

GIA® Gemolite® NXT

User Guide



GIA® Gemolite® NXT
Professional Edition



GIA®

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Important Safety Instructions

The general safety information contained in this summary is for you. Specific warnings and cautions are found throughout the manual where they apply and should be followed in each instance.

Spray and moisture can cause an electric shock or hardware damage.

DO NOT use the microscope where it is likely to be affected by moisture or spray of fluids. Unstable positions can cause serious damage to the microscope or personal danger if it falls. DO NOT put the microscope on an unstable cart, stand, or table. Using incorrect plugs can cause an electrical shock.

Use a three-wire grounding type plug with a third (grounding) pin. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your outlet.

Improper cabling can cause injury or a shock. DO NOT let anything rest on the power cord. DO NOT locate the microscope where people will walk on the cord. When routing cord, try to make rounded bends rather than sharp ones that can kink the cord.

CAUTION: Always position the microscope so that it is easy to operate the disconnect device (power supply cord plug).

CAUTION: Solvents can damage the microscope. DO NOT use liquid or aerosol cleaners directly on the surface of the microscope. Wet a damp cloth with a mild dish washing detergent and wipe the unplugged microscope if needed.

CAUTION: Prolonged use of the microscope can cause the diaphragm housing to reach 60°C/140°F.

If a fault occurs: A fault can cause electric shock or injury. Unplug the microscope from the power outlet and contact qualified service personnel if the following conditions occur:

- The power cord or plug is damaged or frayed.
- Liquid has been spilled into the microscope.
- The microscope has been exposed to water.

Contact GIA Instruments at instrumentsupport@gia.edu or +1 760-603-4200

Introduction

GIA® Gemolite® NXT - The next generation of gemological microscopy.

The GIA® Gemolite® NXT gemological microscope preserves all of the functionality of the proven Gemolite lineage of GIA gemological microscopes and adds modern features that enhance its functionality.

LED lighting is utilized throughout and a powerful fiber optic illuminator has been built into the base of the instrument.

The GIA Gemolite NXT microscope system can be fully customized to suit the individual user's needs, with optional parts such as 10x or 15x oculars, adjustable wrist supports to improve ergonomics in high use environments, and firm and flexible fiber optic light guides.

The GIA Gemolite NXT is available as both a basic model that is budget friendly or Pro model that includes optional accessories to give the user a fully customizable microscope experience.

GIA® Gemolite® NXT



GIA® Gemolite® NXT

Professional Edition



Features Comparison Chart

	GIA® Gemolite® NXT	GIA® Gemolite® NXT Professional
Benefits		
Global Power Compatible	Yes	Yes
1 Year Warranty	Yes	Yes
Features		
Ergonomic Tilt Function	Yes	Yes
LED Darkfield Lighting	Yes	Yes
Parts		
Swivel Base	Yes	Yes
GIA Optics Pod	Yes	Yes
10x Oculars	Yes	Yes
10x Soft Eyecups	Yes	Yes
Stoneholder	Yes	Yes
Power Cord	Yes	Yes
Dust Cover	Yes	Yes
Padded Arm Rests		Yes
LED Overhead Light		Yes
LED Firm Fiber Optic Light Guide		Yes
LED Flexible Fiber Optic Light Guide		Yes
15x Oculars		Yes
15x Soft Eyecups		Yes
Hex Keys		Yes
Hardware		Yes

Part Descriptions

Stone Holder The stone holder can be affixed to either side of the stage.
The stone holder is designed to hold a gem firmly in place.



Oculars Oculars are installed into the optics pod to increase the magnification.
Depending on the model, you may have two sets (10x or 15x). Ensure the oculars installed in the optics pod are the same magnification.



Dust Cover

A dust cover is included to protect your microscope from collecting any contamination on the optical surfaces, which could affect clarity. Please ensure that the dust cover is placed over top of the microscope whenever it is not in use.

**Optics Pod**

The optics pod is located at the top of the microscope and contains the optical components. You can move the optics pod up and down to adjust the focus by turning the focus control knob located on the focus column.



Focus Column The optics pod rests on the focus column, which is mounted on the stage. It is designed to let you focus on the specimen by adjusting the two ergonomically designed focus knobs, located on either side, to lower or raise the optics pod.



Soft Eyecups Eyepieces are equipped with removable soft eyecups that help eliminate extraneous light. Keep your eyes at the correct distance from the eyepieces to make the microscope even more comfortable to use.



Stage

The stage is located directly below the optics pod. It is a working platform where you examine the gem. The well light is beneath the stage. It houses the darkfield and brightfield LED light source.

**Base**

The base supports the stage and houses the electronics. An on/off knob on the base controls the internal darkfield and brightfield intensity. The LCD readout has been updated to include 3 lighting controls: Overhead lamp, fiber optic illuminator, and well light.



Power Cord

The power cord is designed to remain stationary when you rotate the base. To attain maximum use of this feature while working with the microscope, position the base with the AC power module and power cord facing toward the most convenient wall outlet.



***Overhead Lamp**

The overhead lamp is used to illuminate the specimen from above. This flexible light can be installed on either the right or left side of the stage.



* Included in the GIA® Gemolite® NXT Professional Edition

***Fiber Optic
Light Guides**

There are two fiber optic light guides included. One flexible and one firm, either of which can be installed on the base of the microscope.



***Armrests**

Adjustable, removable armrests with padded wrist supports may be installed on either side of the stage.



* Included in the GIA® Gemolite® NXT Professional Edition

***Hardware**

Hardware and hex keys are provided to install accessories, such as the armrests, overhead lamp, and fiber optic attachment. Please retain the 3mm and 4mm hex keys for future use. An extra 2.5A fuse is also included.



* Included in the GIA® Gemolite® NXT Professional Edition

Assembly Instructions – GIA® Gemolite® NXT

Carefully unpack and inspect all components of the microscope. Depending on the model you purchase, there may be added accessories, which will be covered later in the user guide.

The microscope base is the foundation of the instrument and will arrive fully assembled. The first step is to plug the power cable into the base of the microscope.



This will allow the darkfield well to power on. Please ensure that the microscope is powered on by pressing the knob furthest on the right side of the microscope base. Rotating the knob will adjust the intensity of the darkfield light.



Next, install the optics pod onto the base, tightening the setscrew to secure the optics pod.



Install the oculars into the optics pod. Depending on the model, you may have two sets of oculars. Ensure the oculars installed in the optics pod are the same magnification, either 10x or 15x.

Before installing the soft eyecups, be sure to remove the rubber rings that come pre-installed on top of the oculars.

Rubber ring on



Rubber ring off





GIA® Gemolite® NXT is now ready to use!

Assembly Instructions – GIA® Gemolite® NXT Professional

OVERHEAD LIGHT INSTALLATION

To install the overhead lamp, first locate the two setscrews on the underside of the GIA® Gemolite® NXT's stage. There is an option to mount the overhead lamp either to the right or left of center. Remove the two screws and set aside. Included with the overhead lamp will be a 3mm hex wrench, as well as two longer screws to secure the mounting flange to the bottom of the stage. Once fastened, connect the power cord to the power jack located at the front of the underside of the stage. The overhead lamp installation is complete.



FIBER OPTIC INSTALLATION

To install either fiber optic light guide, you must first remove the cover at the base of the GIA® Gemolite® NXT. The rectangular rubber cover is installed using two screws. The two screws will be reused to fasten the fiber optic light guide to the base. Insert the fiber optic light guide and replace the screws. A 3mm hex wrench is included with the fiber optic light guide.



ARMREST INSTALLATION

To install the armrests, locate four screws, two on each side of underside of the stage. Remove these four screws with the supplied 3mm hex key. These screws will not be reused for the installation of the armrest, but should be kept in case the armrests are ever removed.

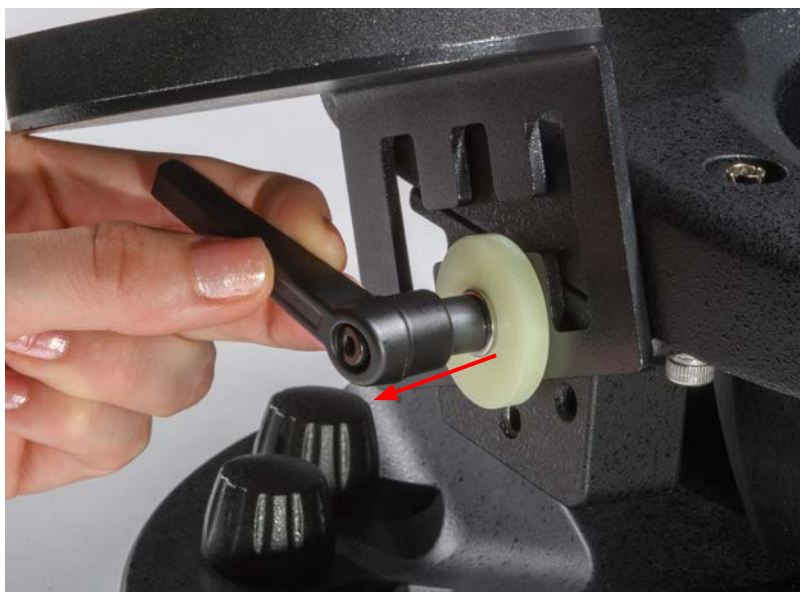
Using the supplied cap head screws, washers, and 4mm hex wrench, install the mounting brackets on both sides of the microscope. These mounting brackets will be used to hold the armrests in the next step.



There are many points of adjustment for each user preference. Any of the four mounting holes can be used for the armrests. Start by holding the armrests next to the mounting block, and use the provided adjustable lever screw to position the armrests.



The adjustable lever screw is used in this application since pulling outward on the lever disengages the lever from the screw. Doing so, the lever can be rotated out of the way and tucked under the armrest without loosening the screw.



Use and Operation

TILT ADJUSTMENT

The GIA® Gemolite NXT® microscope has a tilting spine which allows for a range of ergonomic adjustments to suite a wide range of users.

To tilt the microscope, support the base or stage of the microscope with one hand and pull on the top of the spine towards the rear of the microscope. Adjust this angle for the most comfortable viewing.



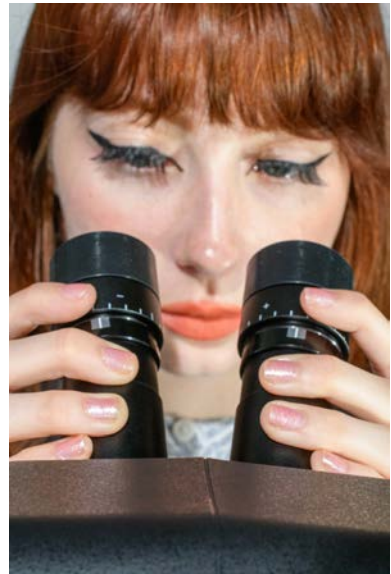
DIOPTER AND INTER-OCULAR ANGLE ADJUSTMENT

For proper viewing, the microscope oculars must first be set up to the individual user's eyes. The inter-ocular distance should be set to match the spacing between the user's eyes. This is done by gently pulling the ocular tubes apart or gently pushing them together. When the spacing is correct, you should see one image circle when looking into the oculars instead of two.

Once the spacing is correct, you must adjust the diopter on ocular. To set up your microscope's diopter, place a flat object on the microscope stage (a piece of paper with printed text works well for this) and set the diopter adjustment on both oculars to the 0 position. Close your non-dominant eye and look into the ocular with your dominant eye. Adjust the focus rack so that the object is in clear and sharp focus with the dominant eye. Without moving the focus rack, close your dominant eye and look into the ocular with your non-dominant eye. Rotate the ocular's diopter control (+/-) until the image is in sharp focus with the non-dominant eye.

Your microscope is now adjusted to your unique vision requirements.

Note: In general, you do not need to wear glasses that correct for near-sightedness or far-sightedness when using the microscope as the diopter adjustment will correct for different dioptic strength as long as the difference is within the range of correction of the ocular's diopter control.



The inter-ocular distance can be adjusted by gently pushing the ocular tubes together or gently pulling them apart. When they are in the correct position, the user should see one single circular image during viewing.

FOCUS COLUMN

The focus column of the microscope adjusts distance between the optical system and the subject you are observing until the subject appears with maximum clarity. By rotating either of the focus knobs clockwise or counter-clockwise, the optical system will move up or down relative to your gemstone, allowing you to find the focal point.

When the sample you are viewing appears very sharp, the light rays are converged to the focal point of the optical system and your sample is “in focus.” As you observe your gemstone and change its position or orientation, you may need to make fine focus adjustments by turning the focus knobs to maintain a clear view of the gemstone.



Rotate the focus knob to move the optical system up or down until the image is sharp and in clear focus.

ZOOM

The GIA® Gemolite® NXT microscope is equipped with a stereozoom optical system. This allows for continuously increasing magnification throughout the zoom magnification range of 0.8x to 5x. This zoom magnification is multiplied by your ocular lens magnification (10x or 15x) which gives you the total magnification power of your microscope at a given configuration (0.8x to 75x).

Higher magnification will decrease the field of view, which is the visible area seen through the microscope when it is in focus. A lower magnification will increase the field of view.



Rotate the zoom knob to increase or decrease the desired magnification.

LIGHTING KNOBS

The GIA® Gemolite® NXT microscope is equipped with three LED light sources, each of which is independently controlled by its own adjustment knob.

To turn on each light, press the knob down. To increase the brightness, rotate the knob clockwise. Turning the knob counter-clockwise will decrease the brightness level between 0-100. When the microscope is turned off, the microscope will store the brightness level and resume that same brightness when it is turned on again.

- The **overhead light** is controlled by the knob on the left side of the microscope.
- The **fiber optic illuminator** is controlled by the left knob located on the right side of the microscope.
- The **well light** is controlled by the right knob located on the right side of the microscope.

These lights can be used independently or in combination.



Pressing the knob on the left will turn on the overhead light.



Pressing the left knob on the right side of the microscope will turn on the fiber optic illuminator.



Pressing the furthest right knob will turn the well light on and off.



Rotating the knobs clockwise will increase the intensity of the light and counter-clockwise will decrease the intensity.

The intensity values for each light are displayed on the LCD screen, with 0 representing the lowest “on” level. To turn the light completely “off”, press the knob.

Illumination and Lighting

DARKFIELD

To configure the microscope for darkfield illumination, be sure the baffle in the bottom of the light well is in the closed position and turn on the well light. The stone will be illuminated with diffused light from all sides. Inclusions in gems observed in this configuration will appear bright against the dark background provided by the baffle.



For darkfield viewing, turn the well light on and make sure the baffle is in the closed position.



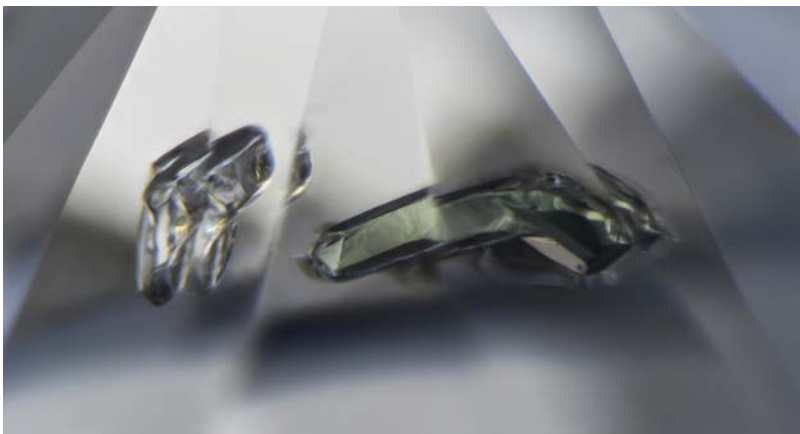
This garnet inclusion shows up as a bright orange crystal in its quartz host when viewed using darkfield illumination.

BRIGHTFIELD

For brightfield viewing, open the baffle in the microscope well and turn the well light on. Inclusions observed in gems in this configuration will generally appear dark against a bright background.



To configure the microscope for brightfield viewing, turn the well light on and open the baffle in the bottom of the light well.



Using the microscope in a brightfield configuration, crystal inclusions in this diamond appear to have a dark outline against a bright background.

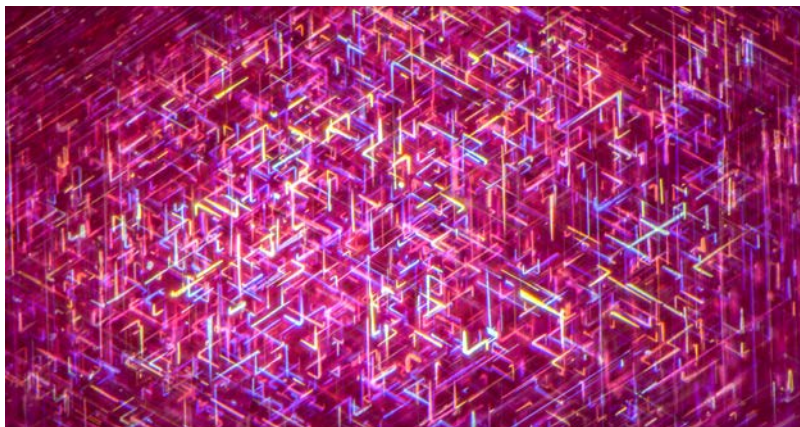
FIBER OPTIC ILLUMINATION

The fiber optic illuminator allows for highly controlled illumination at a wide range of angles. This light source is certainly the most versatile in gemology as it can be used to examine the surfaces of gems, highlight reflective inclusions, and cause light scattering inclusions to stand out in high contrast when it would otherwise be invisible.

The flexible fiber optic light guide can be used for routine gemological examination of stones over a wide variety of configurations. The firm fiber optic light guide is useful for situations when you want the light to stay in place, are taking a photomicrograph, or are sharing an observation with a colleague, for example.



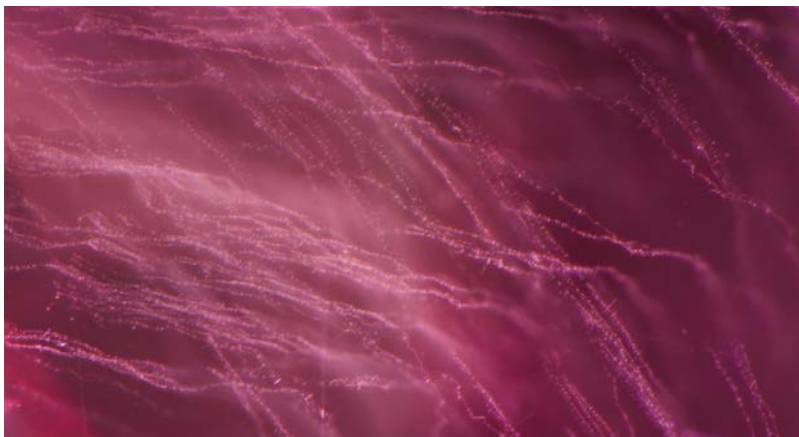
The firm fiber optic light guide, as seen above, is useful for when you want the light to stay in position for taking a photomicrograph or for sharing your observation with a colleague.



The fiber optic illuminator is ideal for examining reflective inclusions in gems like this rutile silk in a ruby.



Using the fiber optic illuminator to light the stone from a horizontal position will help to scatter light off of minute, microscopic particles that may otherwise go unseen.



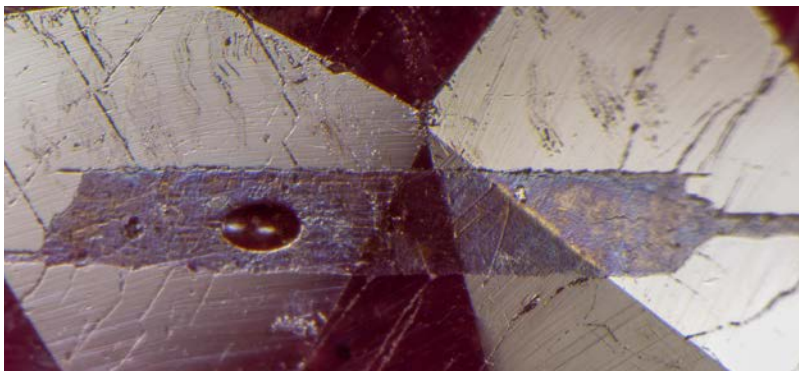
When using the fiber optic illuminator in a horizontal position, light scatters off of what are ordinarily nearly invisible decorated dislocations, causing them to stand out in high relief, as seen in this spinel.

DIFFUSE REFLECTED LIGHT AND OVERHEAD LAMP

The overhead lamp is a daylight-equivalent color temperature with diffused light that has many uses. It can be used for louping the final clarity grade of diamonds as is frequently done in the GIA Laboratory. It can also be used to carefully examine the surfaces of gemstones, making it easy to observe luster variations and detect possible treatments. The flexible neck of the lamp allows for easy positioning of the lamp in a wide range of possible configurations.



The overhead LED lamp can be useful for examining stones with diffuse reflected light. This can cause reflective inclusions to light up and can be useful for examining the surface luster of gems, which can give clues about possible treatments. The flexible neck of the lamp allows the ability to position the lamp to best highlight the subject you are examining.



The diffused reflected light from the overhead lamp can be used to examine luster differences on the surface of gemstones. This glass-filled cavity has a much lower surface luster than the surrounding ruby, which makes it readily identifiable as a lead glass-filled ruby or manufactured product.

DIFFUSED TRANSMITTED LIGHT

By adding the white diffuser plate accessory on top of the light well, you will be able to examine stones using diffused, transmitted light which will allow you to see color zoning in colored gems more easily. This can be particularly helpful when looking for curved color banding in some colors of flame fusion synthetic sapphires.



Adding a white diffuser plate accessory on top of the microscope well light will aid in examining color zoning in colored gems.

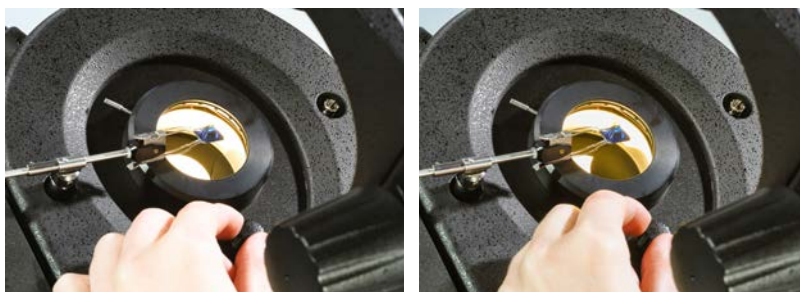


Curved color banding in this flame fusion blue sapphire was easily resolved with the help of a white diffuser plate.

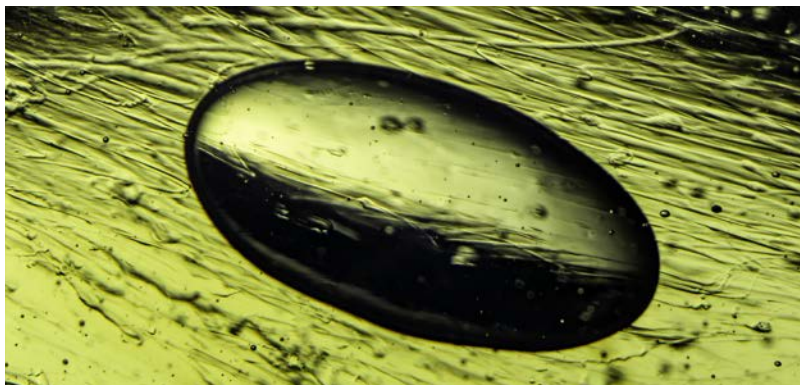
SHADOWED ILLUMINATION

Turn on the light well with the baffle in the open position. While you are observing your stone, partially close the baffle while you watch a shadow edge move across the stone. This will provide significant contrast to subtle (and sometimes nearly invisible) features in the gem.

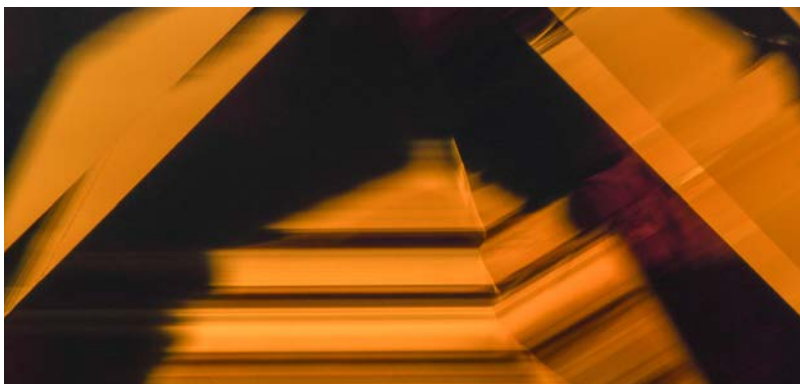
This contrast enhancement technique can be useful to aid in resolving features like flow patterns in moldavite glass as well as helping to see subtle curved striae in flame fusion synthetic rubies. You can also experiment with variations on this shadowing technique by partially closing the iris diaphragm or by partially inserting any opaque black piece of paper or foil between the gemstone and light source.



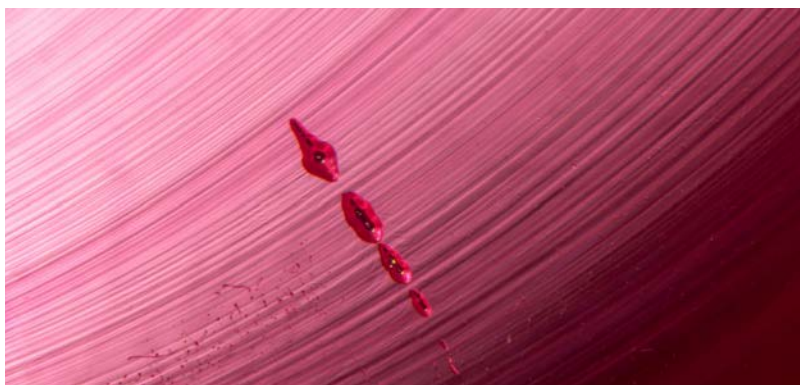
Starting with the baffle open (left image), you can slowly rotate the baffle to a partially closed position (right image) while observing a shadow edge, which causes ordinarily low contrast details to stand out in high relief in your gemstone.



Shadowed illumination is responsible for bringing out high contrast details in otherwise low contrast subjects, like the flow lines in this moldavite glass.



The visibility of subtle growth structures, sometimes called “graining”, in this spessartine garnet were revealed using a shadowed illumination technique.



Shadowed illumination makes subtle curved striae in synthetic rubies stand out in high contrast.

Care and Maintenance

CLEANING OPTICS

Inspect the surfaces of the ocular lenses. Blow off any loose dirt or dust with a dry air duster. DO NOT use canned air as the propellant can leave a film on the lens surface.

DO NOT dry wipe a lens surface as even a dry tissue has the potential to cause a scratch. Use a tissue or cotton swab with dedicated lens cleaning solution to clean the surfaces of the oculars in a circular motion from the center outward. Use each swab or tissue only once. Take care not to scratch delicate optical surfaces.

CLEANING OTHER SURFACES

Other surfaces can be dusted with a lint free cloth. Take care around the iris diaphragm in order to preserve the integrity of the blades. Excess pressure or moisture can damage the iris blades.

FUSE REPLACEMENT

There is a 2.5A slow-blow fuse located next to the power cord on the base. This is a user-serviceable fuse and replacements can be obtained from GIA Instruments (SKU: 811019) or local electronics suppliers.

Specifications

MAGNIFICATION AND FIELD OF VIEW

Ocular Magnification	Zoom Magnification	Total Magnification	Approximate Field of View
10x	0.8x	8x	27.5 mm
10x	1x	10x	22 mm
10x	2x	20x	11 mm
10x	3x	30x	7.3 mm
10x	4x	40x	5.5 mm
10x	5x	50x	4.4 mm
15x	0.8x	12x	20 mm
15x	1x	15x	16 mm
15x	2x	30x	8 mm
15x	3x	45x	5.3 mm
15x	4x	60x	4 mm
15x	5x	75x	3.2 mm

Technical Specification

Technical Specifications for GIA Microscope

Input Voltage: AC 100v-240v

HZ: 50-60

Current: 2.5 A max.

Bulb type: LED

Fuse Type: 2.5A 250v Slo Blo (5mm x 20mm)

Environmental

For indoor use only, Pollution Degree 2, Installation Category (CATII)

Altitude: 2000m MAX

Ambient temperature: 5° C to 40° C

Max Relative Humidity: 80% for temperatures up to 31° C

Decreasing Linearly to 50% Relative humidity at 40° C

Mains supply voltage fluctuations up to +/- 10% of the nominal voltage



LIMITED WARRANTY

Subject to the exclusions, limitations, and conditions set forth below, Gemological Institute of America, Inc. and affiliates ("GIA") warrants to the original purchaser of the GIA® Gemolite® NXT instrument (hereinafter, the "Gemolite® NXT") that it will be free from defects in material and workmanship (each a "defect" and a Gemolite® NXT with a defect is said to be "defective"), when subjected to normal, proper, and intended usage by properly trained and informed users, for twelve (12) months from the date of shipment of the Gemolite® NXT to the original purchaser (the "Warranty Period").

LIMITATION OF USE

The result from using the Gemolite® NXT should not be considered analogous to or a substitute for information provided by GIA on a GIA Report and should not be represented or interpreted as the opinion of GIA.

GIA DOES NOT WARRANT THAT THE GEMOLITE® NXT IS ERROR-FREE OR WILL ACCOMPLISH ANY PARTICULAR RESULT.

SOLE AND EXCLUSIVE REMEDY

For any defective Gemolite® NXT that is returned to GIA by the original purchaser during the Warranty Period in compliance with the process specified below, GIA will, at GIA's option, repair or replace the defective Gemolite® NXT. A replacement may be a new or refurbished Gemolite® NXT, at the sole discretion of GIA, and any such replacement will continue to be subject to the warranty provided by the manufacturer, if any.

THE FORGOING REMEDY SHALL BE THE SOLE AND EXCLUSIVE REMEDY IN THE EVENT OF A DEFECTIVE GEMOLITE® NXT.

EXCLUSIONS FROM THE LIMITED WARRANTY

A Gemolite® NXT will not be deemed defective and GIA will not have any obligation to repair or replace a Gemolite® NXT as a result of any one or more of the following: (i) normal wear and tear, (ii) accident, disaster, or event of force majeure, (iii) misuse, fault, or negligence of or by any user or other person, (iv) use of the Gemolite® NXT in a manner for which it was not designed, (v) causes external to the Gemolite® NXT such as, but not limited to, power failure, electrical power surges, exposure to fire, water, other liquids, excessive humidity or temperature, (vi) improper storage or handling of the Gemolite® NXT, or (vii) use of the Gemolite® NXT in combination with equipment or materials not supplied by GIA.

ANY MAINTENANCE, REPAIR, OTHER SERVICE, MODIFICATION, ALTERATION, OR OTHER TAMPERING WITH THE GEMOLITE® NXT (INCLUDING BUT NOT LIMITED TO OPENING OR ATTEMPTING TO OPEN THE GEMOLITE® NXT OR ANY PART OF THE GEMOLITE® NXT, OR ANY ATTEMPT AT SELF-REPAIR OF THE GEMOLITE® NXT, ETC.) THAT IS PERFORMED BY ANY PERSON OR ENTITY OTHER THAN GIA WITHOUT GIA'S PRIOR WRITTEN APPROVAL, OR THE USE OF ANY REPLACEMENT

PART(S) NOT SUPPLIED BY GIA, SHALL IMMEDIATELY VOID AND CANCEL ALL WARRANTIES WITH RESPECT TO THE AFFECTED GEMOLITE® NXT.



GEMOLITE® NXT WARRANTY CLAIM PROCESS

If the original purchaser of the Gemolite® NXT believes that it is defective, the original purchaser shall promptly contact GIA technical service at +1 760 603 4200 or instrumentsupport@gia.edu. The original purchaser will be required to provide to the GIA customer service representative the Gemolite® NXT product model number and serial number, the date of purchase, and detail of the alleged defect and as necessary additional information to support the alleged defect and use of the Gemolite® NXT. After (a) GIA's review of the information provided by the original purchaser, (b) GIA's confirmation that the Warranty Period has not yet expired, and (c) GIA's belief that the Gemolite® NXT is likely defective, GIA will provide the original purchaser a Return Material Authorization ("RMA"). An RMA may include specific handling and labeling instructions and the original purchaser will comply with such instructions.

If the Gemolite® NXT is returned to GIA without an RMA or without the proper handling and labeling, the delivery of the Gemolite® NXT may be refused by GIA.

After receipt of an RMA from GIA, the original purchaser may return the allegedly defective Gemolite® NXT to GIA to the address specified by the GIA customer service representative with all shipment, insurance, and applicable costs prepaid by the original purchaser. If the Gemolite® NXT is being returned within the thirty (30) day period after the original shipment of the Gemolite® NXT to the original purchaser and it is in fact defective, then GIA will reimburse the original purchaser the reasonable shipment and insurance costs. If the Gemolite® NXT is being returned more than thirty (30) days after shipment of the Gemolite® NXT to the original purchaser and the Gemolite® NXT is in fact defective, then GIA may, in its sole discretion, reimburse the original purchaser the reasonable shipment and insurance costs.

Any returned Gemolite® NXT must be packaged in the original packaging or in packaging that is described in the RMA or is otherwise approved in writing (email sufficient) in advance by GIA and which adequately protects the Gemolite® NXT during shipment to GIA or GIA may refuse the delivery. Any loss or damage to the Gemolite® NXT that occurs during shipment to GIA will be at the original purchaser's sole risk.

If the returned Gemolite® NXT is defective, then GIA will provide one of the remedies set forth above. Replacement parts included by GIA in a repaired Gemolite® NXT may be new or refurbished, at the sole discretion of GIA. All parts that are replaced shall become the property of GIA.

Shipment to the original purchaser of the repaired or replacement Gemolite® NXT shall be at GIA's cost and expense. Any loss or damage to the Gemolite® NXT that occurs during return shipment by GIA to the original purchaser will be at GIA's sole risk.

If GIA determines that a Gemolite® NXT returned to GIA is not defective or is not covered by the limited warranty set forth above, the original purchaser shall pay or reimburse GIA for all costs of investigating and responding to such request at GIA's then-prevailing time and materials rates, including but not limited to the cost of shipping and applicable transport fees of the Gemolite® NXT to the original purchaser.

If GIA provides repair services or replacement parts that are not covered by the limited warranty, the original purchaser shall pay GIA for such services and parts at GIA's then current rates and prices.



DISCLAIMER OF ALL OTHER WARRANTIES

EXCEPT FOR THE LIMITED EXPRESS WARRANTY SET FORTH ABOVE, GIA, ITS SUPPLIERS, AND ITS LICENSORS AND MANUFACTURERS MAKE NO OTHER REPRESENTATIONS, WARRANTIES, GUARANTEES OR CONDITIONS, WHETHER EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, WRITTEN OR ORAL, WITH RESPECT TO THE GEMOLITE® NXT OR WITH RESPECT TO THE RESULTS THAT WILL OR WILL NOT BE ACHIEVED USING THE GEMOLITE® NXT. THE GEMOLITE® NXT IS PROVIDED "AS IS". ALL IMPLIED WARRANTIES ARE HEREBY DISCLAIMED, INCLUDING WITHOUT LIMITATION ALL IMPLIED WARRANTIES AND CONDITIONS OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT OF THIRD-PARTY INTELLECTUAL PROPERTY RIGHTS, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING, USAGE, TRADE, OR ANY OTHER MANNER.

LIMITATION OF LIABILITY

TO THE FULL EXTENT PERMITTED BY APPLICABLE LAW, NEITHER GIA NOR ANY OF ITS SUPPLIERS OR LICENSORS OR MANUFACTURERS SHALL BE LIABLE TO THE ORIGINAL PURCHASER OR ANY OTHER PERSON OR ENTITY FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, EXEMPLARY, INCIDENTAL, RELIANCE, OR PUNITIVE DAMAGES, LOST REVENUES, PROFITS OR BUSINESS, OR THE COST OF PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES ARISING FROM OR RELATED TO THE GEMOLITE® NXT, THE USE OF THE GEMOLITE® NXT, OR THE RESULTS OR OUTPUT FROM THE GEMOLITE® NXT, EVEN IF AN AUTHORIZED REPRESENTATIVE OF GIA IS AWARE OF OR IS ADVISED OF THE POSSIBILITY OR LIKELIHOOD OF ANY SUCH DAMAGES OR AMOUNTS.

TO THE FULL EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL GIA'S TOTAL CUMULATIVE LIABILITY TO THE ORIGINAL PURCHASER OR ANY OTHER PERSON OR ENTITY ARISING FROM OR RELATED TO THE GEMOLITE® NXT, THE USE OF THE GEMOLITE® NXT, OR THE RESULTS OR OUTPUT FROM THE GEMOLITE® NXT EXCEED THE PRICE PAID TO GIA FOR THE GEMOLITE® NXT OR IF NO PURCHASE PRICE WAS PAID TO GIA, THEN THE SUM OF ONE HUNDRED U.S. DOLLARS (US \$100).

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