
TECHNICAL INFORMATION

BLUEMAXX™ Digital Latent Evidence Photo System

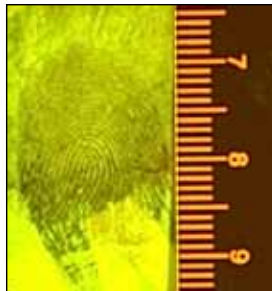
Catalog No. BML100

INTRODUCTION

At the core of the BML100A Digital Latent Evidence Photo System is a 7.1-megapixel digital camera that uses internal memory storage. The digital camera also features the provision for use with a memory stick (not provided) and is capable of recording short video/audio segments if required. The camera features a built-in flash with fully-automatic or manual exposure, as well as a macro setting, giving the camera the kind of flexibility needed to complete BLUEMAXX™ photography as well as crime scene photography.

The kit includes the BM300 Forensic Light Source along with an expanded inventory of fingerprint developing tools and agents. A practical assortment of regular fluorescent fingerprint powder and dusting tools are provided.





A technician (left) uses the BLUEMAXX™ BM300 forensic light source to illuminate a CD cover while dusting for prints with No. LL703 GREENESCENT™ Fluorescent Latent Print Powder. The digital camera (included in the BML100 kit) is then attached to the BML102 MiniPod (middle) and a MR30FO Fluorescent Scale is used in the evidential photograph. Resultant latent print is shown right.

DIGITAL PHOTOGRAPHY

Digital photography has become the method of choice for crime scene photographers. So, we've combined this vital recovery method with our BLUEMAXX™ system and fluorescent latent fingerprint powders. By employing a high-resolution digital camera (7.1-megapixels), evidence photos are sharp, crisp and clear.

BML100 ADVANTAGES

- 7.1-megapixel for high resolution images
- System permits quick, efficient downloads
- All-in-one development and recording of latent print evidence using fluorescent/ALS technology

PRECAUTIONS

- Consult the appropriate Material Safety Data Sheets (MSDS) found on our website at www.sirchie.com/support.
- Be certain that the camera battery has received a full charge prior to use at a crime scene.

INITIAL SETUP

Camera Software

The camera software is contained on a CD-ROM that is packaged with the camera manual. Install the software in your computer per the instruction sheet that accompanies the CD-ROM. **NOTE:** *Read through the camera manual to familiarize yourself with various functions and capabilities.*

You will need a graphics program in order to work on and then save your photographs. Programs such as Adobe® Photoshop or Ulead® PhotoImpact are among those used by many law enforcement agencies.

For specific instructions covering camera operation, consult the camera's users manual.

Camera Setup for BLUEMAXX™ Photography

Your camera may be configured to be used either hand-held, tripod-mounted or on the MiniPod supplied with this kit.

Camera Operation:

1. The camera is shipped with a 58mm Adapter Ring and 58mm Coupler pre-mounted on it. For most functions, this assembly may be left installed on the camera. **NOTE:** *This assembly is required when using the camera in conjunction with the minipod or filters to prevent mechanical interference between the camera lens and filters when fully zoomed.*

2. Under most circumstances it is best to take a series of at least three photos of the evidence prior to taking the BLUEMAXX™ photo. The following series of photos are taken under normal light or with electronic flash:
 - a. Take an overall photo (wide angle).
 - b. Next, take a medium close-up photo.
 - c. The last photo is a close-up. For best results turn on the Macro feature (mode) of the camera. Be certain that the image fills the screen and that the scale is visible.



Wide-Angle



Medium Close-up



Close-up

NOTE: BLUEMAXX™ photography may require that brightly lighted areas be somewhat darkened. Turn off lights and close blinds or shades. If you are using a standard photographic tripod, mount the No. B9896-1 Barrier Filter onto the Adapter Ring. Mount the camera on the tripod, and then follow Steps 3c through 3h.

3. If you are using the MiniPod supplied with this kit, proceed as follows:

- a. Attach the legs to the MiniPod top ring.
- b. Mount the top ring of the MiniPod to the camera's adapter ring (Fig. 1).
- c. Place the assembly in position. Darken the area and turn the camera ON.



FIGURE 1—Mount the camera to the top of the MiniPod (camera may differ from that shown).



FIGURE 2—Illuminate the print with the BLUEMAXX™ BM300 included with the kit.

- d. Set the camera on the Manual (M) Camera mode. **NOTE:** BLUEMAXX™ photography requires lengthy exposures and camera shake will cause blurred photos.
- e. Zoom in or out to fill the LCD screen with the image. Be certain to place a fluorescent scale in the shot so that it is visible. DO NOT use Digital Zoom as this causes degrading of the image.
- f. Illuminate the print with the BLUEMAXX™ BM300. Keep the beam moving during the exposure to insure even lighting (Fig. 2).
- g. Press and release the shutter button.
- h. Preview each photo taken to be certain that good results were obtained.

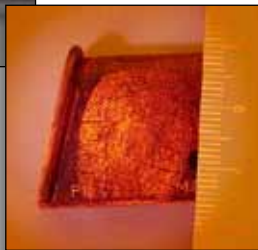
Starting Point for BLUEMAXX™ Exposures

With the digital camera in the (M) Manual Mode and the Macro Mode selected, set the aperture to $f/2.5$ and the shutter to 1/20 sec. If exposures are too dark, lower the shutter speed—too light, increase the shutter speed. If greater depth of field is needed, use a smaller aperture of $f/3.5$ and a slower shutter speed of 1/10 sec.

The series of photographs to follow are of latent prints developed with the fluorescent latent print powders and exposed with the BLUEMAXX™ BM300 Light, all included with the BML100 kit.



Pistol Magazine (above) dusted with LL704. Inset (right) photographed with BLUEMAXX™ illumination.



Camera Setup for Available Light or Flash Photography

Use the same setup for BLUEMAXX™ photography as described in Step 3 above. If insufficient light is not available, however, illuminate the print with a flashlight or use an electronic flash. Press and release the shutter button, and preview each photo to be certain that good results were obtained.



Pen box (above) dusted with LL703. Inset (top right) photographed with BLUEMAXX™ illumination.



ZIP Disk Case (above) dusted with LL701. Inset (left) photographed with BLUEMAXX™ illumination.



BML100 CONTENTS:

- 1- 7.1-megapixel Digital Camera with 58mm Camera Adapter/58mm Coupler Assembly
- 1- Video/Audio Connection Cable
- 1- USB Connection Cable
- 4- AA Alkaline Batteries
- 1- BM300 BLUEMAXX™ Forensic Light Source and 3 Alkaline D-Cells
- 1- DEPS102 MiniPod w/removable Barrier Filter
- 1- BMS300 BLUEMAXX™ Barrier Goggles w/Case
- 1- B9896-1 Barrier Filter, 58mm

1- BML103 Fluorescent Latent Fingerprint Kit containing:

- 1- LL701 REDESCENT™ Latent Print Powder, 2 oz. (59ml)
- 1- LL703 GREENESCENT™ Latent Print Powder, 2 oz.(59ml)
- 1- LL704 Silver/REDESCENT™ Latent Print Powder, 2 oz. (59ml)
- 3- 122L1 Fiberglass Brush, Kit Type
- 1- 131LB Black Hinge Lifters,
2" x 4" (5.1cm x 10.2cm), 12 ea.
- 1- 131LW White Hinge Lifters, 2" x 4" (5.1cm x 10.2cm), 12 ea.
- 1- MR30FO Fluorescent Scales, Orange, 6" (15.2cm), 10-pack
- 1- Technical Information
- 1- Digital Still Camera Operator's Manual w/Software & CD-R PC Adapter
- 1- Rugged Black Plastic Copolymer Carrying Case w/Custom Foam Insert; Dimensions: 21" x 17" x 10.5" (53.3cm x 43.2cm x 26.7cm); Weight: 15.94 lbs. (7.2kg)