Windows XP, Vista, 7 (32 or 64 bit)
- Memory: 1 GB
- CD/DVD reader (for install only)

## FXE350 CONTENTS:

- Digital Evidence Examination Station
- FXE Capture Software (DVD)
- Mini USB-USB 2.0 cable
- FXE100 Acetate Sheets, 10 each 11.6" x 18.6" (29.5cm x 47.2cm)
- Screen clips (for acetate sheets)
- FXMAG4 Magnets, pin-style, set of 4 each



FOCOS2™ Patent Pending



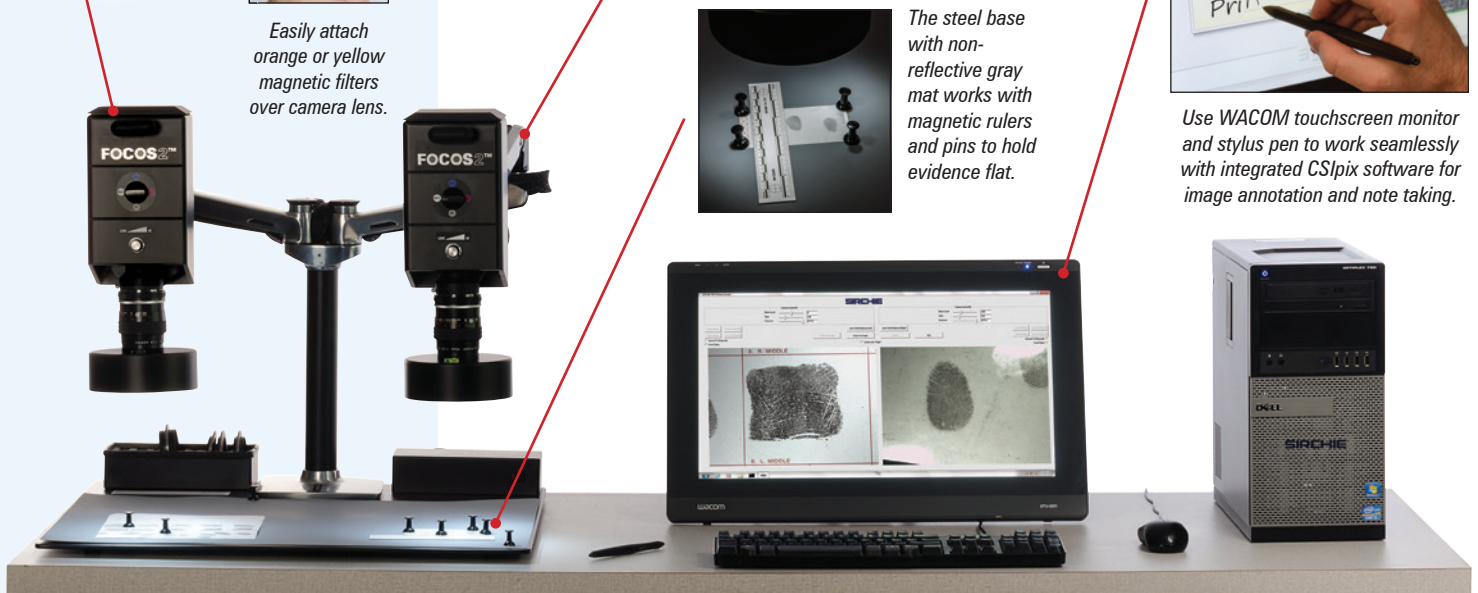
Forensic  
Light Selector  
(White, Blue  
(455nm), and  
Longwave UV  
(395nm))

Forensic Light  
Dimmer

Lens Aperture  
Ring

Lens Zoom  
Ring

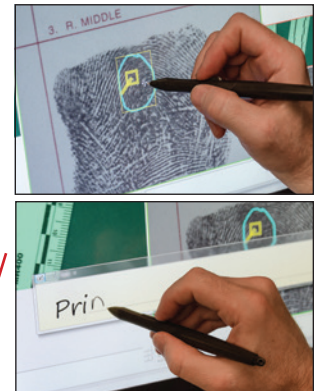
Easily attach  
orange or yellow  
magnetic filters  
over camera lens.



Articulating  
armature allows  
for significant  
camera tilt,  
extension,  
elevation, and  
panning.



The steel base  
with non-  
reflective gray  
mat works with  
magnetic rulers  
and pins to hold  
evidence flat.



Use WACOM touchscreen monitor  
and stylus pen to work seamlessly  
with integrated CSIpix software for  
image annotation and note taking.





# Optical Comparators

## Magnifiers & Comparators

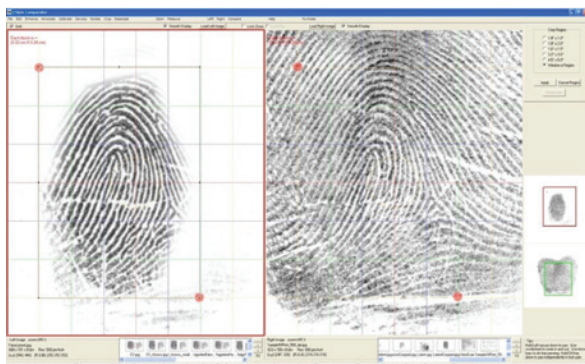
### KEY FEATURES TO HELP YOU WORK EFFICIENTLY INCLUDE:

- Proprietary Sirchie FOCOS2™ live camera capture module integrated in CSI Pix software designed to work with the two integrated cameras for efficient comparisons of latent prints and other physical evidence. Excellent tool for peer review of latent prints (ACE-V)
- 2 - 8MP cameras allow for 1000 ppi image capture to FBI requirements. Mounted on movable arms that allow for near 180 degree rotation of each camera on axis and around the base platform with white, blue (455nm), and Longwave UV lights (395nm) for a broad range of forensic examination applications
- Magnet mounted quick change Yellow and Orange camera filters for eliminating backgrounds while viewing fluorescent powders, dye stains or other evidence with the UV or Blue lights
- Stylus-based WACOM touch screen monitor which allows user to make annotations, notes, and documentation directly into image captured from cameras or uploaded from your department's electronic case files
- Rugged, sturdy base with matte powder coated finish & included soft gray resin mat to provide muted background options while working with smaller pieces of evidence
- Integrated PC built to exact specifications for fast software and camera processing

### CSIPX™ INTEGRATED SOFTWARE

Images from the camera are imported into proprietary software designed in partnership with CSIpix™. CSIpix™ Comparator Software is a Windows-based application for use by forensic professionals. It allows the user to easily and quickly compare two images side-by-side with a complete suite of photo editing tools. A number of these functions have been written specifically for forensic casework including:

- Automated scaling
- Text enhancement of latent images including the ability to plot minutiae
- Automatic color to grayscale conversion
- Dewarp Function – utilizes a reference ruler perspective to dewarp the image so that analysis of the evidence (fingerprint, shoe print, tire track, etc) will be more accurate
- CSIpix™ Notes allows the examiner to take notes and save them with the case file
- Ability to open and save fingerprint images in the WSQ format



*Blue Light w/orange filter*



*Known prints compared to fumed latent*



*Corresponding monitor screen w/live image feeds into CSIpix.*

### FOCOS2™ SPECIFICATIONS:

#### Cameras, arms, base

Weight: approx. 85 lbs

Dimensions: 24 in x 24 in x 24 in H (arms fully extended upward)

#### Computer

Weight: approx. 22 lbs

Dimensions: 14.2 in x 6.9 in x 16.4in

#### WACOM monitor

Weight: approx. 16 lbs

Dimensions: 22.2 in x 14.7 in x 2.2 in

### SYSTEM CONTENTS:

- Computer w/keyboard, mouse, Win7-64bit Pro, CSIpix, JAI SDK (all preloaded), dual port gigabit NIC, video card w/DVI
- WACOM monitor w/stylus, power supply, DVI input, USB input
- FOCOS2™ system w/base, gray overlay mat, articulating armature, integrated dc power supply & cabling, foam-lined storage compartment with 4 lens filters (2=org, 2=yel), 2 each AB800-GE 8MP color cameras, 2 each F-mount 55mm zoom macro lenses, 2-selectable wavelength LED rings (white, royal blue 455nm, long-wave UV 395nm), fully dimmable, with integrated diffuser, integrated leveling indicator

CATALOG NO.	DESCRIPTION	PRICE
FOCOS2	FOCOS2™ Dual Camera Forensic Optical Comparator/Examination Station	

Phone: +1.919.554.2244 Fax: +1.919.554.2266



*Now You Can Visualize  
Evidence in Greater Detail...  
and Examine It in Full-Color!*

## FX10AC/FX10A SPECIFICATIONS:

### FX10AC Camera

- Hi res color
- 12VDC
- Effective image: 768H x 492V
- Resolution line: 470
- Lens 12mm, f1:1/4 CS mount
- 5X-14X zoom (magnification on 19" monitor)

### FX10A Camera

- Black and White
- 12VDC
- Effective image: 768H x 492V
- Resolution line: 380
- Lens 12mm, f1:1/4 CS mount
- 5X-14X zoom (magnification on 19" monitor)

### Video Board

- Memory: 10Mb per channel
- Oversampling: 4X (54MHz)
- 10 bit Digital to Analog converters
- VGA output

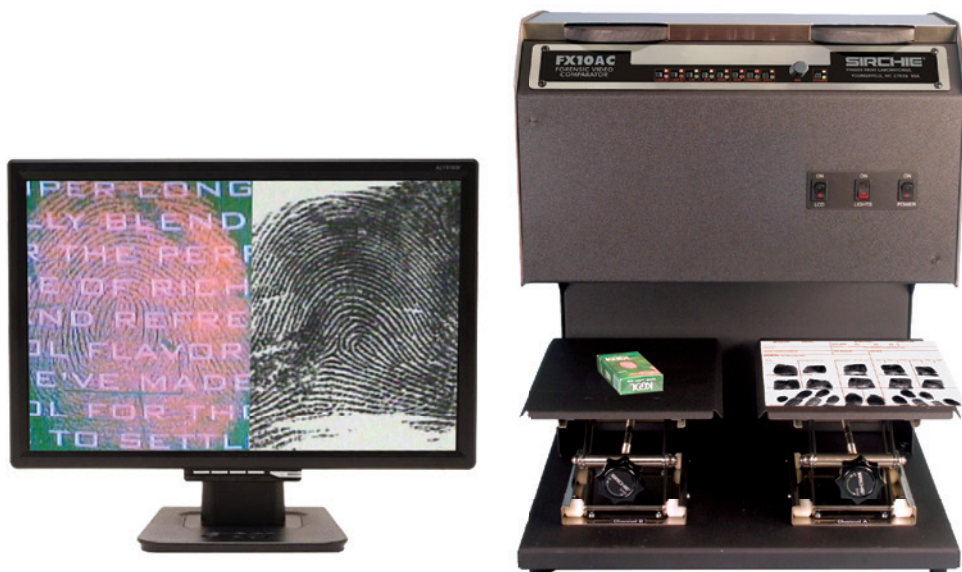
### Monitor

- 19" 4:3 ratio flatscreen
- Resolution: 1280 X 1024

## VIDEO-BASED FORENSIC OPTICAL COMPARATOR

**SIRCHIE®**'s Video-Based Optical Comparators permit the examination of a variety of items of forensic interest. The laboratory-grade focusing jacks permit viewing of both two-dimensional and three-dimensional objects. The optics offer exceptional depth of field, even when viewing curved surfaces. The image splitter provides both vertical and horizontal split screens for evidence comparison. The unit also has the capability of superimposing one image over another.

The FX10AC Video-Based Forensic Optical comparator utilizes two VGA color video cameras for full-color video output to the included monitor or any computer with video capture capability. The FX10A Video-Based Optical Forensic Comparator utilizes two high-resolution black & white video cameras for video output to the included monitor or any computer with capture capability. Included with each unit is a 19" flat screen color monitor. *Also available in 220V.*



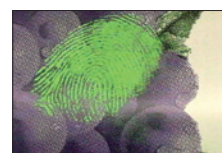
*The FX10 includes 8 pin-style magnets for securing evidence on the evidence platform.*



*Easily match the fibers of torn fabric.*



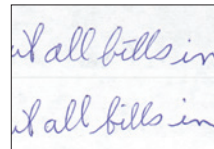
*View fiber detail of torn paper.*



*Distinguish prints from a confusing background.*



*View latent prints in L/R mode for comparison.*



*View handwriting in T/B mode for comparison.*

**SHOP  
ONLINE**  
[www.sirchie.com](http://www.sirchie.com)

CATALOG NO.	DESCRIPTION	PRICE
FX10AC	Video-Based Forensic Optical Comparator w/14" Color Video	
FX10A	Video-Based Forensic Optical Comparator, w/14" B & W Video	
FXMAG4	Magnets, pin-style, set of 4 each	