



SYNTHETIC DIAMOND SCREENER II PRESIDIUM

Synthetic Diamond Screener II is a portable desktop diamond verification instrument for loose and mounted stones. Synthetic Diamond Screener II is designed to screen out synthetic diamonds. Synthetic Diamond Screener II is manually operated but gives an automatic test result. Synthetic Diamond Screener II is suitable for an environment where you need to test both mounted and loose diamonds e.g. retailers, manufacturers, pawnbrokers, appraisers, gemmologist and hobbyists.

599 USD (February 2019)
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How does the instrument operate?

The instrument tests individual stones and automatically displays a test result. The user manually places a loose or mounted polished stone into the Synthetic Diamond Screener II. To start the testing, the user closes the lid and presses the start button. Synthetic Diamond Screener II automatically presents the test result.

Synthetic Diamond Screener II displays one of the following results:

- ◇ 1. 'Blue – Natural diamond'
- ◇ 2. 'Red – Type IIa diamond'

The "Red – Type IIa diamond" result could contain potential synthetic diamonds and diamonds. These referrals shall be tested further for full verification. Presidium Instruments recommends further testing by a gemmological laboratory.

The instrument does not require calibration by user.



13cm (w) x 10cm (d) x 6.5cm (h)

0.21 kg

Stone Capabilities

Weight of stones: **0.02 ct - 10 ct**
Size of stones: **1.50mm in width - 5.00mm in height**
Colour of stones: **D-J**
Shape of stones: **ALL** as long as it has a flat surface
Diamond simulants: **NO**
Jewellery: **YES** open back settings

Instrument Capabilities

Automatically feed the stones? **NO**
Automatically interpret the results? **YES**
Automatically dispense the stones? **NO**
Detect or refer synthetic diamonds? **REFER**
Multiple stones at one time? **NO**
Training? **NO**

ACCORDING TO PRESIDIUM INSTRUMENTS

ASSURE Test Results

Synthetic Diamond Screener II was tested in accordance with the Diamond Verification Instrument Standard with the test protocol for instruments that separate diamonds from synthetic diamonds (Operation Category 1). The manufacturer advises that the Synthetic Diamond Screener II's primary objective is to screen out synthetic diamonds from diamonds, and that its performance is tuned towards the detection of synthetic diamonds.

The tests took place at the independent laboratory UL in Canton, Massachusetts, United States.

Synthetic Diamond Screener II was tested with the ASSURE Core Sample that consists of 1,000 diamonds and 200 synthetic diamonds. The stones are 0.02 ct to 0.20 ct in D-J colour. The below results are from the test with the ASSURE Core Sample.

The tests were performed by a novice operator.

Safety Credentials

The most important requirement when selecting a Diamond Verification Instrument is that the instrument meets the safety regulations of your local jurisdiction. Before purchasing an instrument, request that the manufacturer verifies that their instrument complies with all regulatory requirements.

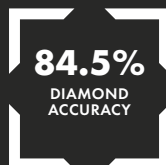
[Click here](#) to download the safety testing credential for Synthetic Diamond Screener II submitted by Presidium Instruments. Please note that the safety testing credentials have not been validated through the ASSURE Program.



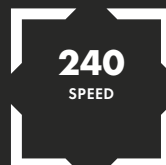
Ratio of synthetic diamonds incorrectly classified as 'diamond' to the total number of synthetic diamonds



Ratio of diamonds being referred for further testing to the total number of diamonds



Ratio of diamonds correctly classified as diamond to the total number of diamonds



Stones tested per hour



Ratio of synthetic diamonds correctly classified as synthetic diamond to the total number of synthetic diamonds

The summary test report issued by UL can be [found here](#)