

# GIA iD100<sup>®</sup>

## Gem Testing Device

The GIA iD100<sup>®</sup> combines advanced spectroscopic technology with GIA's more than 60 years of diamond and gemstone identification research to distinguish natural diamonds from laboratory-grown (HPHT and CVD) diamonds and diamond simulants.

### GIA iD100

Standard features\* include:

- Colorless to near-colorless diamond identification
- NEW: blue-to-green and brown diamond identification
- Automatic identification with results in <2 seconds
- Easy reading result with audio: "Pass" or "Refer" for further testing
- Tests both mounted and loose diamonds 0.9mm or greater in diameter (approx. 0.005 carat)

**List Price:** US\$ 5,495.00

Item Number: 220000

Patent Pending

\*Does not detect treatments



Size: 165mm X 200mm X 80mm

Weight: 1.02kg

### GIA iD100 Pink Diamond Software Upgrade

This software is an add-on to the device that utilizes advanced spectroscopic technology, combined with GIA's pink diamond identification research, to distinguish natural pink diamonds from laboratory-grown (HPHT and CVD) diamonds, diamond simulants and natural diamonds whose pink color is introduced by treatments involving irradiation and annealing.

**List Price:** US\$249.00

Item Number: 220401

Order now at [store.GIA.edu](https://store.GIA.edu)

For technical questions, email [instrumentsupport@gia.edu](mailto:instrumentsupport@gia.edu)

Instruments Distributor  
for  
 **GIA**<sup>®</sup>

  
[www.lexusindia.in](http://www.lexusindia.in)  
Distributed in India



# GIA®

## GIA iD100™ Technical Support FAQ

### About the GIA iD100®

#### What color diamonds does the GIA iD100® test?

The GIA iD100 can test colorless to near-colorless, blue-to-green and brown diamonds. With the addition of the GIA iD100 Pink Diamond Software Upgrade, pink diamonds can also be tested.

#### What makes the GIA iD100 different than other diamond testers? Does the GIA iD100 use UV Light?

GIA iD100 uses fluorescence spectroscopy, one of the most accurate and advanced technologies available to determine if a stone is a natural diamond. If the device detects a natural diamond's luminescence signature, a "PASS" result will appear on the display. If a diamond's luminescence signature is not detected, a "REFER" result will appear on the display. The user will not have to interpret results.

#### What does "REFER" mean?

The tested stone may be a laboratory-grown diamond or diamond simulant. The tested stone should be referred for further testing.

#### Will the GIA iD100 detect HPHT and CVD laboratory-grown diamonds?

Yes, HPHT and CVD laboratory-grown diamonds will receive a "REFER" result.

#### Is it possible to achieve both "PASS" and "REFER" on the same stone?

Anytime you receive a "PASS" result, the "PASS" result is the definitive result regardless of the quantity of "REFER" results. A false "REFER" may be the result of interference, such as the detection of metal, light interference, bending of fiber probe, or not testing within optimal conditions.

#### What are the optimal testing conditions?

Ensure the stone is clean. The optimal test background is a solid, non-reflective black background; white background or paper may cause "REFER" results due to interference. Stable and dim room light are optimal. Avoid strong room light exposure during testing. The fiber probe should be in contact with the stone's table to maximize the fluorescence.

#### How quickly do I receive the result?

The GIA iD100 displays results within two seconds.

#### What is the diamond false positive rate?

The optimal false positive rate is 0%. The GIA iD100 achieves a 0% false positive rate.

#### How accurate is the GIA iD100?

The GIA iD100's has a 100% accuracy in referring laboratory-grown diamonds or diamond simulants. There is approximately a 3% chance a natural diamond may achieve a "REFER" result.

#### What diamond color range does the GIA iD100 test?

The GIA iD100 is intended to test colorless to near colorless diamonds.

#### Is there a limit to the size of diamond?

The GIA iD100 tests diamonds 0.9mm or greater in diameter (approx. 0.005 carat).

#### Can the GIA iD100 test both mounted and loose diamonds?

Yes.

#### Does the GIA iD100 "REFER" fracture-filled, natural diamonds?

No; the actual structure of the diamond is natural.

#### Will the GIA iD100 "REFER" heat-treated diamonds?

The default software in the GIA iD100 does not detect treatment. The GIA Pink Diamond Software Upgrade is designed to detect the common treatment for pink diamonds, indicating a "REFER" result.

#### Can the GIA iD100 "PASS" mined rough diamond?

Yes.

#### Will a novice GIA iD100 user receive the same results as an expert user?

You do not need any gemological experience whatsoever to utilize the GIA iD100. A novice user will achieve the same results as an expert user.

#### How many stones per hour can it test?

Approximately 180 stones per hour.

#### Do metal tip tweezers such as stainless steel or titan affect testing results?

Non-reflective tweezers make it easy to see the contrast of the diamond when using the GIA iD100. You would not get false "PASS" results from reflective tweezers, but the iD100 may take longer to process, or may be higher in "REFER" results due to the potential of added light interference.

#### Can the GIA iD100 "Pass" Type IIa Diamonds?

Natural Type IIa diamonds are extremely rare and make up around 1 – 2% of natural diamonds. The GIA iD100 is one of the only instruments that can "PASS" Type IIa diamonds; we expect around 50% to "PASS".