



PHOENIX IMAGING, LTD.

Providing Equipment and Tools for Manual Inspection

MIB-40™

Precision Engineered Lighting Equipment



MIB-40™ (Version 2.0)
shown in Standard Configuration

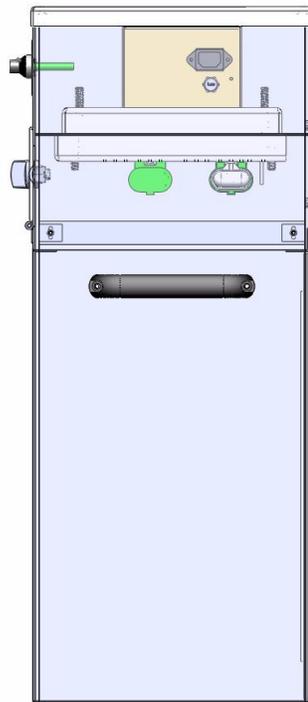
Advanced Single-Sided Lighting System

Top Dual Lamp Orientation
Benchtop Unit

Manual
Inspection
Solutions
That Work

Technology at work for you

MIB-40™ MANUAL INSPECTION



MIB-40™ Single-Sided Top Lighting

The latest iteration of the MIB-40™ is now available after its second revision. The single-sided lighting configuration offers the same feedback circuitry to maintain constant luminous flux from the lamps as found in other MIB products. The lights in the MIB-40™ can be positioned closely to each other or further apart to allow a narrow or wider illumination pattern. The lamps are separated from the inspection chamber with an acrylic diffuser panel. The light intensity with the inspection chamber can be changed by altering the light transmission properties of the diffusing material. The typical intensity in the center of the inspection chamber ranges from 2,500 Lux to 10,000 Lux.

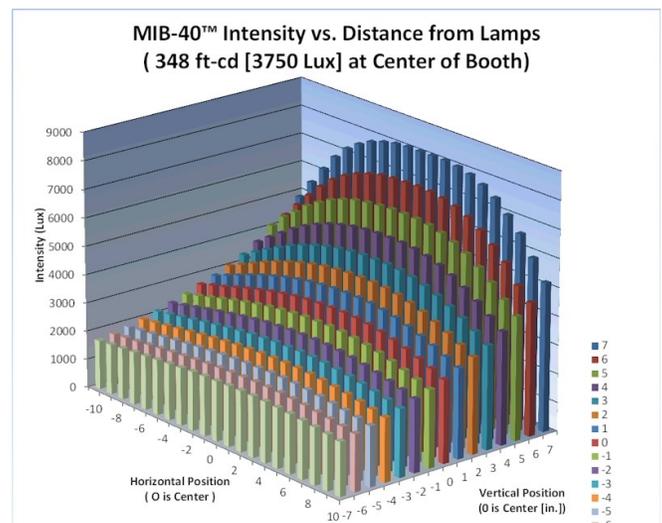
The design of the MIB-40™ permits a small foot print for the benchtop as well as providing easy access to the lamps. The light intensity can also be adjusted with the "Master Intensity Control" located on the front of the MIB-40™ enclosure. A small indicator lamp provides feedback of the MIB-40™ operation, when illuminated it indicates that the booth is functioning properly.

flexible solutions for your inspection needs

MIB-40™ DESIGN BENEFITS

The lighting system uses an advanced lighting controller with lamp monitoring feedback to maintain constant light intensity for the life of the lamps. As the lamps age, the lighting system will automatically adjust the current to keep the lamp output at the user specified intensity. The lighting controllers drive the lamps at 55 KHZ to provide "flicker-free" lighting inside the inspection chamber. The light intensity in the inspection volume can be adjusted between 2,500 and 10,000 Lux. The standard configuration implements a low glare white / black background that measures 22" wide x 16" high, divided equally between the white / black panels. The background is replaceable and is easily removed if damaged. The background is available in all white, all black or the more common white / black.

The MIB-40™ product is superior to similar lighting configurations because it offers two regulated Bi-x lamps for illumination that are properly positioned within a well controlled environment as compared to other single-sided lighting booths. The Light Intensity Map shown to the right represents the standard configuration MIB-40™. The light intensity map has the familiar "water-fall" characteristics found in single-sided lighting inspection booth but it is less pronounced and much more uniform near and below the vertical midpoint. This permits the inspector more freedom in positioning the product during the inspection procedure.



MIB-40™

Standard Components

The MIB-40™ includes all of the features as standard equipment, all you have to provide is power.

Master Intensity Control:

The Master Intensity Control is used in conjunction with the internal light plate slides to adjust the light intensity in the inspection volume. The Master Intensity Control can adjust the booth intensity by about 50%. It is used for precise adjustment of the light intensity.

Lamps in Regulation:

The advanced power supply of the MIB-40™ monitors the lamps over 5,000 per second. A green visual indicator lamp is provided on the front panel to show proper operation of the system.

Master Power Switch:

The MIB-40™ Master Power Switch is conveniently located on the front panel. The system should be powered off when not in use or lamp replacement is required.

Lamp Access Door:

The lamps of the MIB-40™ can be replaced when required. The front panel folds down to provide access to the MIB-40™ Biax lamps. No tools are required for lamp removal.

Replaceable Backgrounds:

The background of the MIB-40™ can be replaced if it is damaged. The background is attached to the back wall of the MIB-40™ with magnetic fasteners to allow easy removal. The large Black / White panels have a non-glare finish and can be wiped clean using IPA.

Digital Intensity Control:

This is a new option for the MIB-40™ that allows the user to simply input the desired intensity value for the center of the booth and the system will go to that intensity. This option is only available on the MIB-40™ (Version 3.1 or later).

This option requires the addition of a PLC and Operator Interface Touch Screen, this option must be ordered at the time of system fabrication.



CUSTOM SOLUTIONS

Not all manual inspection projects can be performed using standard products. Some of the applications require custom hardware or system calibration. Phoenix Imaging will work with customers to create a Custom Tailored Solution (CTS) to meet exact customer requirements for both fit and function.



CALIBRATION SERVICES

When customer service is required we offer both On-Site and On-Line whenever possible. The Calibration service provides customers with the knowledge that their lighting system has been balanced and functioning correctly. All calibrations are performed using NIST traceable light meters and instrumentation.



EBUSINESS SOLUTIONS

Continuous product improvements often require modifications to the inspection software. Any changes to a customer's application are automatically logged in the secure project server. Any version of a customer's application is available for download upon request.

MIB-40™

MIB-40™ Specifications

System Power Requirements:

115VAC, 3.0 A, 1 Ø

220VAC, 1.5 A, 1 Ø

Width (w/o Handles): 596 mm (23.5")

Depth: 315 mm (12.5")

Height: 788 mm (31.0")



The MIB-40™ system is offered in both 100—120 VAC and 200—220 VAC editions. Please specify the geographical region in which the MIB-40™ will be used at the time of order. All of the MIB Lighting Controllers are now equipped with Power Factor Correction (PFC) to meet European and world standards for operation. The Operator Interface Display now has a built in SD slot to allow easy software upgrades. The lamp mounting plates are now equipped with roller bearing guides for easy lamp position adjustment. The new **Digital Intensity Control** makes changing the light intensity as simple as a push of a button.

Our instrument laboratory is equipped with the latest optical, illumination and image processing technology. We have designed over 500 different types of lighting modules, including Custom and Standard models of High Frequency Fluorescent and LED lighting. A full line of advanced machine vision systems using the latest image processing technology. Whether the applications requires intelligent vision sensors or high speed multiple-core vision processors, Phoenix Imaging offers a solution for your unique application.

optical
gaging
technology
& consulting



Other Phoenix Imaging PRODUCTS

- MIB-40™ Low Cost Entry Top-lighting Unit, Benchtop
- MIB-50™ Dual-Sided Lighting System, Benchtop, Left-Right Light Path. Pacer PLC standard.
- MIB-70™ Dual-Sided Lighting System, Benchtop, Top-Bottom Light Path. Pacer PLC and Light Curtain Control Available.
- MIB-75™ Dual-Sided Lighting System, Benchtop, Top-Bottom Light Path, Basic System, No PLC.
- MIB-90™ Dual-Sided Lighting System, Floor Standing, Top-Bottom Light Path, stainless steel arm-rest, large hooded work area, hydraulic height adjustment.
- MIB-100™ Dual-Sided Lighting System, Floor Standing, Top-Bottom Light Path, Corian arm-rest, PLC and Pacer Controls, (this model is the Industry Standard).
- RLPS™ Referee Level Particle Standards.

Phoenix Imaging offers a wide range of special machine vision tools for a wide range of applications. From simple filter paper particle counters to non-destructive in-situ vial / cartridge particle detection / measurement systems. Phoenix Imaging will offer to perform an in-depth evaluation of your project for a nominal fee. The engineering fee may be applied to the project cost if feasibility is demonstrated and the customer decides to proceed with the project.



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29865 6 Mile Road
Livonia, Michigan 48152
734 744 9280 ph
734 744 9299 fax
www.phoeniximaging.com
www.MIB-Lights.com