



PRESIDIUM[®]

PRIM II Software (Mac)

User Guide



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1. Using PRIM II Software

The PRIM II Software has the same functionality as the PRIM II unit for the continual elimination of possible gemstones through other known values such as S.G. and Hardness. The functions are as follows:

- R.I. Reading
- Refractive Index (R.I.) Dictionary

A top navigation bar is provided in the software for you to navigate to the functions mentioned above.

1.1. Decimal Separator

The software will adapt to the decimal separator used in different countries which can be either a period (.) or a comma (,). Please use the supported decimal separator according to the system language of your computer.

1.2. Connecting the PRIM II Unit

Step 1: Connect the PRIM II unit to your PC via the USB cable. Make sure that the device is turned on and has the message “USB CONNECT” on the screen.



Figure 1

Step 2: After that, click “Connect” to establish the connection between the PRIM II unit and PC.

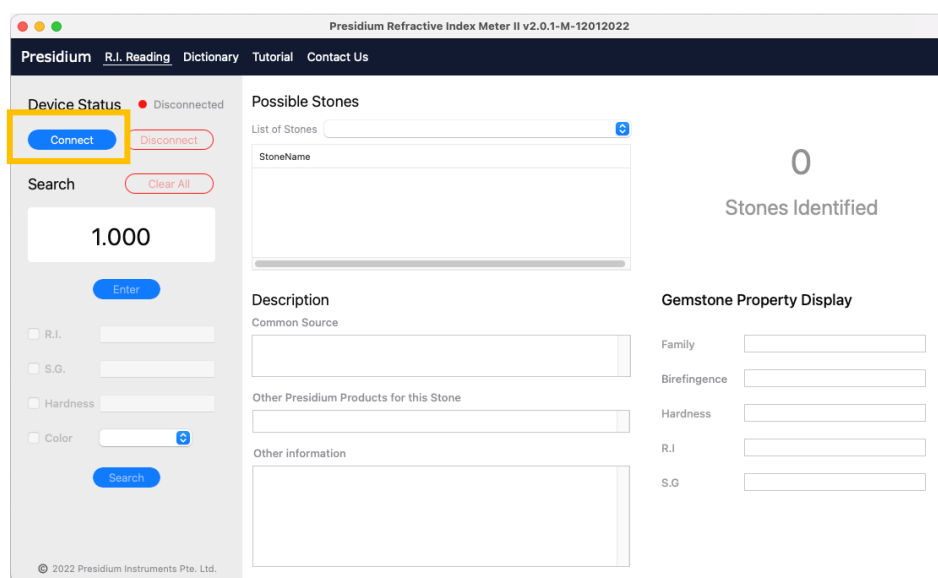


Figure 2

1.3. R.I. Reading

The R.I Reading helps to look for possible gemstones based on the R.I. reading from the PRIM II unit. Further elimination of the possible gemstones can be done using other values on the various gemstone property.

1.3.1. Using R.I. Reading Function

Step 1: Place the gemstone on the PRIM II unit as shown in Figure 3 below. Ensure that the gemstone is well-centered to prevent reading errors.



Figure 3

Step 2: Cover the gemstone with the recessed cylinder as shown in Figure 4 and you the see the actual reading on the PRIM II Software.



Figure 4

Step 3: Refer to Figure 5, and click “Enter” to confirm the reading.

Step 4: The software will then provide a list of possible stones based on the R.I. reading. You may select a gemstone to view the description and its properties.

Presidium Refractive Index Meter II v2.0.1-M-12012022

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Device Status Connected

Connect Disconnect

Search Clear All

1.000

Enter

☒ R.I.

☐ S.G.

☐ Hardness

☐ Color

Search

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Possible Stones

List of Stones Apatite

StoneName

Apatite

Aquamarine

Beryl

Emerald

Feldspar

10 Stones Identified

Description

Common Source

Sri Lanka, Myanmar, Norway, Canada, India, Germany, Pakistan, Madagascar, Tanzania, Brazil

Other Presidium Products for this Stone

PRM, PEGG, PGCG

Other information

Apatite is found in pegmatite, hydrothermal veins and cavities, metamorphic rocks in gem gravels. Common color is yellowish green.

Gemstone Property Display

Family

Birefringence

Hardness

R.I.

S.G.

Figure 5

Step 5: Filter the list of possible stones further by entering other known values of the gemstone property and clicking “Search”.

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Device Status ● Connected

[Connect](#) [Disconnect](#)

Search [Clear All](#)

1.000

[Enter](#)

☒ R.I. 1.602

☒ S.G. 2.65

☐ Hardness

☐ Color

[Search](#)

Possible Stones

List of Stones: Emerald

StoneName

Emerald

Feldspar

Iolite

Labradorite

Synthetic Emerald

Description

Common Source

USA, Madagascar, India, Pakistan and etc.

Other Presidium Products for this Stone

PDT, PGT, PRM, PEGG, PGCG, PGI

Other information

Emerald is found on granitic rocks - pegmatite and schists, in hydrothermal veins and metamorphic limestone. It is in the family of Beryl and color is usually green.

Gemstone Property Display

Family: Beryl

Birefringence: 0.005 - 0.009

Hardness: 7.500 - 8.000

R.I: 1.552 - 1.612

S.G: 2.650 - 2.710

5 Stones Identified

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Figure 6

1.4. Refractive Index (R.I.) Dictionary

The R.I. Dictionary displays the gemstones database and can be used to look for specific gemstones by searching for the gemstone property.

The search can be done using the following values for their respective property

- R.I value
- S.G. value
- Hardness value
- Gemstone color
- Gemstone name

1.4.1. Using the Refractive Index (R.I.) Dictionary

Step 1: Select the checkbox to enable the fields you want to search for. Multiple fields can be used for a more detailed search

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Device Status ● Connected

Connect Disconnect

Search Clear All

☒ R.I.

☒ S.G.

☐ Hardness

☒ Color Green ↓ ↑ Green

☐ Name

Search

Possible Stones

List of Stones Agate ↓

StoneName

Agate

Alexandrite

Almandite

Amazonite

Amber

Description

Common Source

Brazil, India, Russia, Iceland, U.S.A. Germany and etc.

Other Presidium Products for this Stone

PRM, PEGG, PGCG

Other information

Agate may be found in various kinds of rock, they are classically associated with volcanic rocks but can be common in certain metamorphic rocks. Common colors of the stones are Light blue, red, orange, white, grey, black

57

Stones Identified

Gemstone Property Display

Family Quartz

Birefringence 0.004

Hardness 7.000-7.000

R.I. 1.530 - 1.540

S.G. 2.500-2.700

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Figure 7

Step 2: Fill in the values for the enabled fields and click “Search” to see the result.

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Device Status ● Connected

Connect Disconnect

Search Clear All

☒ R.I. 1.53

☒ S.G. 2.64

☐ Hardness

☒ Color Yellow ↓ ↑ Yellow

☐ Name

Search

Possible Stones

List of Stones Feldspar ↓

StoneName

Feldspar

Iolite

Oligoclase

Description

Common Source

India, Canada, USA, South Africa and etc.

Other Presidium Products for this Stone

PEGG,PGCG

Other information

Feldspars are crystallize from magma in both intrusive and extrusive igneous rocks, as veins, and are also present in many types of metamorphic rock. Common colors depend on the types of stones.

3

Stones Identified

Gemstone Property Display

Family Feldspar

Birefringence 0.008-0.011

Hardness 6.000-6.500

R.I. 1.490 - 1.609

S.G. 2.640-2.750

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Figure 8

End of Document