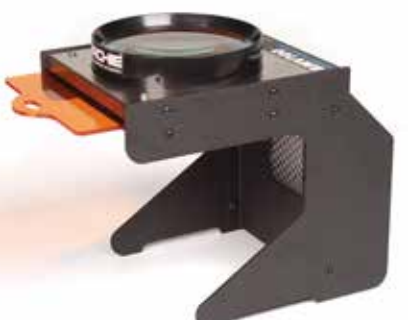
TECHNICAL INFORMATION

BLUEMAXX™ Evidence Viewer

Catalog No. BMV100

INTRODUCTION

This new application for our popular BLUEMAXX™ alternate light sources features a self-contained device that incorporates a wide field 2.5X magnifier and two built-in light sources—white light for examining objects under normal lighting and a BLUEMAXX™ light for viewing fluorescent materials. Its lightweight, compact design permits freedom of movement, and the magnification reduces eyestrain as objects are examined.



BACKGROUND/THEORY OF OPERATION

Developed latent prints on a multi-colored or patterned background have often plagued latent print examiners when photographs are taken. With

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BLUEMAXX™ illumination, in conjunction with fluorescent latent print development methods, the BMV100 can reduce or eliminate backgrounds. As shown in this DFO enhanced print photo to the right, the BMV100 reveals the print clearly.

Fashioned from brushed nickeloid and epoxy coated steel, the BMV100 reduces eyestrain with its large 4" magnifying lens. Blue lighting is provided by a single 3-watt, high-powered LED (Light Emitting Diode) operating at 455nm, and white lighting is provided by one 3-watt LED. A built-in diffusion lens softens the white light—making it an ideal light source for photography. The BLUEMAXX™ Light and White Light are controlled by a single three-position switch mounted on the rear of the unit. The LEDs never need replacement.

DFO enhanced prints, like the palm print shown here, are highly luminescent when viewed with the BMV100 in the blue light mode.

PROCUDURE

Setup

Plug in the universal AC power adapter into the rear of the unit. Plug the adapter into a convenient AC outlet. Do not use any AC adapters other than the one supplied with the unit.

Usage

The BLUEMAXX™ Evidence Viewer permits examination and photography of many objects of forensic interest. The BMV100 can be utilized to examine for physiological fluids, review latents developed with DFO, or cyanoacrylate prints enhanced with Ardrox or Basic Yellow. The self-contained light sources eliminate the need for external illumination.

BLUEMAXX™ Light

Blue light is supplied by a single 3-watt LED rated at 455nm. Place the item to be examined under the lens, insert the Orange Barrier Filter into the slot provided. Set the three-position switch on the rear panel

of the unit to Blue Light (see Control Panel photo). For photography, subdued room lighting is recommended. *CAUTION: Do not look directly into the blue light for extended periods as this may cause damage to the eyes.* USES—Examination of physiological fluids such as semen, saliva and urine, as well as latent prints developed with fluorescent dyes, stains and powders.

Three-Position Switch

White Light

White light is provided by one 3-watt LED and is used for examining small weapons, latent print lifts, questioned documents, etc. Set the three-position switch on the rear panel of the unit to White Light. This soft, diffused lighting is an excellent light source for photography—photographs can be taken directly through the magnifying lens.

MAINTENANCE

No field maintenance is required. LEDs have a +50,000 hour life expectancy. Keep the unit clean by removing dust and dirt using a damp cloth. Do not use commercial leaning solvents as they may damage the surface. Household glass cleaners may be used on the magnifying lens.

TROUBLESHOOTING	
Neither Blue or White light comes on	Check to see if AC adapter is plugged into the wall socket.
	Check the power cord—verify that it is plugged into the rear of the unit.
	Check circuit breakers—verify that the wall outlet has power.
Blue light comes on, white light does not, or vice versa	Defective switch. Contact Customer Support at the factory and request Return Authorization.

References

Enotes.com Inc. *World of Forensic Science/Alternate Light Source Analysis,* <http://www.enotes.com/forensic-science/alternate-light-source-analysis>. August 24, 2009.

Forensic Magazine. *New LEDs Enable Innovations in Forensic Alternative Light Sources,* <http://www.forensicmag.com/articles.asp?pid=44> Daniel McGraw, PhD, August 24, 2009.

OPPapers.com. *Forensic, Alternate Light Sources—Essay #420247365,* <http://www.oppapers.com/essays/Forensic-Alternate-Light-Sources/113295> August 24, 2009.

BMV100 Contents
1- BMV100 Evidence Viewer
1- Removable Orange Barrier Filter
1- Universal AC Adapter 110-220V AC

Specifications
DIMENSIONS: 5.75"W x 7.5"H x 8.625"D (14.5cm x 19cm x 21.9cm)
WEIGHT (w/out filter or adapter): 2.2 lbs. (1kg)
CONSTRUCTION: Brushed Nickeloid Steel and Epoxy-Coated Steel