

# Magnifiers & Comparators

The smallest details and minutiae in evidence can lead to a match, an identification, and the establishment of justice. Our magnifiers and comparators are used globally to examine evidence, and trusted by examiners and technicians to help them execute their mission.

We have the right tools for you backed with a full line of Latent Fingerprint and Footwear Examination Classes to help you build your skills.

From our comprehensive line of hand-held magnifiers to advanced digital and video-based comparators, we have the right solution for your classification and comparison needs.



## Introduction to the Science of Fingerprints Course

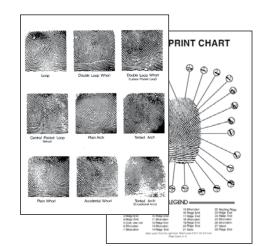
The first in a series of 6 fingerprint classes, this course introduces the science of fingerprint identification that's based on the uniqueness and permanence of friction ridge structures. The ability of the technician to accurately classify and identify fingerprint patterns is essential.

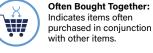
The student will learn fundamental techniques of fingerprint pattern interpretation and how this information is used to accurately classify, compare, and identify fingerprints.

#### No. CFC100



For class schedule or to register, visit <a href="https://www.sirchie.com/training">www.sirchie.com/training</a>.





## **Fingerprint Magnifiers**

#### **Ridge Pro Plus Digital Magnifier**

This powerful, hand-held digital magnifier offers a 5-inch wide-screen LCD screen with up to 14x magnification for easy examination. Features include the ability to capture and send an image via USB port, store up to 80 images, built-in stand & lights, built-in handle for field use, and more.



#### **FXM50A Features:**

- · Portable & lightweight
- Up to 14X magnification
- Wide screen 5-inch (12.7 cm) display
- 100MB of Storage allows for up to 80 images (BMP format)
- Built-in LED Lighting
- · Lithium-ion rechargeable battery with 3-hour continuous use battery life
- · Built-in stand and flip-out handle
- Two viewing modes: color and greyscale

#### **FXM50A Specifications:**

- Size: 5.44" x 3.45" x 0.78" (13.8 cm x 8.8 cm x 2 cm)
- Weight: 10.5 oz. (300 g)
- Magnification: 2x to 14x
- Display: 5" (12.7 cm) wide screen LCD 16:9 aspect ratio
- Battery: Rechargable lithium-ion polymer battery with 3 hours of continuous use
- Camera: 5 mega pixel, auto focus
- · Connection: Micro USB port

#### **FXM50A Contents:**

- 1- FXM50A Macro Forensic Examiner
- 1- Transparent Photo Scale, 6" (15cm)
- 1- Rechargable Lithium Ion Battery w/charger
- 1- Micro USB cable
- 1- Wrist strap
- 1- Carry case

No. FXM50A

**Ridge Pro Plus Digital Magnifier** 

#### **Professional Fingerprint Magnifier**

Our most popular magnifier, the JC100P is sturdy, rugged and built for years of use. An optional locking ring will ensure your setting is maintained. Precision focus with four available classification discs: The Henry Disc, the Battley Disc, the Henry/Battley Disc, and the Miracode Palm Disc.





#### **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
No. JC101LR	Locking Ring
No. JC101H	Henry Disc
No. JC101B	Battley Disc
No. JC101HB	Henry/Battley Disc
No. JC101M	Miracode Disc



#### M1 and M2 Fingerprint Magnifiers

Our M1 and M2 magnifiers have superb image clarity and sharpness and feature fine focusing and a lock ring. Both magnifiers provide 4.5x magnification while the M2 features a height adjustment knob. Classification discs that are compatible with both the M1 & M2 Magnifiers are also available: Henry Disc, Battley Disc, Henry/Battley Disc, and Miracode Palm Disc.















PFM13









## PFP100/PFP200 Specifications:

- 100% black anodized aluminum
- · Two-lens optics, 4.5X magnification
- 1.375" (35mm) aperture
- **PFP100:** Thumbscrew coarse focus, threaded fine focus, locking ring included
- PFP200: Thumbscrew focus
- 1.438" (3.65cm) viewing field
- Positive lock disc mount
- **PFP100:** Dimensions: 3" x 3" x 3" (7.6cm x 7.6cm x 7.6cm)
- **PFP200:** Dimensions: 3" x 3" x 3.75" (7.6cm x 7.6cm x 9.5cm)
- Weight: 7.5 oz. (213g)

No. PFP100	M1 Fingerprint Magnifier
No. PFP200	M2 Fingerprint Magnifier
No. PFH10	Henry Disc
No. PFB11	Battley Disc
No. PFHB12	Henry/Battley Disc
No. PFM13	Miracode Disc

#### **Rack & Pinion Focus Fingerprint Magnifier**

Featuring a two-element 4.5X magnification system with a smooth rack-and-pinion focusing mechanism, this system will ensure you have sharp clear images. Also available are compatible classification discs: The Henry Disc, the Battley Disc, the Henry/Battley Disc, and the Miracode Palm Disc.





Often Bought Together: (RC221) Reversible Ridge Counter, (GL004) Retractable Ridge Counter









#### 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. JC200	Rack & Pinion Focus Magnifier
No. JC201H	Henry Disc
No. JC201B	Battley Disc
No. JC201HB	Henry/Battley Disc
No. JC201M	Miracode Disc

## **Ridge PRO Fingerprint Magnifier**

Our premium product in our magnifier line, the Ridge PRO is lightweight for its size but rugged and built for hard use. Its textured rubber barrel makes it easy for you to maneuver and with a rubber guard, it's comfortable for the eye and face. The magnifier has a 3X magnification and a 2" wide lens that makes it virtually distortion-free.



Often Bought Together: (RC221) Reversible Ridge Counter, (GL004) Retractable Ridge Counter

## **Wide-Field Fingerprint Magnifier**

Study a much larger field of view with this magnifier. Images will appear sharp and clear over the entire viewing area and a thumbscrew allows fast and simple focus. It features 3.2X magnification. Available classification discs include: The Henry Disc, the Battley Disc, the Henry/Battley Disc, and the 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)

No. JC300	Wide-Field Fingerprint Magnifie
No. JC301H	Henry Disc
No. JC301B	Battley Disc
No. JC301HB	Henry/Battley Disc
No. JC301M	Miracode Disc

#### **RPM350 Specifications:**

· Port for pen-light usage

· Light weight, rugged construction

RPM350 Features:

Fixed focal distance

3X magnification

Large field of view

• Optics: Two Element Optic (50mm dia.); Field of View: 2.36" (60mm)

• High quality, minimal distortion, precision ground glass lenses

· Construction: Acetal plastic body, aluminum, and rubber

No. RPM350 **Ridge PRO Fingerprint Magnifier** 

The RPM350 comes equipped with a docking port for Stylus Pen lights.





#### **Super Wide-Field Fingerprint Magnifier**

Ideal for fingerprint comparison, this 3.5X magnifier features an exceptionally wide field-of-view. Using the convenient thumbscrew locking adjustment, you can focus in on details quickly. Also available are compatible classification discs: The Henry Disc, the Battley Disc, the Henry/Battley Disc, and the Miracode Palm Disc.













#### **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)

No. JC400	Super Wide-Field Fingerprint Magnifier
No. JC401H	Henry Disc
No. JC401B	Battley Disc
No. JC401HB	Henry/Battley Disc
No. JC401M	Miracode Disc

#### **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 new 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.

#### 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)

No. JC5214

**4X Aspheric Stand Magnifier** 

## **6X and 8X Aspheric Stand Magnifier**

These high power 6X & 8X Aspheric Stand Magnifiers offer distortion free viewing using hard coated acrylic lenses and tough, long-lasting ABS frames. The perfect tool for busy identification bureaus and the classroom as well



#### 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)

No. JC4206	6X Aspheric Stand Magnifier
No. JC4208	8X Aspheric Stand Magnifier

## **Magnifiers/Fingerprint Readers**

Ideal for examining latent print and other physical evidence, these polished glass lenses feature maximum detail. Available in plastic frames with easy-to-grip handles and sizes: 3", 4".



No. 317P	3" Plastic Frame Magnifier w/10" focus, 2X
No. 319P	4" Plastic Frame w/rubber handle, 2X

#### **Dactyloscopic 5X Fingerprint Magnifiers**

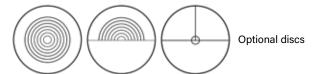
These compact magnifiers include a diopter adjustment on the control knob, and come with a Henry Classification disc. Options include: Battley, Henry-Battley and the Miracode Palm classification discs. FM1008 Model comes with LED Light powered by 3 ea. AAA batteries (included).







No. FM1008



No. FM1007	5X Magnifier (Henry Disc included)
No. FM1008	5X Magnifier w/LED light (Henry Disc included)
No. FM10078BD	Battley Disc
No. FM10078HB	Henry/Battley Disc
No. FM10078MP	Miracode Disc

## **Dual Magnification Fixed Focus Magnifier**

This magnifier gives you two options of magnification: 3.5X and 7X. It's intended to verify fingerprints and documents with security features.

The FM1005 is a compact device constructed in a metal body. The optical system consists of two lenses—one of them is movable.



#### FM1005 Specifications:

- Magnification 3.5 X and 7X
- Field of view 2.9" (dia.)
- Dimensions (length  $\times$  width  $\times$  height),  $-4.6" \times 3.35" \times 3.7"$
- Weight 9.8 oz.

No. FM1005

**Dual Magnification Fixed Focus Magnifier** 

## **Questioned Document Magnifiers**

## **Regula Fixed Focus Compact Device Magnifiers**

These compact magnifiers are ideal for documents with security features, such as passports, ID cards, drivers licenses, and signatures. These devices can detect main security features in printing, compare sizes, and detect mechanical and chemical alterations in document structure. These magnifiers have up to 10x magnification and several different options so you have the flexibility to get what you need.

#### **Regula DC1010 Compact Magnifier**

Regula compact magnifier Model DC1010 is intended for verifying the authenticity of documents and identifications. It is equipped with 10x magnification, two light sources (white light and UV 365nm), and a micro-USB port for charging batteries (batteries not included).





No. DC1010 10X Compact Device (white, uv lights) No. DC1010C 10X Compact Device (lights and disc)





#### **Regula DC1019 Compact Magnifier**

The Regula Model DC1019 is a compact magnifier, excellent for document examination under white oblique light or UV illumination at 254nm, 313nm, and 365nm. It is intended for verifying the authenticity of documents and identification. This magnifier features 10X magnification, White and UV 365nm illumination and it detects Retroreflective features and Anti-Stokes luminescence. Unit is powered by 2 ea. AAA batteries (included).



No. DC1019 10X Compact Device (UV lights, retro lights, IR)

No. DC1019C 10X Compact Device (with disc, UV lights, retro lights, IR)

#### **Regula DC1025 Compact Magnifier**

Regula compact magnifier Model DC1025 has 10X magnification. It is equipped with a variety of light sources such as: incident white light, oblique white light from two sides, UV 400 nm, UV 365 nm, UV 313 nm, UV 254 nm, retroreflective light (RR), two high intensity convertible IR light (anti-Stokes) 980 nm, OVD/Kinegram visualization light, and UV365/white. The interchangeable lights allow experts to perform a quick examination of documents, identifications and other security papers. Unit is powered by 2 ea. AAA rechargable batteries (not included) that can be charged via the micro-USB port.





No. DC1025 10X Compact Device (white lights, uv lights, ovd visualization)

No. DC1025C 10X Compact Device (white lights, uv lights, ovd visualization, disc)

## **Miscellaneous Magnifiers**

#### **Fixed Focus 10X Magnifiers**

Perfect for small security features or details with up to 10x magnification. Choose from options below.

#### FM1001M Fixed Focus 10X Magnifier

A portable, fixed focus 10X magnifier, ideal for quick examinations.

#### FM1002M Fixed Focus 10X Magnifier

The FM1001M with the inclusion of a measuring scale disc.

#### FM1003M Fixed Focus 10X Magnifier

Fixed focus 10x magnification equipped with a white light and oblique white light. The light sources are powered by a single type 4LR44 6V battery (included) with convenient on/off buttons.

#### **FM1004M Fixed Focus 10X Magnifier**

The FM1003M with the inclusion of a measuring scale disc.





FM1001M

FM1002M



No. FM1001M	10X Fixed Focus Magnifier
No. FM1002M	10X Fixed Focus Magnifier w/precision disc
No. FM1003M	10X Fixed Focus Mag w/diopter adj, 2 lights
No. FM1004M	10X Fixed Focus Mag w/diopter adj, 2 lights & disc

#### **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, as well. The Magni-Focuser can be worn over glasses and the front lens unit flips up during non-use. Viewing distance is 4" (10.2cm).



No. JC110

## **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.



No. JC5428 Stand Magnifier

#### **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 ½, 3 ½" or 4 ½"



lo. JC349M	2 1/2" Acrylic Magnifier
No. JC350M	3 1/2" Acrylic Magnifier
No. JC351M	4 1/2" Acrylic Magnifier

## 5X Compact Folding Magnifier

Magni-Focuser

This 5X, fixed-focus magnifier folds up into a compact unit for storage. The base is clearly marked with graduation lines on all 4 sides.



No. 313M 5X Compact Folding Magnifier

## **Attached Case Magnifier**

The perfect size for kits or to carry in your pocket with this inexpensive 1 3/4" diameter, 3X magnification lens.



No. 379M Attached Case Magnifier



## **Ridge Counters**

### **Reversible Ridge Counter**

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



No. RC221

**Reversible Ridge Counter** 

#### **Retractable Ridge Counter**

This counter features a push-button retractable point, which can be replaced.



No. GL004

**Retractable Ridge Counter** 

No. GL0051

**Replacement Point** 

## **Illuminated Magnifiers**

## **Illuminated LED Slide Out Magnifier**

This pocket magnifier is a compact 3x power slide-out magnifier with a protective plastic sleeve. The built-in LED light makes it



perfect for use in the dark, and its crystal-clear acrylic lens gives you a sharp, distortion-free view. This illuminated magnifier operates on (3) AAA batteries (not included).

No. JC7538

**Illuminated LED Slide Out 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.

This illuminated magnifier operates on (2) C-cell batteries (not included).

No. 314M

**Flashlight Fingerprint Magnifier** 

#### **Illuminated Swing Arm Magnifier**

The 360-degree illuminated swing arm magnifier attaches to almost any desk or tabletop to easily examine evidence. It features two light options: white light and Longwave UV with three diopters of magnification. Available in 110V or 220V.



No. 465MA	Illuminated Swing Arm Magnifier, 110V
No. 465MA220	Illuminated Swing Arm Magnifier, 220V

## **Comparators**



base and 9" viewing height gives you flexibility to work with larger evidence. Available in 110V or 220V.

No. 365M	Illuminated Magnifier, 110V AC
No. 365M220	Illuminated Magnifier, 220V AC

## **Forensic Optical Comparator**

Often Bought Together:

Indicates items often purchased in conjunction

The FX8B is designed exclusively for operator convenience and performance. The FX8B features two projectors for a full-screen, side-by-side display of two images—without image overlap. Developed 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.



No. FX8B	Forensic Optical Comparator, 110V AC
No. FX8B220	Forensic Optical Comparator, 220V AC
No. FX8BSW	Replacement Toggle Switch
No. FX8BVS	Replacement Viewing Screen
No. SFL1091	Replacement Projection Lamp
No. FXMAG4	Pin-Style Magnets, 4 ea.

#### **FX8B Features:**

- FX8B puts the evidence upfront in a clear, crisp, magnified image
- Two prints have a side-by-side image display (no
- · Control knobs let you switch between 6.5X and 10X magnification
- · Available in 110V and 220V

#### 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)



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

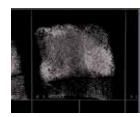


The picture above illustrates fine, clear and sharp detail in the comparison of currency.

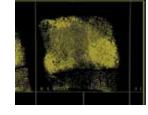


#### **FXE350A Features:**

- · 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 LCD flat panel display allows you to adjust the height and angle of the screen for the best view and better ergonomics while viewing.
- The Screen Capture Module and software create high resolution JPEG Photos for transfer via USB connection to a computer.



Use onboard controls to adjust brightness, contrast & reverse or colorize picture



#### **Digital Forensic Evidence Examination Station**

The Sirchie Forensic Digital Optical Desktop Video Magnifier, Catalog No. FXE350A makes evidence examination a far simpler task than ever before. It facilitates viewing small details with its movable viewing table and fully adjustable magnification—up to 50X. The FXE350A features a wide range of color correction, brightness and contrast on the oversize 24-inch LCD, high-resolution (1680x1050 pixels) viewing screen. In short, the FXE350A 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 50-60 Hz, 110-120V / 240V AC power receptacle.

#### You need this station if you examine:

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

#### With this station, forensic examiners will have:

- The ability to view small details with a moveable viewing table and fully adjustable magnification -
- · A wide range of color correction, brightness, and contrast on an oversized 24-inch LCD, highdefinition viewing screen.
- Plenty of room on the mounting table to exam 3D objects. Magnets can also secure evidence to the evidence platform.
- Connect and control from any computer with the FXE350 software, which is included. You can use your own computer to turn the station's lights on and off, adjust screen colors, pause the camera, and adjust the brightness of the images.



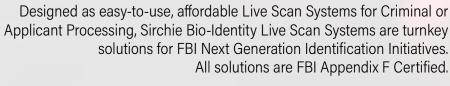
Moveable work table is fully adjustable



User-friendly capture software included

No. FXE350A Digital Forensic Examination Station w/capture software





Featured above: Palm Print Live Scan System with computer loaded with Sirchie Live Scan software.

(800) 356-7311

sales@sirchie.com

www.sirchie.com



