

# Gemology Equipment

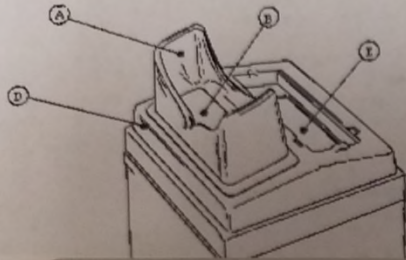
For Review







**MODEL C-10 CHROMATO-VUE® CABINET**

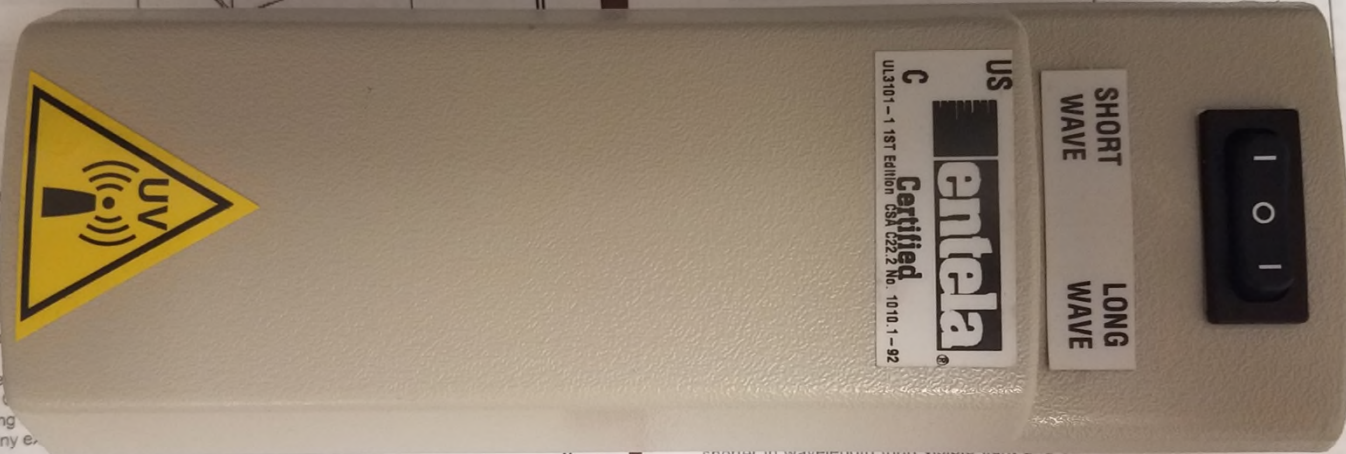


malfunction occurs during the warranty period, UVP shall examine the inoperative equipment and have the option of repairing or replacing any part(s) which, in the judgment of UVP, were originally defective or became so under conditions of normal usage and service.

No warranty shall apply to any instrument, or part thereof, that has been subject to accident, negligence, alteration, abuse or misuse by the end-user. Moreover, UVP makes no warranties whatsoever with respect to parts not supplied by UVP or that

**Compact & Handheld  
Ultraviolet Lamps  
OPERATING INSTRUCTIONS**

1. Lift fl...
2. Check...
3. Slip f...  
portio...
4. Place...  
Your...  
placing...  
out any e...



**UVP**

UVP INC  
2066 W. 11TH STREET  
UPLAND, CA 91786

shorter in wavelength than visible light.

**Longwave ...** The ultraviolet energy nearest to the visible light range (commonly called black light), activates fluorescence in numerous natural substances and manufactured materials.

**Midrange ...** The ultraviolet energy representing the shortest wavelengths found in sunlight, causing sunburn and used to fluoresce certain substances more effectively than shortwave or longwave ultraviolet light.

**Shortwave ...** The ultraviolet energy farthest from visible light, shorter than rays in sunlight, and primarily noted for its ability to fluoresce minerals for chemical analysis, and for its germicidal effects.

For information on ultraviolet lamp applications, refer to UVP's web site:

[Click on Application Bulletins](#)

Long Wave UV



Short Wave UV



## Mettler AE 500 ct Scale

### AE 500c Unpacking and Operating Instructions

#### Unpacking:

The balance is very well packed and under usual shipping conditions should protect your balance adequately. Please exercise great care when unpacking as, surprisingly, most damage is caused at this stage. I therefore suggest carefully cutting the bubble wrap from around the balance as over handling can only increase the chance of damage or dropping. The weighing pan and power cable is packed in the weighing compartment. Remove the masking tape which is placed to prevent accidental deployment of the calibration weight during shipping.

#### Installing:

Place the assembled balance on a very firm bench away from vibrations, very strong drafts, doors, windows and equipment likely to emit electromagnetic forces. With the balance connected to the power, switch it on by pressing and releasing the front control bar. There will be a display test before the balance displays 0.000. The balance should be allowed to acclimate to its new environment, ideally, for 12 hours before attempting to calibrate and use. Please remember this is an Analytical balance with many components which must stabilize before reproducible readings can be achieved.  
THE BALANCE MUST BE CALIBRATED BEFORE USE See Below.

#### General:

The AE 500c is a Single Range Electronic Balance.  
The range is 500 ct x 0.001ct.

There are only TWO controls on an AE balance, they are the Multi function front control bar (located on the front base below the display) and the Calibration control lever (located on the right hand side on the base, below R/H door). A remote hand switch or foot switch for taring can be connected at the rear. Interfacing to a printer or computer can be achieved only by the use of an optional RS232 interface unit which attaches to the rear of the balance.



**Mettler**  
**AE 500C**

0.000

ct

↗ RE-ZERO

↘ MODE ↘

↘ ON/OFF ↗

Scale Shown With Removable  
Custom Specific Gravity Option.  
A MUST for any Serious  
Gemologist.







METTLER

Mettler  
AS 001

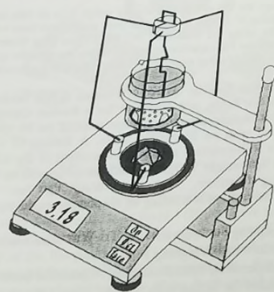
Shown With Specific Gravity  
Accessory Removed







**Instruction Manual  
Universal Specific  
Gravity Kit for an  
Electronic Scale**



**Produced by Mineralab**

**Mineral Tables**

furnished by

**Mineralab**

A database of 300 Minerals sorted by Specific Gravity, along with seven other characteristics, including Mohs' Hardness, Refractive Index, Color, Streak, Luster, Crystal System, and Chemical Composition

**Instruction Manual  
Universal Specific  
Gravity Kit for an  
Electronic Scale**



**Produced by Mineralab**

- Crust System**
- A = Amphibole
  - H = Hornblende
  - I = Illite
  - M = Muscovite
  - O = Olivine
  - T = Titanite
  - Tr = Trondhjemite
  - pl = plagioclase

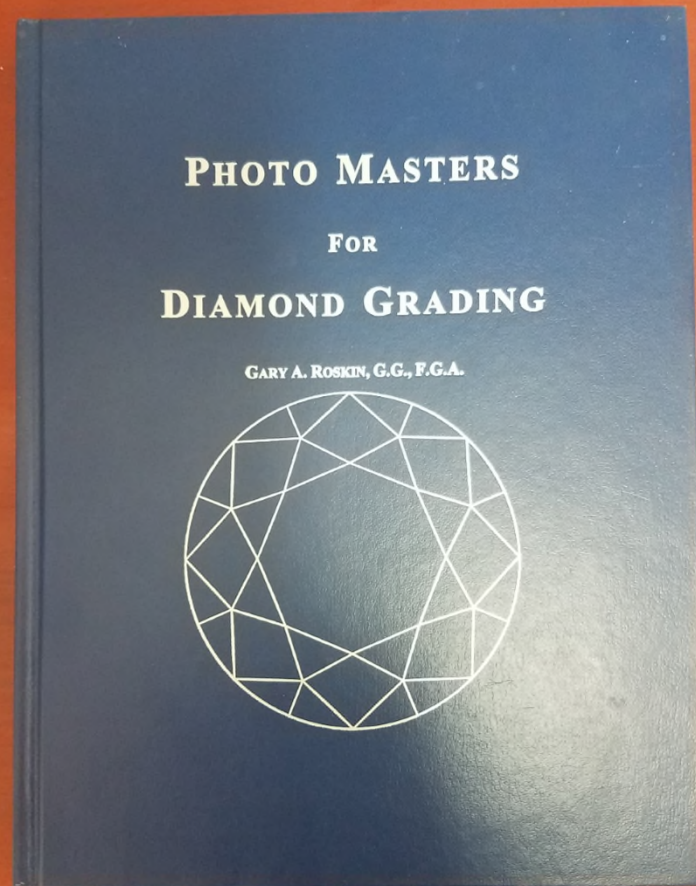
**Mineral Table Legend**

**Chemical Composition**  
The numbers within the chemical formulas are of 2 types: those in subscript (those in atom) which are enclosed in { } < > and superscript (those which are enclosed in { } < > and subscript) which are not enclosed in any brackets.





A Brand New Copy of Photo Masters for Diamond Grading by Gary Roskin. Sadly, he never got the chance to use it.



GIA Gem Instruments  
Polariscope with Original  
Dust Cover and Paperwork





**GIA**  
GEMOLOGICAL INSTITUTE OF AMERICA®  
ESTABLISHED 1931

**USER GUIDE**



start here>



GIA  
GEMOLOGICAL INSTITUTE OF AMERICA  
Instruments

Poster with gemstone information and a blue gemstone image.













Always pays to have an extra on hand



## GIA Gem Instruments Utility Lamp

Use one of these with the refractometer and you will be amazed. Highly coveted and no longer available.

















GIA Gem Instruments Duplex II Refractometer with Original Dust Cover and Paperwork





# GEM USA

GEMSTONE	R. I.	VAR. BIRE.	GEMSTONE	R. I.	VAR. BIRE.
LOW ZIRCON .....	1.81-1.815	±.020 .002 .003	IDOCRASE .....	1.713-1.718	±.014 VAR.
SPESSARTITE .....	1.81	±.010 S. R.	ZOISITE .....	1.691-1.704	±.003 .013
ALMANDITE .....	1.80	(+.030 -.040) S. R.	DIOPSIDE .....	1.675-1.701	(+.029 -.007) .026
CORUNDUM .....	1.762-1.770	(+.007 -.003) .008	JADEITE .....	1.654-1.667	USUALLY 1.66
SYN. CORUNDUM .....	1.762-1.770	.008	JET .....	1.66	±.020 S. R.
RHODOLITE .....	1.760	±.010 S. R.	PERIDOT .....	1.654-1.690	±.020 .036
PYROPE .....	1.746	(+.010 -.026) S. R.	SPODUMENE .....	1.660-1.676	±.005 .016
CHRYSOBERYL .....	1.746-1.755	±.004 .009	MALACHITE .....	1.660-1.910	.250
GROSSULARITE .....	1.735	(+.015 -.035) S. R.	ENSTATITE .....	1.658-1.668	±.005 .010
SYN. SPINEL .....	1.73	±.010 S. R.	CORAL .....	1.486-1.658	.172
SPINEL .....	1.718	(+.044 -.006) S. R.	PEARL SHELL .....	1.530-1.686	.156



DIAMOND · HEMATITE · SYNTHETIC RUTILE · STRONTIUM TITANATE  
ZIRCON ( MEDIUM-HIGH ) · ANDRADITE · SYNTHETIC GARNET  
ABOVE LIMIT OF REFRACTOMETER

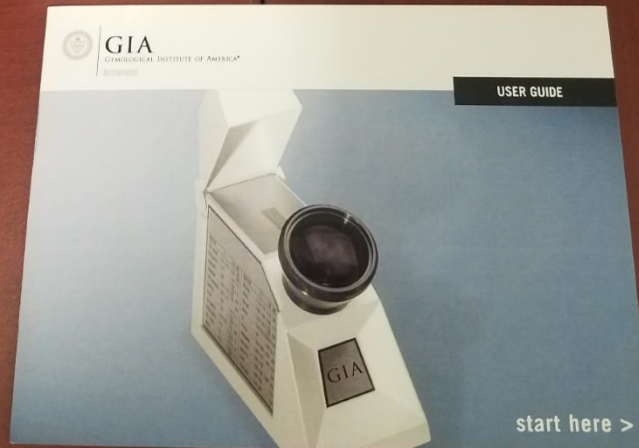
GEMSTONE	R. I.	VAR.	BIRE.	GEMSTONE	R. I.	VAR.	BIRE.
TOURMALINE	1.624-1.644	±.005	.020	AMBER	1.54		S. R.
TOPAZ	1.619-1.627	±.010	.008	CHALCEDONY	1.535-1.539		
TURQUOIS	1.610-1.650			MICROCLINE	1.522-1.530		.008
NEPHRITE	1.606-1.632			ORTHOCLASE	1.518-1.526		.008
BERYL	1.577-1.583	±.016	(.006 .009)	OLIGOCLASE	1.532-1.542	±.007	.010
SYN. EMERALD: (OVERGROWTH)	1.575-1.581		.006	LAPIS-LAZULI	1.50		S. R.
(HYDROTHERMAL)	1.568-1.573	±.002		SODALITE	1.483	±.003	S. R.
(FLUX-FUSION)	1.561-1.564		.003	OPAL	1.45	(+.020 -.080)	S. R.
SERPENTINE	1.56-1.57		-.07	GLASS-PLASTICS	1.48 TO 1.70		(USUAL)
LABRADORITE	1.559-1.568		.009	ASSEMBLED STONES	VARIABLE		
QUARTZ	1.544-1.553		.009				



Shown here with the GIA  
Gem Instruments Utility  
Lamp.

The glass is coated with  
petroleum jelly to protect  
it while not in use.









GIA Gem Instruments Polarizing Filter 396000





GIA Gem Instruments Diamond Lite

**GEM**

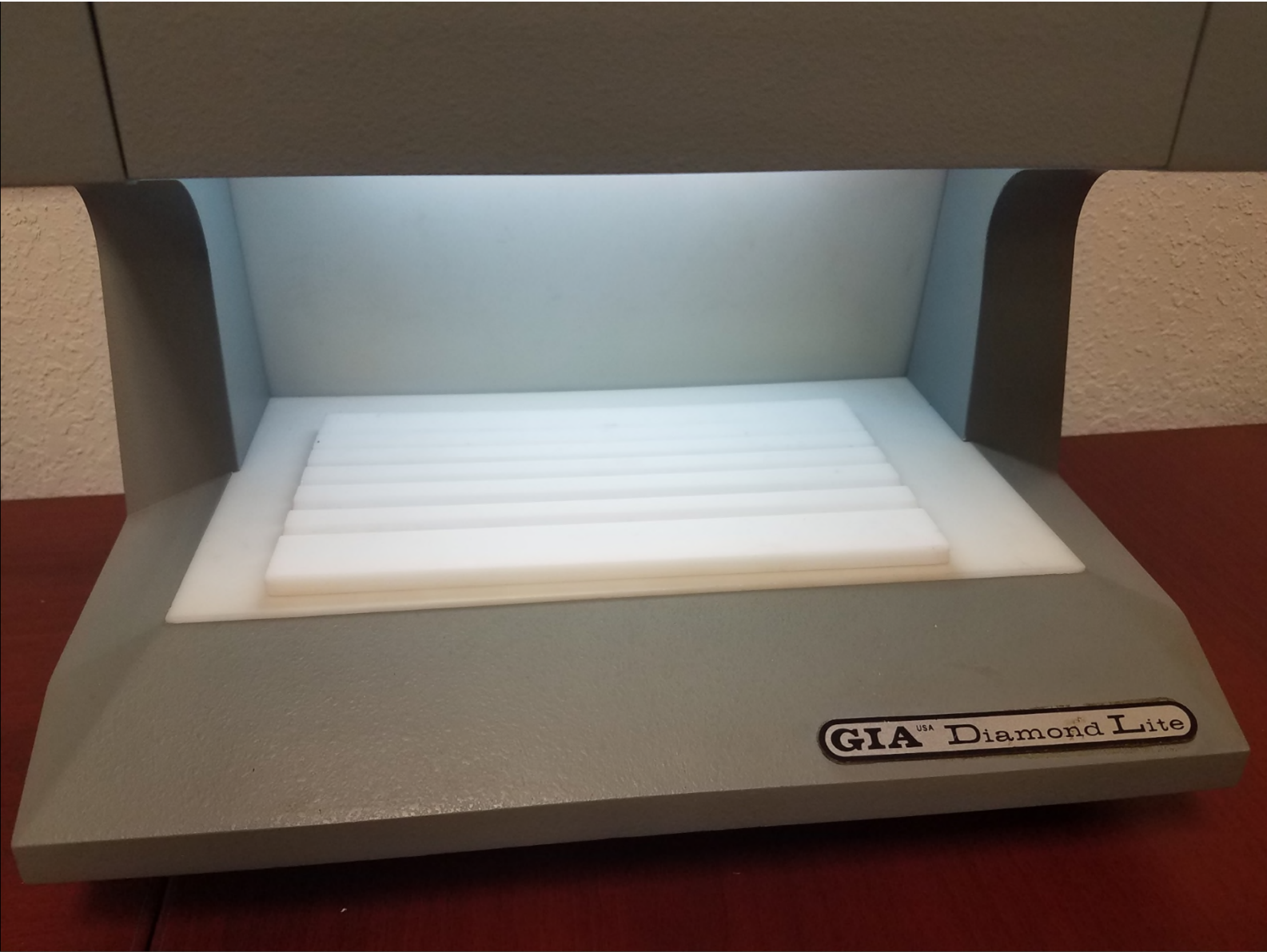
**INSTRUMENTS**

SANTA MONICA

U.S.A.



**GIA** <sup>USA</sup> **Diamond Lite**



GIA<sup>USA</sup> Diamond Lite

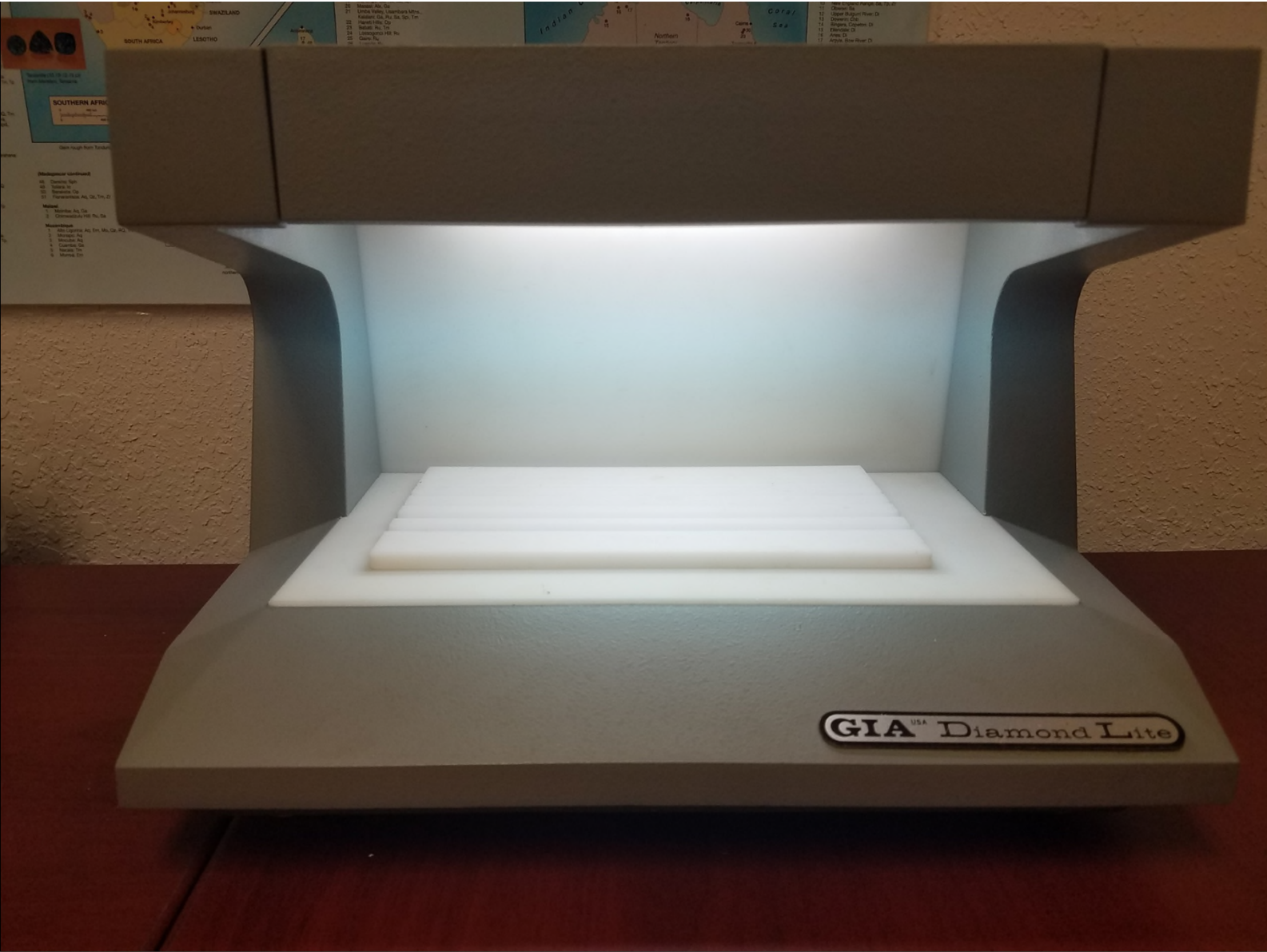












GIA<sup>USA</sup> Diamond Lite





M  
1.63 ct

2466

**ELLIN'S DIAMONDS, INC.**  
1323 HARDEN LANE • BALTIMORE, MD 21208

INSTRUCTIONS

1. When color grading, always use fluorescent lighting. Desk-top fluorescent lights are good -- daylight fluorescent tubes are preferable. Always get close up under the light.
2. To perform color comparison, put the diamond being graded on the shelf inside the box. Put one Cubic Zirconia at a time next to the diamond until you match the color of the Cubic Zirconia to the color of the diamond. Make certain that the stones sit along the shelf with the table facing down and the culet facing up and

Ellin's Very high quality CZ Master Set for diamond grading, which even has by special order, the M Stone that isn't included in the sets.

## GIA Gem Instruments Fiber Lite

If you have never used one, it's the gold standard. This light is the secret to getting good reading with even a cheap spectroscope.

Sadly, like most of the Gem Instruments Line, it has been discontinued.





GIA Gem  
Instruments  
pocket Darkfield  
Loupe. A must if  
you're buying  
loose stones  
outside your lab.







Luminox

AA MAG INST  
POWER

GIA Gem  
Instruments  
Chelsea Color  
Filter 469000



GIA Gem  
Instruments  
Calcite  
Dichroscope  
427000



GIA Gem  
Instruments  
Spectroscope



Large OPL Desktop  
Model  
Spectroscope with  
Desktop Stand and  
Colin Winter's  
Book.

This with the GIA  
Fiber Lite makes  
an amazing  
combination.

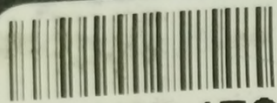


Kruss prism  
Spectroscope to find  
those hard to see  
markers that can be  
elusive in defraction  
grating style scopes



**WARNING**

Should the slit become dirty, it may be cleaned by lightly stroking with a fine brush. On no account should the slit come into contact with a solid object as it is a fine precision machined component and thus susceptible to damage.



**GMKR1504**

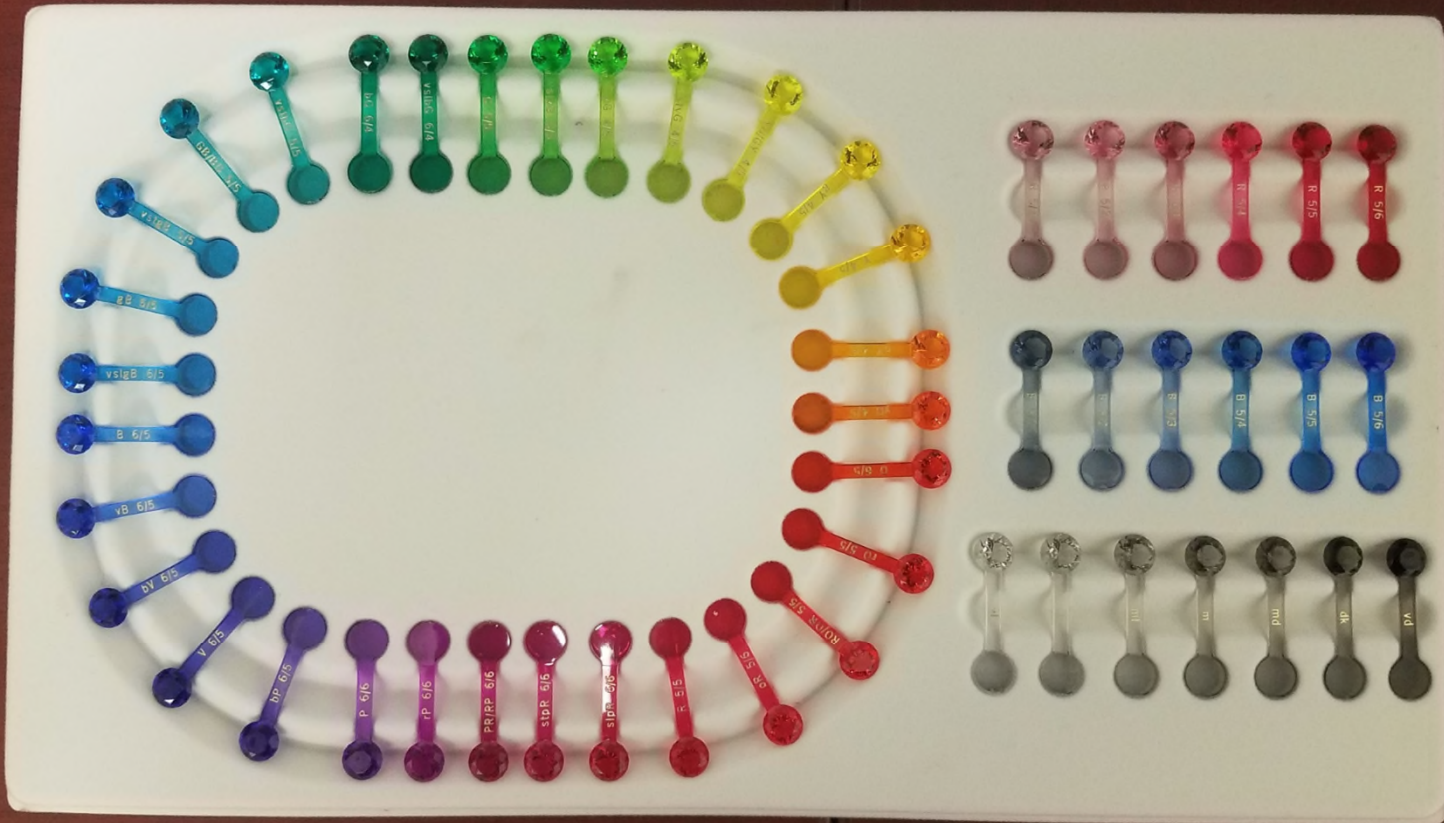
E07

KR HANDSPECTROSCOPE/WAVELENGTH

A-04-F

Spectroscope

50 Piece GIA Gem Set – Like New

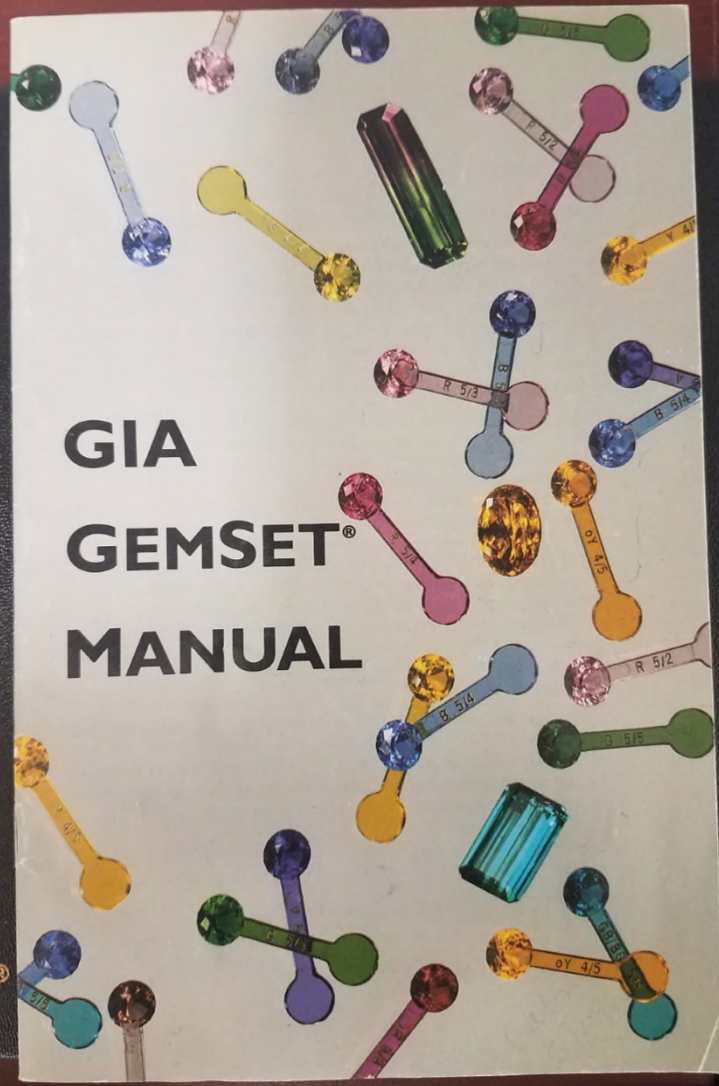




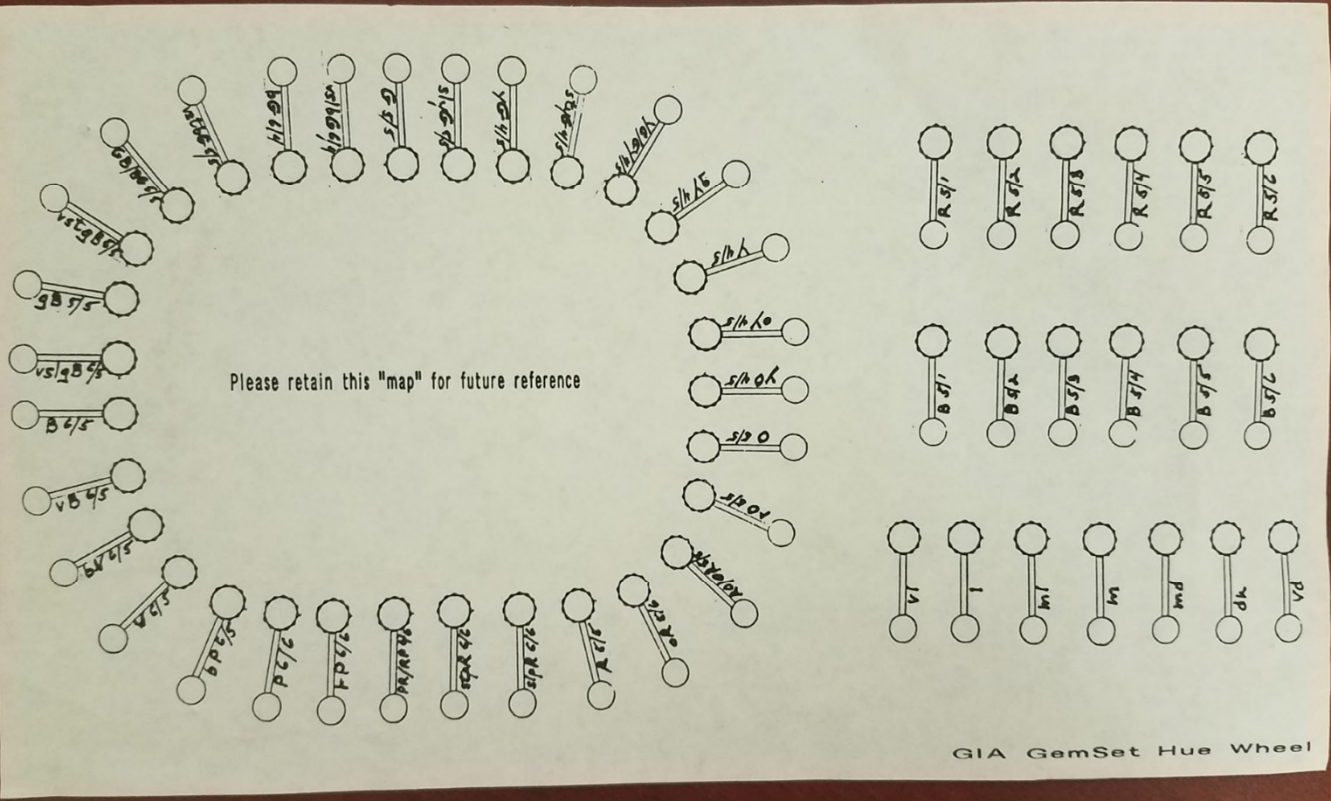
PANTONE®

**GIA**  
*GemSet*®

**GIA  
GEMSET®  
MANUAL**



NE®



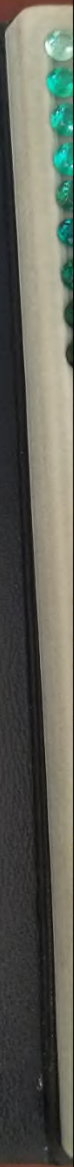
GIA GemSet Hue Wheel

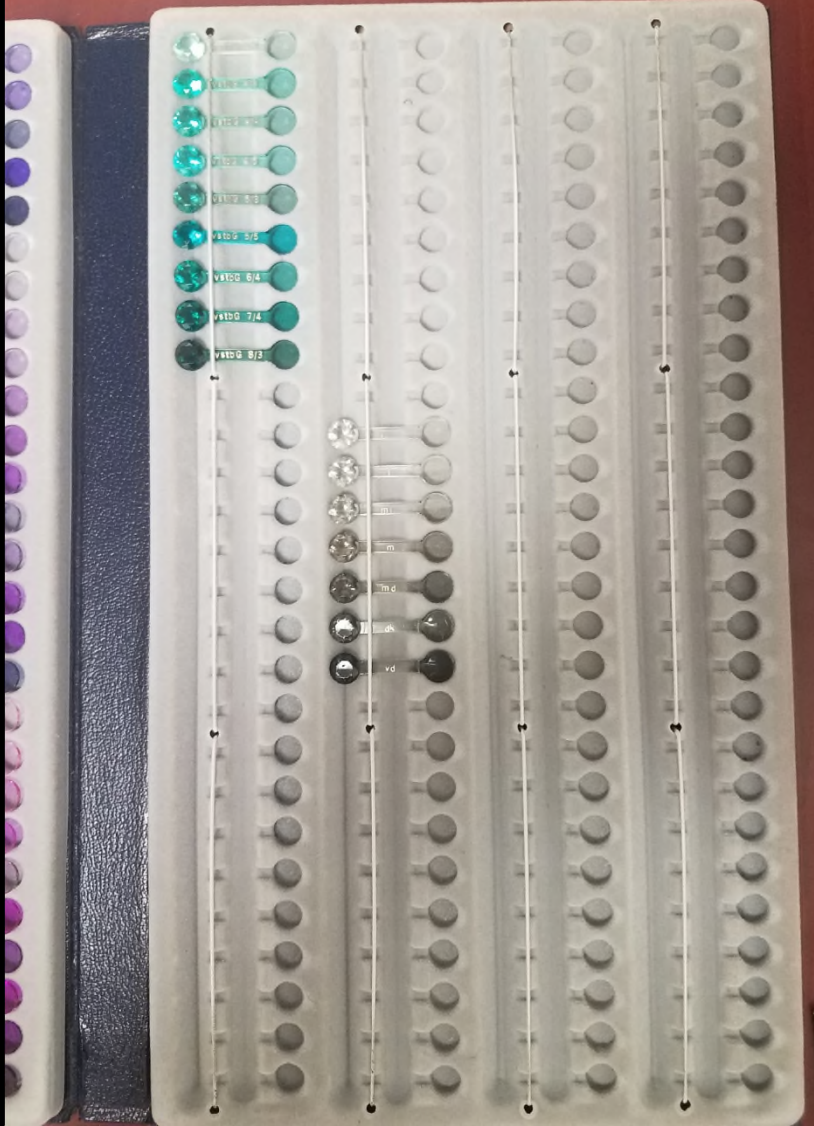
340 Pieces Total in this GIA Gem Set – This one was bought used as they are so hard to find and is not in the same “like new” condition as the 50 piece set.



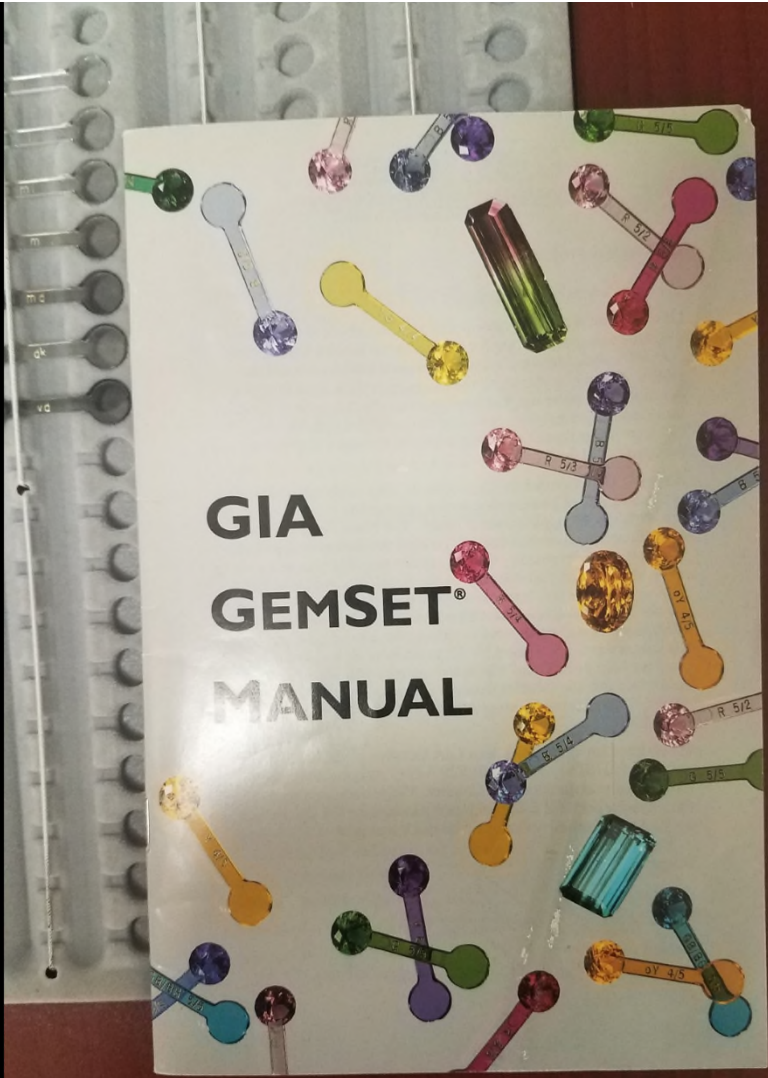












**GIA**  
**GEMSET®**  
**MANUAL**

### Appendix C Order of GIA GemSet Samples in Tray 1

Use these tables to correctly replace the pieces should they get out of order. You can also use these tables to find out the color coding for a lost piece you want to replace.

PR/RP 2/1	slpR 4/4	oR 4/5	ro 6/5
PR/RP 2/3	slpR 5/4	oR 5/5	ro 7/3
PR/RP 3/3	slpR 5/5	oR 5/6	ro 8/3
PR/RP 4/2	slpR 6/3	oR 6/3	O 2/2
PR/RP 4/3	slpR 6/5	oR 6/4	O 3/3
PR/RP 4/5	slpR 6/6	oR 6/5	O 3/4
PR/RP 5/3	slpR 7/4	oR 7/4	O 4/3
PR/RP 5/6	slpR 8/3	oR 8/3	O 4/5
PR/RP 6/3	R 2/2	RO/OR 2/2	O 5/2
PR/RP 6/4	R 3/2	RO/OR 2/3	O 5/4
PR/RP 6/6	R 3/4	RO/OR 3/2	O 5/5
PR/RP 7/4	R 4/3	RO/OR 3/4	O 6/3
PR/RP 8/2	R 4/5	RO/OR 4/3	O 6/5
stpR 2/3	R 5/1	RO/OR 4/5	O 7/3
stpR 3/3	R 5/2	RO/OR 5/4	O 8/2
stpR 4/4	R 5/3	RO/OR 5/5	yo 2/3
stpR 5/4	R 5/4	RO/OR 6/3	yo 3/3
stpR 5/5	R 5/5	RO/OR 6/4	yo 4/4
stpR 5/6	R 5/6	RO/OR 7/4	yo 4/5
stpR 6/4	R 6/3	RO/OR 8/2	yo 5/4
stpR 6/5	R 6/5	ro 2/3	yo 5/5
stpR 6/6	R 7/3	ro 3/4	yo 6/3
stpR 7/3	R 7/4	ro 4/3	yo 6/4
stpR 8/3	R 8/2	ro 4/5	yo 7/3
slpR 2/3	oR 3/4	ro 5/4	oY 2/3
slpR 3/3	oR 4/3	ro 5/5	oY 3/4
slpR 4/3	oR 4/4	ro 6/4	oY 3/5

### Appendix C Order of GIA GemSet Samples in Tray 2

oY 4/4	YG/GY 3/3	slyG 4/5	vsibG 7/3
oY 4/5	YG/GY 3/4	slyG 5/3	bg 2/3
oY 5/4	YG/GY 4/3	slyG 5/5	bg 3/3
oY 5/5	YG/GY 4/5	slyG 6/3	bg 4/3
oY 6/4	YG/GY 5/3	slyG 6/4	bg 4/4
oY 7/4	YG/GY 5/4	slyG 8/3	bg 5/4
Y 2/2	YG/GY 6/3	G 2/2	bg 5/5
Y 3/3	YG/GY 7/3	G 3/1	bg 6/4
Y 3/4	styG 2/3	G 3/3	bg 7/3
Y 3/5	styG 3/3	G 3/4	vstbG 2/3
Y 4/3	styG 3/4	G 4/2	vstbG 4/3
Y 4/5	styG 4/3	G 4/3	vstbG 4/4
Y 5/4	styG 4/5	G 4/5	vstbG 4/5
Y 5/5	styG 5/3	G 5/1	vstbG 5/3
Y 6/5	styG 5/4	G 5/3	vstbG 5/5
Y 7/4	styG 6/4	G 5/5	vstbG 6/4
Y 8/3	styG 7/3	G 6/2	vstbG 7/4
gY 2/3	yG 2/3	G 6/4	vstbG 8/3
gY 3/4	yG 3/3	G 7/1	GB/BG 2/2
gY 3/5	yG 4/3	G 7/4	GB/BG 3/3
gY 4/3	yG 4/5	G 8/2	GB/BG 4/2
gY 4/5	yG 5/3	vsibG 2/3	GB/BG 4/4
gY 5/3	yG 5/5	vsibG 3/4	GB/BG 5/3
gY 5/4	yG 6/4	vsibG 4/4	GB/BG 5/4
gY 6/3	yG 7/3	vsibG 5/3	GB/BG 5/5
gY 7/3	slyG 2/4	vsibG 5/5	GB/BG 6/1
YG/GY 2/1	slyG 3/3	vsibG 6/4	GB/BG 6/4

**Appendix C**  
Order of GIA GemSet Samples in Tray 3

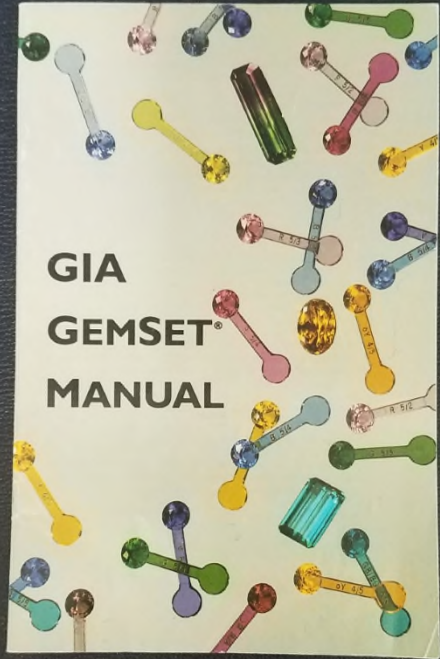
GB/BG 7/2	vslgB 7/5	vB 6/4	bp 4/4
GB/BG 8/3	vslgB 8/3	vB 6/5	bp 5/5
vstgB 2/3	B 2/2	vB 7/3	bp 6/3
vstgB 3/2	B 3/1	vB 7/5	bp 6/5
vstgB 4/3	B 3/3	bv 2/3	bp 7/4
vstgB 5/2	B 3/4	bv 3/4	P 2/1
vstgB 5/5	B 4/2	bv 4/3	P 3/1
vstgB 6/4	B 4/5	bv 4/5	P 3/4
vstgB 7/2	B 4/6	bv 5/4	P 4/3
vstgB 7/5	B 5/1	bv 5/5	P 4/5
vstgB 8/3	B 5/2	bv 6/4	P 5/5
gB 2/2	B 5/3	bv 6/5	P 5/6
gB 3/3	B 5/4	bv 7/4	P 6/3
gB 4/3	B 5/5	bv 8/3	P 6/4
gB 5/2	B 5/6	V 2/2	P 6/5
gB 5/4	B 6/2	V 3/2	P 6/6
gB 5/5	B 6/5	V 4/3	P 8/3
gB 6/3	B 6/6	V 4/4	rp 2/3
gB 7/4	B 7/2	V 4/5	rp 3/4
gB 8/1	B 7/4	V 5/2	rp 4/4
vslgB 2/2	B 8/3	V 5/5	rp 4/6
vslgB 3/3	vB 3/3	V 6/4	rp 5/3
vslgB 4/2	vB 4/3	V 6/5	rp 5/6
vslgB 4/4	vB 4/4	V 7/4	rp 6/4
vslgB 5/4	vB 4/6	V 8/1	rp 6/6
vslgB 6/3	vB 5/3	bp 2/3	rp 7/5
vslgB 6/5	vB 5/5	bp 3/3	rp 8/3

**Appendix D**  
ColorMaster Equivalents to GIA GemSet Samples.

GIA GemSet samples represent the same area in color space as the ColorMaster notations listed. Slight color differences may result from variations in individual eyesight, the environment or viewing conditions, or as a result of different media producing slightly different colors, i.e., dyestuffs versus filters and light. "X" signifies that the GIA GemSet sample is out of the range of the ColorMaster.

PR/RP 2/1 — A 38 49 15	R 5/2 — C 41 45 27	rO 7/3 — D 19 13 11
PR/RP 2/3 — A 46 41 16	R 5/3 — C 52 35 24	rO 8/3 — D 10 04 04
PR/RP 3/3 — B 90 71 29	R 5/4 — C 65 26 23	O 2/2 — A 47 47 07
PR/RP 4/2 — B 42 32 15	R 5/5 — C 78 18 23	O 3/3 — B 99 78 08
PR/RP 4/3 — B 49 28 16	R 5/6 — B 64 01 04	O 3/4 — G 41 26 32
PR/RP 4/5 — B 67 17 20	R 6/3 — D 51 51 54	O 4/3 — B 57 30 03
PR/RP 5/3 — C 43 37 53	R 6/5 — D 85 17 52	O 4/5 — B 71 26 01
PR/RP 5/6 — C 87 07 91	R 7/3 — D 19 12 24	O 5/2 — C 42 49 14
PR/RP 6/3 — C 18 12 25	R 7/4 — D 26 06 26	O 5/4 — C 57 39 03
PR/RP 6/4 — C 24 07 33	R 8/2 — D 07 06 11	O 5/5 — X
PR/RP 6/6 — C 45 00 57	oR 3/4 — G 44 21 93	O 6/3 — D 49 61 21
PR/RP 7/4 — D 19 07 78	oR 4/3 — B 58 28 06	O 6/5 — X
PR/RP 8/2 — D 05 07 27	oR 4/4 — B 68 23 05	O 7/3 — D 19 16 02
stpR 2/3 — A 50 40 13	oR 4/5 — B 78 19 05	O 8/2 — D 07 09 04
stpR 3/3 — B 93 71 25	oR 5/5 — C 78 19 14	yO 2/3 — G 66 62 95
stpR 4/4 — B 62 22 13	oR 5/6 — B 68 01 02	yO 3/3 — B 99 80 06
stpR 5/4 — C 60 25 44	oR 6/3 — D 52 52 42	yO 4/4 — B 58 33 01
stpR 5/5 — C 71 17 48	oR 6/4 — D 68 34 35	yO 4/5 — B 61 33 00
stpR 5/6 — C 96 06 55	oR 6/5 — D 85 19 32	yO 5/4 — C 51 48 00
stpR 6/4 — C 28 06 21	oR 7/4 — D 26 07 16	yO 5/5 — X
stpR 6/5 — C 36 03 25	oR 8/3 — D 11 03 07	yO 6/3 — D 42 77 09
stpR 6/6 — C 50 00 31	RO/OR 2/2 — A 47 45 09	yO 6/4 — D 47 75 00
stpR 7/3 — D 16 13 49	RO/OR 2/3 — A 53 41 08	yO 7/3 — D 15 24 00
stpR 8/3 — D 09 03 29	RO/OR 3/2 — B 87 82 15	oY 2/3 — G 60 69 82
slpR 2/3 — A 51 40 11	RO/OR 3/4 — G 43 22 79	oY 3/4 — B 89 95 02
slpR 3/3 — B 97 72 19	RO/OR 4/3 — B 58 28 06	oY 3/5 — B 95 97 00
slpR 4/3 — C 99 96 72	RO/OR 4/5 — B 72 20 04	oY 4/4 — B 47 40 01
slpR 4/4 — B 65 22 10	RO/OR 5/4 — C 65 29 12	oY 4/5 — G 17 15 00
slpR 5/4 — C 63 25 32	RO/OR 5/5 — C 77 21 10	oY 5/4 — C 43 59 00
slpR 5/5 — C 77 16 35	RO/OR 6/3 — D 51 53 37	oY 5/5 — X
slpR 6/3 — D 49 49 76	RO/OR 6/4 — D 68 35 29	oY 6/4 — X
slpR 6/5 — D 81 16 88	RO/OR 7/4 — D 26 07 11	oY 7/4 — X
slpR 6/6 — C 54 00 21	RO/OR 8/2 — D 07 05 06	Y 2/2 — A 37 57 05
slpR 7/4 — D 26 05 58	rO 2/3 — A 54 41 07	Y 3/3 — G 27 37 37
slpR 8/3 — D 10 03 22	rO 3/4 — G 43 23 64	Y 3/4 — G 28 38 18
R 2/2 — A 46 44 11	rO 4/3 — B 58 28 05	Y 3/5 — G 30 39 00
R 3/2 — B 87 80 18	rO 4/5 — B 77 21 03	Y 4/3 — B 40 44 02
R 3/4 — A 33 16 04	rO 5/4 — C 64 30 10	Y 4/5 — B 44 46 00
R 4/3 — B 57 27 08	rO 5/5 — C 75 23 07	Y 5/4 — C 36 65 00
R 4/5 — B 78 18 07	rO 6/4 — D 68 36 22	Y 5/5 — X
R 5/1 — C34 52 30	rO 6/5 — D 87 20 16	Y 6/5 — X

*GemSet*



**GIA  
GEMSET<sup>®</sup>  
MANUAL**

*GemSet*

Leica S8 APO  
DFC420 Camera  
10x/24 Leica Eyepieces 10447137  
Darkfield Lighting  
Overhead Lighting  
Flex Fiber Lighting  
Mitutoyo Digital ID-F150

2X APO Objective Add-On Lens

When the added 2X lens is use with the Mitutoyo, a Z-Reading can be obtained, and used to calculate Refractive Indexes of stones such as diamonds, and others with an R.I. above what can be found using the Refractometer.

















**KASSOY**

Leica Stereo Zoom 64x  
Gemological Microscope  
GMK775300



**KASSOY**

Office and Warehouse  
16 Midland Avenue  
Roseland, NY 11061

TOLL FREE: 1-800-4-KASSOY  
1-800-452-7789  
TEL: 516-942-0400  
FAX: 516-942-0402

NYC Showroom  
28 West 47 Street  
New York, NY 10036  
TEL: 212-719-2291

www.kassoy.com • e-mail: [info@kassoy.com](mailto:info@kassoy.com)

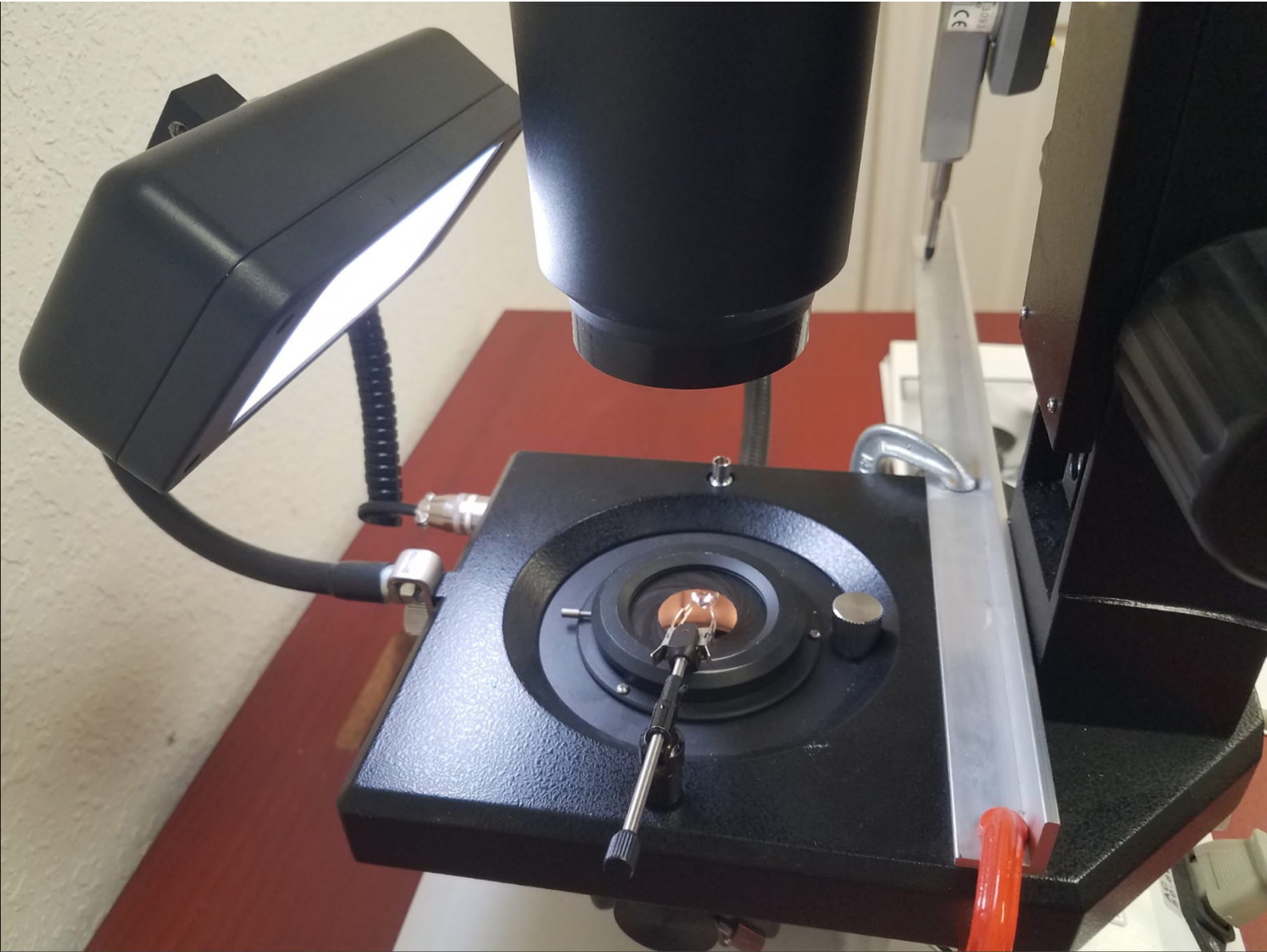


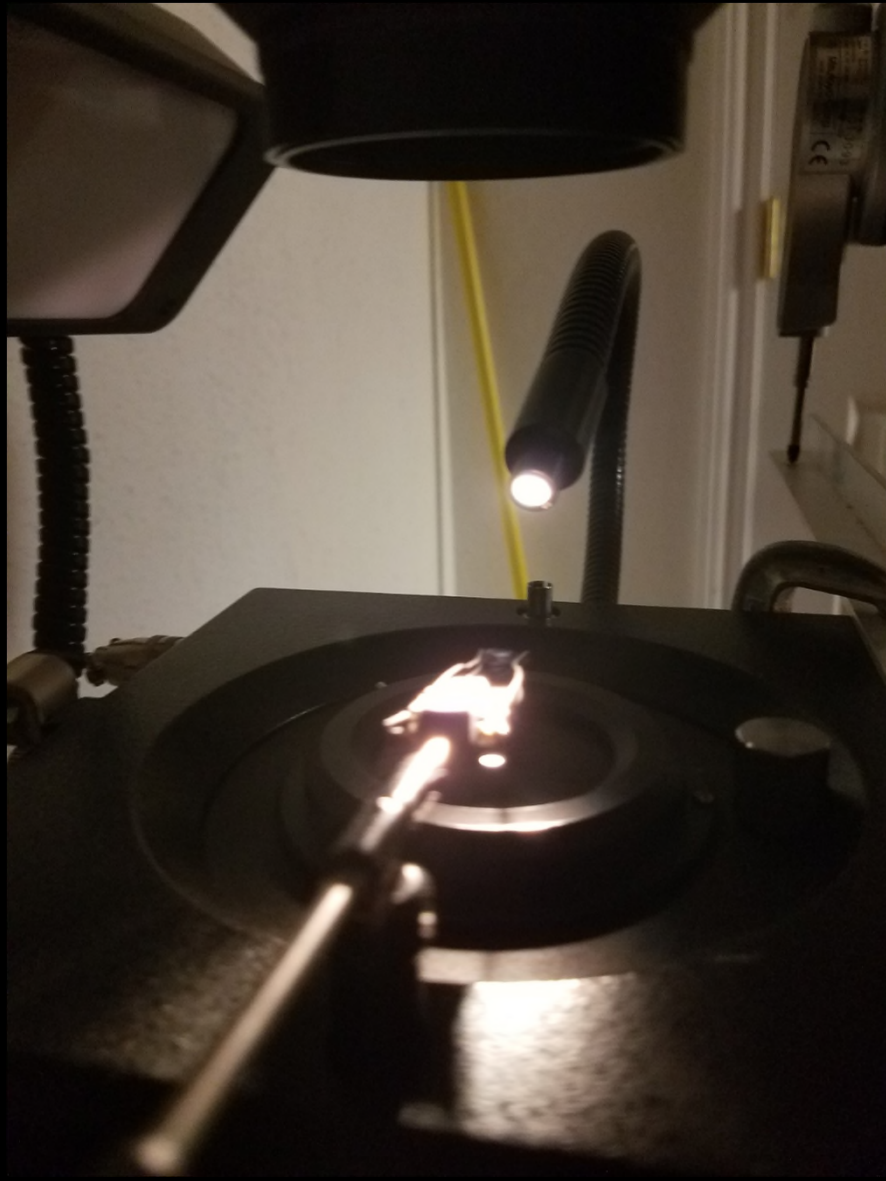
**Leica S8 APO**

Visibly Better

StereoZoom® Leica S8 APO: fully apochromatic stereomicroscope with 8:1 zoom,  
300 Lp/mm resolution and peerless 70 µm depth of field  
for research, medicine and education

**Leica**  
MICROSYSTEMS











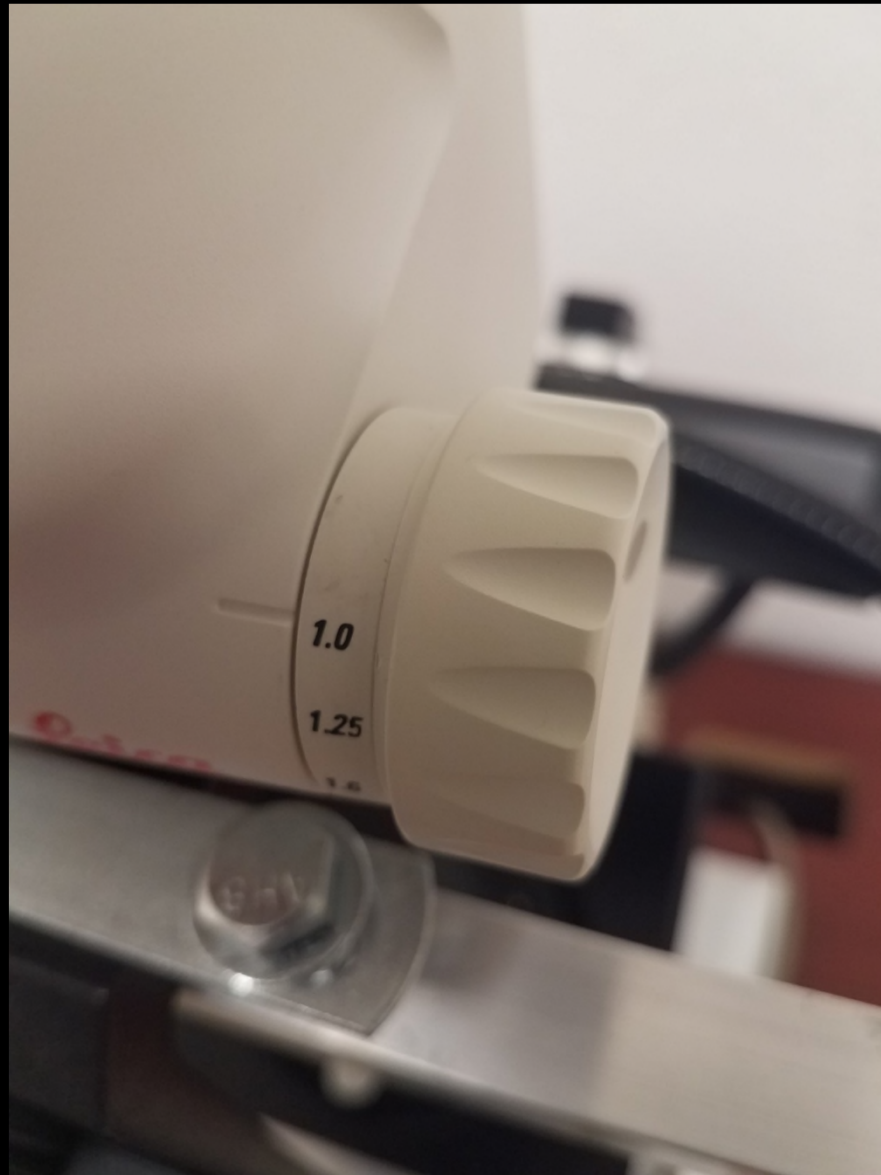
**LEICA S8AP0**



10x/23 LEICA 10447137







**Mitutoyo**

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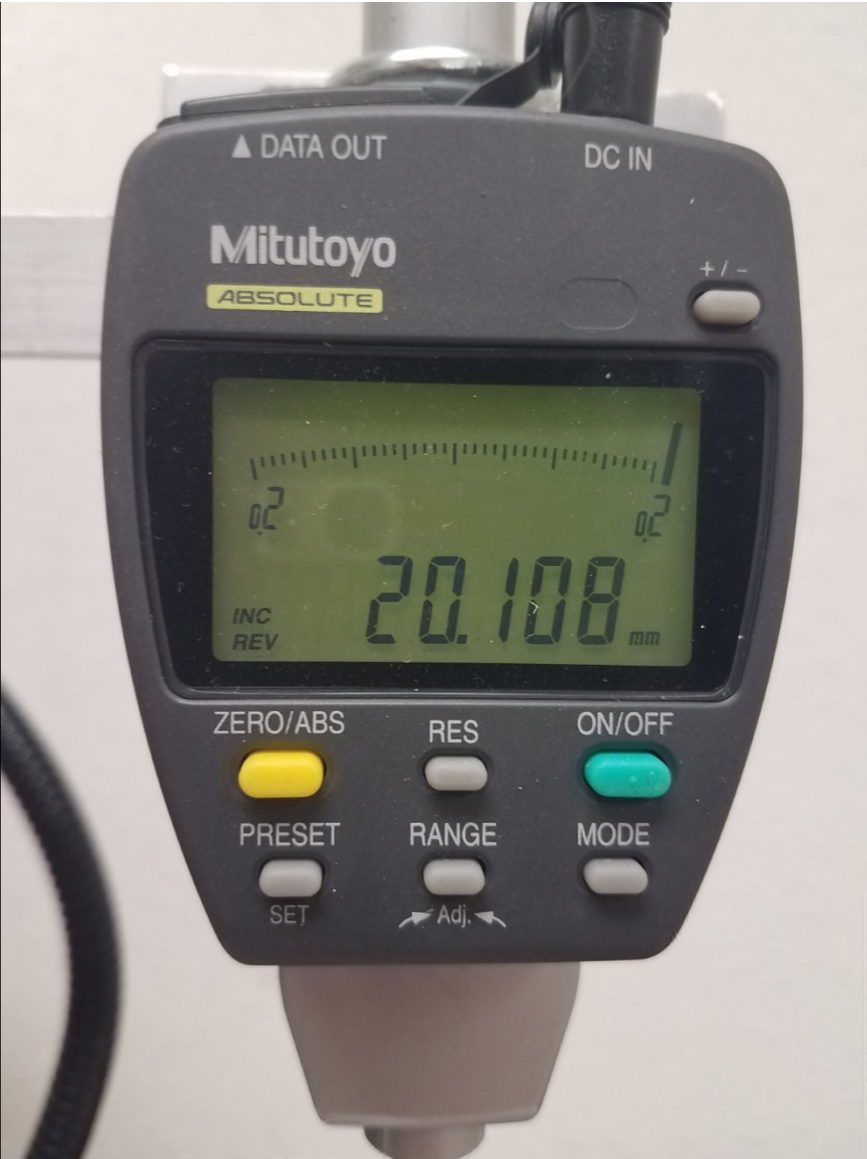
**DIGIMATIC  
INDICATOR**











▲ DATA OUT

DC IN

Mitutoyo

ABSOLUTE

+/-



ZERO/ABS

RES

ON/OFF

PRESET

RANGE

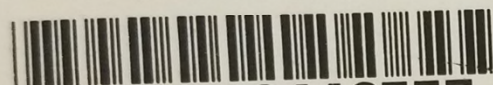
MODE

SET

← Adj. →

Screw this 2X Objective lens on the microscope and use it with the Digital Mitutoyo to get a Z-Reading from the culet to the table of your stone. Then use those numbers to calculate the Refractive Index of diamonds and stones with an R.I. too high to read on the refractometer.

This lens takes you to 10 x 8 x 2.



Art No. 10446337

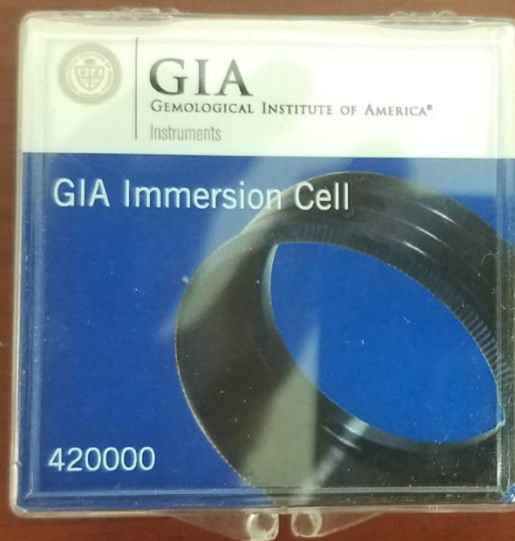
APO 2.0X Objective, WD 25mm

[www.leica-microsystems.com](http://www.leica-microsystems.com)  
[www.stereozoom.com](http://www.stereozoom.com)

*Leica*



GIA Immersion  
Cell 420000





**GIA**  
GEMOLOGICAL INSTITUTE OF AMERICA®  
Instruments

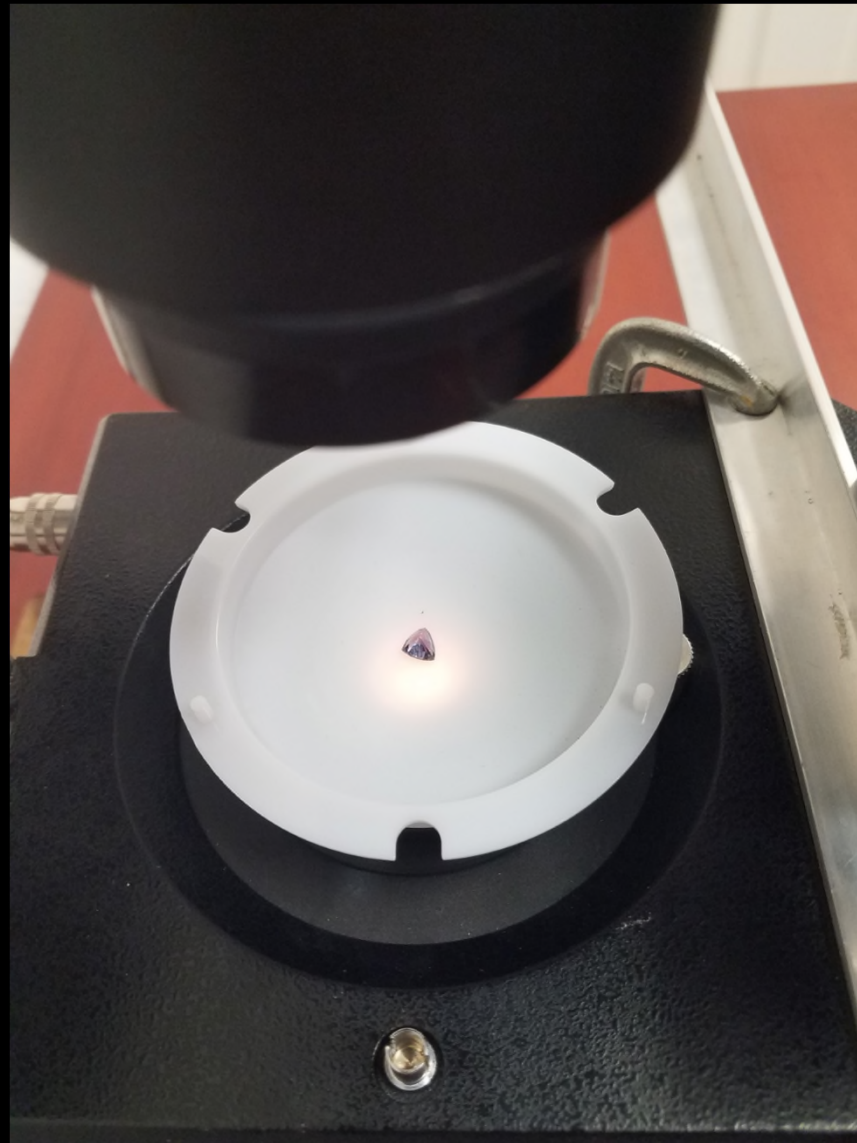
GIA Immersion Cell

420000

Leica EC3 Microscope  
Camera

This camera was used  
prior to finding the  
DFC420 that is  
currently mounted on  
the Leica S8APO  
Microscope







Filters and Diffusors







**PRESIDIUM**  
Multi Tester

36801

HANDBOOK : Sept. 29, 2006

**PRESIDIUM** Multi Tester

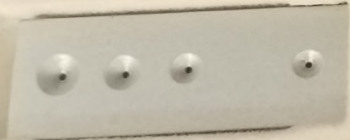


PRESIDIUM  
Multi Tester

36801

HANDBOOK

**PRESIDIUM** Multi Tester





OTT-LITE®

OTT-LITE  
TECHNOLOGY  
The Science of Better LIGHT

13W Task Lamp  
OTT-LITECG

OTT-LITE  
TECHNOLOGY

Product  
Warranty Card  
Inside

**OTT-LITE®**











Mineral	Mohs' Hardness	
	Min	Max
Albite	5.0	5.5
Annite	5.5	6.0
Andalusite	5.5	6.0
Anthophyllite	5.5	6.0
Arsenopyrite	5.5	6.0
Augite	5.5	6.0
Babingtonite	5.5	6.0
Beryl	5.5	6.0
Brookite	5.5	6.0
Charoite	5.5	6.0
Hauyne	5.5	6.0
Ilvaite	5.5	6.0
Kyanite	4.0	7.5
Lazulite	5.5	6.0
Leucite	5.5	6.0
Magnetite	5.5	6.0
Nepheline	5.5	6.0
Nephrite	5.0	6.5
Scapolite	5.0	6.5
Skutterudite	5.5	6.0
Sodalite	5.5	6.0
Vesuvianite	5.0	6.5
Arfvedsonite	5.0	6.0
Brazilianite	5.5	5.5
Cancrinite	5.0	6.0
Chromite	5.5	5.5
Cobaltite	5.5	5.5
Enstatite	5.0	6.0
Glass	5.0	6.0
Hausmannite	5.5	5.5
Hematite	5.0	6.0
Hornblende	5.0	6.0
Ilmenite	5.0	6.0
Milarite	5.0	6.0
Neptunite	5.0	6.0
Perovskite	5.5	5.5
Richterite	5.0	6.0
Romanechite	5.0	6.0
Thorianite	5.0	6.0
Tremolite	5.0	6.0
Turquoise	5.0	6.0
Uraninite	5.0	6.0
Analcime	5.0	5.5

- 6
- 8
- 2
- 5
- 7
- 9
- 3
- 7

Mohs' Hardness			Mohs' Hardness			Mohs' Hardness			Mohs' Hardness			Mohs' Hardness		
Mineral	Min	Max	Mineral	Min	Max	Mineral	Min	Max	Mineral	Min	Max	Mineral	Min	Max
Diamond	10.0	10.0	Allanite	5.0	6.5	Pyrochlore	5.0	5.5	Dolomite	3.5	4.0	Brucite	2.0	2.5
Moissanite	9.5	9.5	Amblygonite	5.5	6.0	Scolecite	5.0	5.5	Heulandite	3.5	4.0	Calcite	2.5	3.0
Bromellite	9.0	9.0	Anatase	5.5	6.0	Sphene	5.0	5.5	Ice	1.5	6.0	Camallite	1.0	4.0
Corundum	9.0	9.0	Anthophyllite	5.5	6.0	Thomsonite	5.0	5.5	Malachite	3.5	4.0	Camolite	2.5	2.5
Chrysoberyl	8.5	8.5	Arsenopyrite	5.5	6.0	Willemite	5.0	5.5	Mimetite	3.5	4.0	Chalcanthite	2.5	2.5
Rhodizite	8.5	8.5	Augite	5.5	6.0	Apatite	5.0	5.0	Pentlandite	3.5	4.0	Chlorargyrite	2.0	3.0
Topaz	8.0	8.0	Babingtonite	5.5	6.0	Dioptase	5.0	5.0	Sphalerite	3.5	4.0	Chlorite	2.0	3.0
Beryl	7.5	8.0	Beryllonite	5.5	6.0	Eosporite	5.0	5.0	Stilbite	3.5	4.0	Clinochlore	2.5	2.5
Phenakite	7.5	8.0	Brookite	5.5	6.0	Glaucodot	5.0	5.0	Wavellite	3.5	4.0	Cryolite	2.5	2.5
Spinel	7.5	8.0	Charoite	5.5	6.0	Monazite	5.0	5.0	Adamite	3.5	3.5	Galena	2.5	2.5
Dumortierite	7.0	8.0	Hauyne	5.5	6.0	Wardite	5.0	5.0	Anhydrite	3.5	3.5	Kernite	2.5	2.5
Euclase	7.5	7.5	Ilvaite	5.5	6.0	Apophyllite	4.5	5.0	Arsenic	3.5	3.5	Uranite	2.5	2.5
Hambergite	7.5	7.5	Kyanite	4.0	7.5	Augelite	4.5	5.0	Astrophyllite	3.0	4.0	Pyrrargyrite	2.5	2.5
Boracite	7.0	7.5	Lazulite	5.5	6.0	Betafite	4.0	5.5	Gyrolite	3.0	4.0	Flexite	2.0	2.5
Danburite	7.0	7.5	Leucite	5.5	6.0	Harmotome	4.5	5.0	Howlite	3.5	3.5	Canthite	1.5	3.0
Staurolite	7.0	7.5	Magnetite	5.5	6.0	Hemimorphite	4.5	5.0	Hydromagnesite	3.5	3.5	Annabergite	1.5	3.0
Tourmaline	7.0	7.5	Nephele	5.5	6.0	Li	5.5	5.5	Laumontite	3.0	4.0	Autunite	2.0	2.5
Andalusite	6.5	7.5	Nephrite	5.5	6.5	Hardness Pick Set a						Bismuth	2.0	2.5
Garnet	6.5	7.5	Scapolite	5.5	6.5	Consists of the follow						Borax	2.0	2.5
Idolite	7.0		Skutterudite	5.5	6.0	Hardness points for						Cinnabar	2.0	2.5
Quartz	7.0		Sodalite	5.5	6.0	sharp						Epsomite	2.0	2.5
Sillimanite	7.0		Vesuvianite	5.0	6.5	atched by a mineral,						Kaolinite	2.0	2.5
Axinite	6.5		Arfvedsonite	5.0	6.0	3.5.						Proustite	2.0	2.5
Bertrandite	6.5		Brazilianite	5.5	5.5							Sepiolite	2.0	2.5
Diaspore	6.5		Cancrinite	5.0	6.0							Stephanite	2.0	2.5
Komerupine	6.5		Chromite	5.5	5.5							Succinite	2.0	2.5
Peridot	6.5		Cobaltite	5.5	5.5							Bauxite	1.0	3.0
Pollucite	6.5		Enstatite	5.0	6.0							Bismuthinite	2.0	2.0
Spodumene	6.5		Glass	5.0	6.0							Erythrite	1.5	2.5
Zircon	6.5		Hausmannite	5.5	5.5							Gypsum	2.0	2.0
Benitoite	6.5		Hematite	5.0	6.0							Halite	2.0	2.0
Cassiterite	6.5		Hornblende	5.0	6.0							Stibnite	2.0	2.0
Epidote	6.5		Ilmenite	5.0	6.0							Sulfur	2.0	2.0
Fergusonite	6.5		Milarite	5.0	6.0							Sylvanite	1.5	2.5
Jadeite	6.0	7.0	Neptunite	5.0	6.0							Sylvite	2.0	2.0
Tanzanite	6.0	7.0	Perovskite	5.5	5.5							Tin	2.0	2.0
Bixbyite	6.0	6.5	Richterite	5.0	6.0							Zinc	2.0	2.0
Feldspar	6.0	6.5	Romanichite	5.0	6.0							Covellite	2.0	2.0
Marcasite	6.0	6.5	Thorianite	5.0	6.0							Orpiment	1.5	2.0
Petalite	6.0	6.5	Tremolite	5.0	6.0							Realgar	1.5	2.0
Prehnite	6.0	6.5	Turquoise	5.0	6.0							Copper	1.5	2.0
Pyrite	6.0	6.5	Uraninite	5.0	5.5							Crocoite	2.5	3.0
Rutile	6.0	6.5	Analcime	5.0	5.5							Glauberite	2.5	3.0
Aegirine	6.0	6.0	Datolite	5.0	5.5							Gold	2.5	3.0
Diopside	5.5	6.5	Goethite	5.0	5.5							Silver	2.5	3.0
Franklinite	5.5	6.5	Herderite	5.0	5.5							Thenardite	2.5	3.0
Hedenbergite	6.0	6.0	Lapis-lazuli	5.0	5.5							Trona	2.5	3.0
Opal	5.5	6.5	Microlite	5.0	5.5							Vanadinite	2.5	3.0
Rhodonite	5.5	6.5	Natrolite	5.0	5.5							Wulfenite	2.5	3.0
Tantalite	5.5	6.5	Nickeline	5.0	5.5							Aluminum	2.0	3.0

100

5.5

3.5

Hardness Pick Set a

bit

Consists of the follow

Hardness points for

sharp

atched by a mineral,

3.5.

off, and screwed to

# Ohaus Pocket Scale





SCIENCETECH  
INSTRUMENTS  
Model: LPG200

mm/inch

OFF ON ZERO



## Gem-A Estimation Loupe

When viewing stones through this loupe, a scale is displayed that allows one to calculate the carat weight



Often referred to as a  
Hearts & Arrows Loupe, or a  
Symmetry Loupe. If the  
diamond is cut to those  
specifications it will display  
hearts and arrows at a quick  
glance.





# Gemology Tools

www.gemologytools.com  
info@gemologytools.com

## Gemology Tools Professional – Quick Start

for Windows

Please note that even if you successfully downloaded the **mini** program you will still need to install the CD. Over 1000 gemstone photos as well as the complete Inclusion Gallery are missing from the mini-program.

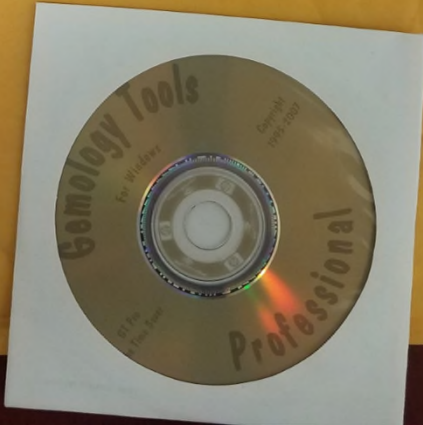
**Installation on Windows 95/98, ME, 2000 or XP:** Insert the CD in your CD drive. Wait for a minute. The CD should auto-start, bringing up the Install Wizard. Follow the on-screen instructions. If the CD doesn't auto-start open the Windows Control Panel and install using Add/Delete Programs. After copying the files the setup program will place the Gemology Tools icon on the startup menu and place a GT icon on your desktop (unless you unchecked the boxes when asked during the installation). Double click this icon to start Gemology Tools Professional.

**Speed Buttons:** The Speed Buttons across the top of the program will quickly start the main modules of the program. Hold the mouse button over an icon for a second or two and a **hint** will tell you what that icon starts. For instance, there are three icons with weighing scales on them. Hold the mouse over the one on the left for a second and the hint tells you it is the Diamond Weight Estimator. Click that **weight** icon to start the module.

**Gemstone Database:** To open the Gemstone Database click **once** on the speed button on the far left (the icon looks like books on a bookshelf). Once the database opens you can access individual gemstone data, the Gemstone Separator, gemstone photographs and the Inclusion Gallery by clicking on their respective buttons across the bottom of the screen. Click on the Find a Gemstone button to search for over 1,900 gemstone species, trade names, varieties or misnomers.

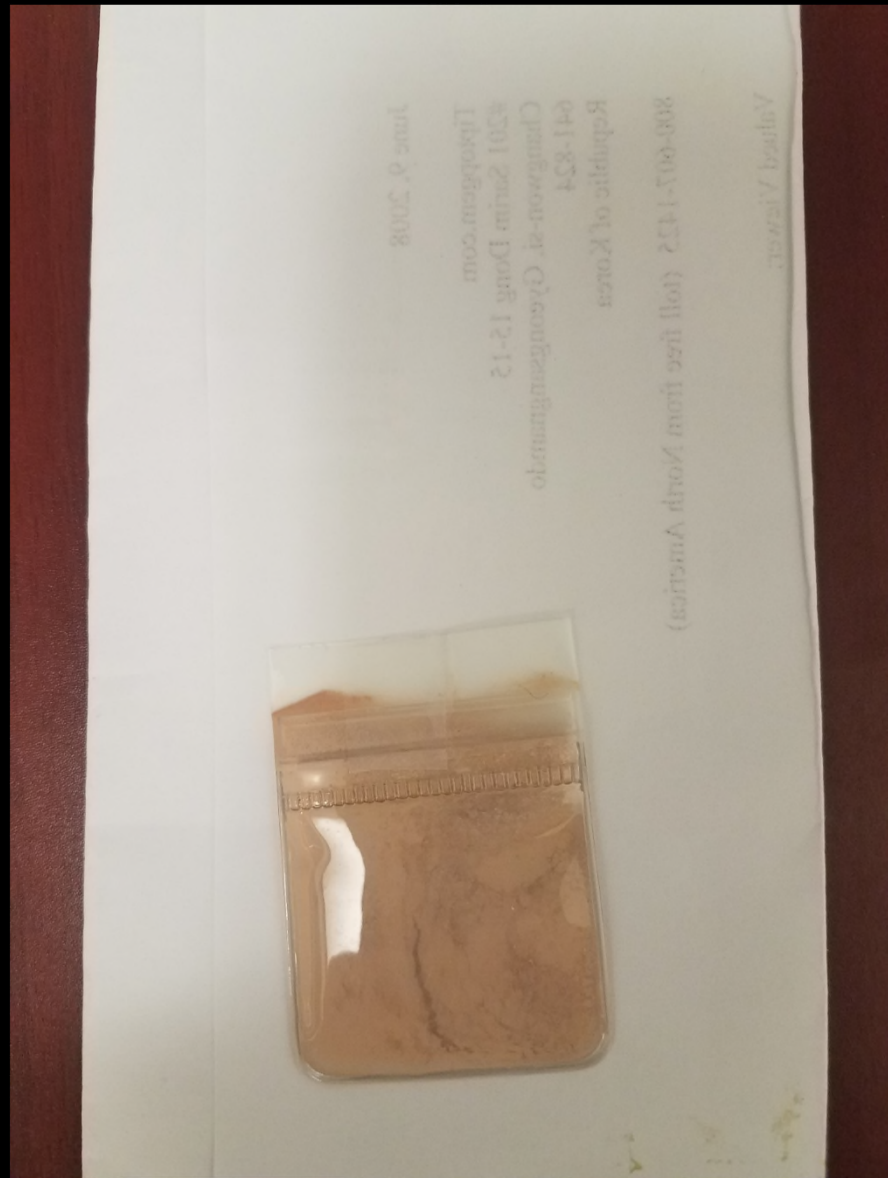
**Use Help (F1 or Help buttons) for information.** The answers to most questions you might have about Gemology Tools will be found in the help files. **Hint:** Pressing the Escape key will always close the window you are in.

**Please Read the Help file before using the Cabochon Weight Estimator.** Understanding how this module works is critical to its success. Click the Help button after you've opened the Cabochon Weight Estimator. If you have any trouble with the installation or any other part of Gemology Tools Professional email us at info@gemologytools.com. Thank you for purchasing Gemology Tools!





Cerium Oxide for  
Refractometer care



220V

BULB

for

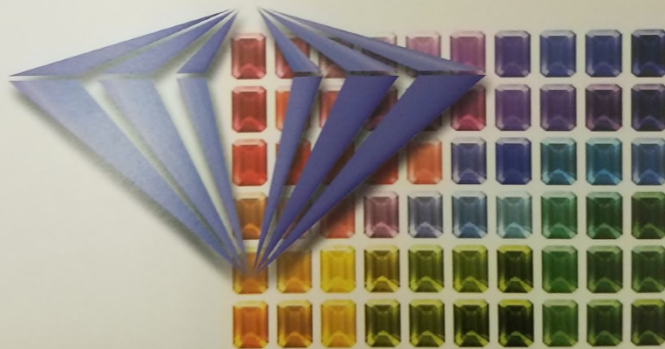
POLARISCOPE



# Gemewizard™

*Your Navigator to the World of Gemstones*

Gem<sup>e</sup>square



BLUE AND WHITE

**VIGOR<sup>®</sup>**  
**PARCEL PAPERS**  
**VIGOR<sup>®</sup>**  
THE BRAND WORLD RENOWNED FOR QUALITY



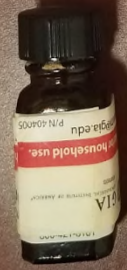
For :  
● Loose and rough  
  Diamonds  
● Industrials  
● Precious stones

Protects stones  
 Show them off at  
  their best  
 Keep stock in  
  orderly way

**Kassoy**  
**Memorandum Book**  
**BK 1107**



**Cargille** CAT.# 19005  
Made in USA  
CAS# 75-11-6 Qty.: 30 ml  
**METHYLENE IODIDE**  
CAUTION: AVOID CONTACT and INHALATION  
MSDS AVAILABLE LOT: 0507  
Cargille Laboratories Cedar Grove, NJ 07009 (973) 239-6633 LCABK-380



0185  
REFRACT  
1.80 +  
ON: Avoid c  
available. Sol  
y. Not for u  
LE LABORA  
RECEIVED, INC. 1 000 507 4470  
ANNE. STEVENSON  
REFRACTOMETER INDEX LIQUID  
LOT: 0507  
**PLEASE READ THIS:**  
This bottle contains 1.80 R.I. Gem refractometer liquid that is intended to be used with the





PYRO PCI 164R2

ADS



67887 32462

SIIG FireWire 3-Port PCI



RoHS

PYRO PCI card

Add FireWire and create exciting...

Quick Guide



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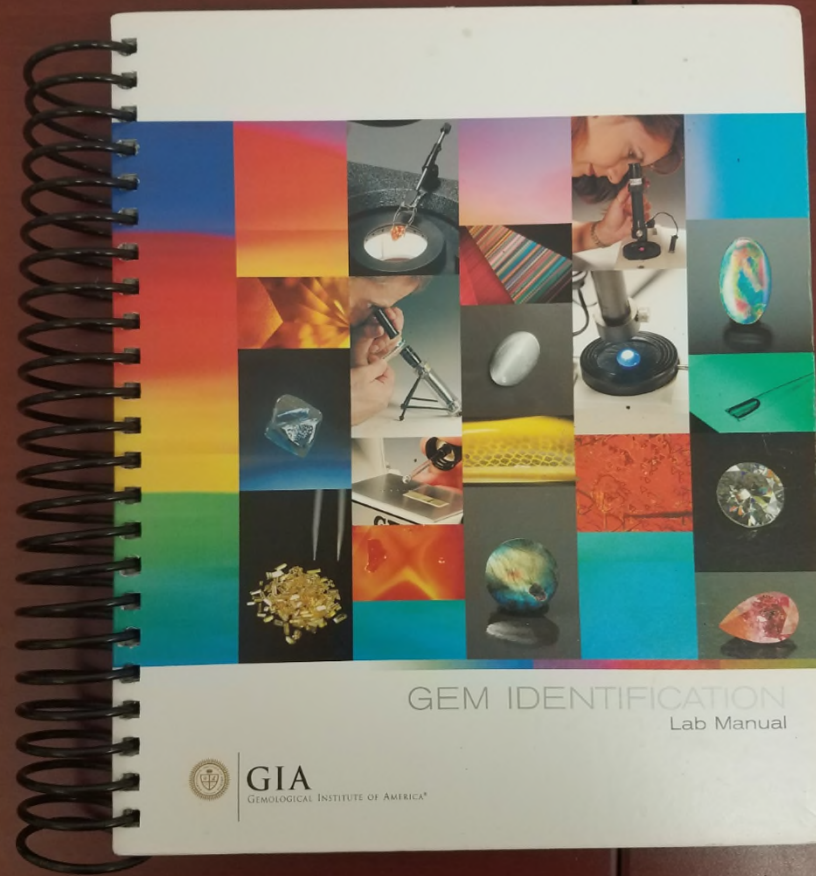
1394DV

REV. F

11/11/11



Brand New – Never  
Used copy of the GIA  
Gem Identification Lab  
Manual



Brand New – Never Used  
copy of the GIA Gem  
Reference Guide

