

Crime-lite® MLD

Simultaneous LIVE R-UV/IR fingerprint examination



Fast and effective detection of fingerprints
for the improvement of laboratory efficiency

foster+freeman

Crime-lite® MLD

Simultaneous Long Wave Reflected-UV and Infrared imaging for the rapid detection of fingerprints without the need for chemical staining

Searching for fingerprints using the Crime-lite MLD is straightforward and intuitive. Evidence is simply passed beneath the twin-camera imaging system with live video of the resulting fingerprints being displayed on-screen.

By exploiting the differing UV/IR reflectance and absorption properties of fingerprint ridges it is possible to reveal high quality fingerprints on superglue fumed, or even untreated, items of evidence.

Searching outside of the visible waveband, the Crime-lite MLD enables the examiner to suppress background detail and to increase fingerprint contrast and clarity.



CA Fumed fingerprints on a milk container

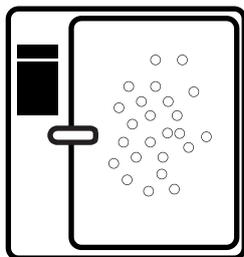


Fingerprints dusted with black powder

Revolutionise the Fingerprint Workflow by Searching Beyond the Visible

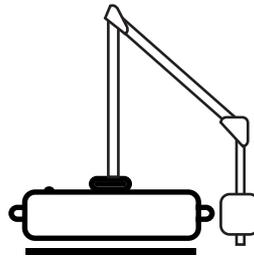
The Crime-lite MLD is an essential laboratory upgrade that can reveal 'invisible' prints without the need for powders, dyes or stains...

1. Fume



MVC/D Fuming Chamber

2. Search



Crime-lite MLD Search Tool

3. Capture



DCS 5 Imaging Workstation

Semi and non-porous evidence is often cyanoacrylate fumed to develop latent prints.

Traditionally, the next stage in the process is to apply a dye, stain or powder in order to create contrast.

Using the Crime-lite MLD, there is no need to dye or stain evidence.

Fumed prints (even those invisible to the naked eye) are immediately visible under the Crime-lite MLD and may be marked up ready for imaging.

Marked up prints are ready to be captured using a UV/IR sensitive imaging system.

UV/IR imaging is capable of producing excellent prints, while reducing laboratory costs and saving countless man-hours

Non-Destructive Fingerprint Visualisation Without the Need for Chemical Dye/Stains



A purely optical examination technique, the Crime-lite MLD enables examiners to reveal fingermarks on a wide variety of evidence types *without* the need for additional chemical stains and dyes.

Simultaneously searching for prints using Reflected-UV and Infrared modes of examination, evidence can be simply passed beneath the Crime-lite MLD to reveal fingerprints that would have remained invisible to the naked eye.

- Quick and easy process with excellent results
- Messy chemical treatments not required
- Results displayed on-screen in real time
- Contact-free, non-destructive examinations

Glossy Cardboard Box



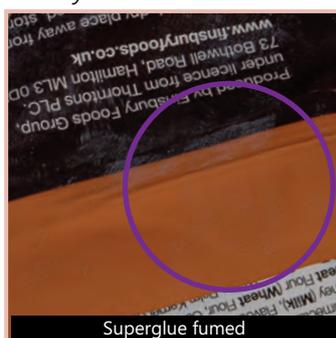
Glass Bottle



Plastic container



Glossy Cardboard Box



PUBLISHED PAPER:

The use of longwave reflected UV imaging for the enhancement of cyanoacrylate developed fingermarks: A simple, safe and effective imaging tool RSP King, LWL Davis, DA Skros 2018

For many forensic labs, the process of superglue fuming evidence, followed by the application of a chemical dye or stain such as BY-40, is a time-consuming daily occurrence. Research has demonstrated Longwave Reflected-UV imaging to be the first choice examination technique, ahead of BY40 staining, when searching for fingerprints on superglue-fumed evidence.

Forensic Science International, Volume 289 <https://doi.org/10.1016/j.forsciint.2018.06.001>

Crime-lite® MLD Product Features



Dual Reflected UV-IR Inspection

Simultaneous examination of evidence using Reflected-UV 365nm and IR 850nm wavelengths

Live Twin-Camera Imaging

Live video images of examinations taking place beyond the visible spectrum are captured via a pair of UV and IR sensitive 5MP cameras

View Evidence in 4K Ultra-HD

Examinations are observed in sharp Ultra-HD via the attached 4K display

Long-Reach Articulated Arm

Easily manoeuvre the Crime-lite MLD over evidence of varying shapes and sizes

intelligent Core Processor

Images are processed, and may be digitally enhanced to boost clarity, via a compact image data processing module.

Crime-lite® MLD Provisional Specification

Image Capture	UV Imaging	• 5MP CMOS auto-focus camera	IR Imaging	• 5MP CMOS auto-focus camera
Viewing Filters		• UV bandpass filter		• IR longpass filter
Illumination		<ul style="list-style-type: none"> • 8x high power UV 365nm LEDs • 350-380nm (nominal) 		<ul style="list-style-type: none"> • 4x high power IR LEDs • 800-900nm (nominal)
		<ul style="list-style-type: none"> • 8x high power UV365nm LEDs • Adjustable side illumination 		

General Features	<ul style="list-style-type: none"> • Easy trackball operation of illumination modes • Foot pedal operation of camera • Intelligent core with 4x USB ports and monitor interface • Heavy duty low profile articulated arm • Three axis adjustable head mount • Dust cover for head <p>• Dimensions: W355 x D215 x H140mm, Weight 1.5Kg</p> <p>• Power Requirements - Input 100-240V, 80W</p>	<p><i>Bench or wall mounted arm, maximum reach 1.32m</i></p> 
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Software Features	<ul style="list-style-type: none"> • Digital zoom control • Focus adjustment • Exposure control • Display two images side by side • Display one image full screen • Image capture to disk 	<p><i>Note: The Crime-lite MLD is supplied with an Intelligent Core module No external PC is required</i></p>
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Foster + Freeman reserve the right to alter the specification of the Crime-lite MLD and its accessories without prior notice.