Y
YEHUDA

YEHUDA USER MANUAL

Dr. Watson, Sherlock Holmes 4.0 & Big Sherlock
(The following instructions are applicable for all 3 models, while some are model specific.)

CONGRATULATIONS ON YOUR PURCHASE OF A YEHUDA LAB GROWN DIAMOND DETECTOR!

As a leader in this field, *YEHUDA* is well known around the world for offering the most reliable protection available for jewelry professionals, and we're pleased you have joined our family of happy customers.

Our goal at *YEHUDA* is to continuously bring you the latest advancements and tools we've developed so you can benefit the most from our technology. As such, our *YEHUDA* app is regularly being enhanced and updated, so we urge you to periodically go to *www.yehuda.com* and download the newest version of our User Manual.

> *IMPORTANT – PLEASE READ:*
> Terms of Use and our Privacy Policy. You can find these on our website,
> www.yehuda.com and within the *YEHUDA* App.

The *YEHUDA* detectors can detect *CVD and HPHT lab grown diamonds* that are loose, mounted in jewelry, as well as parcels, and any size melee. Loose diamonds can be tested while in a thin plastic bag. They cannot be tested if covered by a thick plastic or glass.

Our detectors are designed to detect only white diamonds within the *D- K color range*. Lower color diamonds and fancy color diamonds should not be tested with our devices.

Diamond simulants including CZ, moissanite, diamond coated CZ and diamond coated moissanite can easily be detected when they are tested *loose*.

Please visit our website www.yehuda.com where you can find helpful instructional videos on how to use the detectors and our most updated User Manual.

> *IMPORTANT - PLEASE WATCH OUR INSTRUCTIONAL VIDEOS:*
> It is our opinion that if you did not watch the instructional videos,
> you may make mistakes interpreting the results.

YEHUDA DETECT

After receiving your new detector, please do the following:

1. Go to the App Store or Google Play and search for **"Yehuda Detect"** or **"Sherlock Holmes Detect"**

2. Download the **YEHUDA** app and install it.

3. Follow the instructions to register, add payment information, add users, and then connect your device via Bluetooth to the box in order to start using your **YEHUDA** detector.

There are 3 types of users:

1. **Admins** - The admin is the person responsible for opening up the account. They will be the only one that can handle payments and payment information. The admin can invite other users (Admins, Managers and regular Users) to join. Admins are able to see all aspects of the app. The Admin also controls the cloud settings.

2. **Managers** - Managers can invite other Managers or regular Users and can see the business information but cannot see the payment information.

3. **Users** - A user can perform tests, check out saved tests and export tests.

Note: All types of users can perform tests, check the history of saved tests and export tests.

INCLUDED ACCESSORIES:

DR WATSON

1 – 1.5"x2.5" loose stone sorting tray

1 – 1.5"x2.5" loose stone tray with sections

1 – Slotted ring holder accommodates up to 8 rings

1 – Focusing height adjustment adapter

1 – USB charging cable

SHERLOCK HOLMES 4.0

2 – Loose stone sorting trays 1.5"x2.5" and 4"x5"

2 – Loose stone trays with sections 1.5"x2.5" and 4"x5"

2 – Magnetic finger ring holders

1 – Slotted ring holder tray (holds up to 27 rings)

1 – Worldwide power supply 110-240V

BIG SHERLOCK

1 – **FREE** tablet for testing

2 – Loose stone sorting trays 1.5"x2.5" and 4.5"x5

2 – Loose stone trays with sections 1.5"x2.5" and 4"x5"

1 – Tray with 5 magnetic finger ring holders

2 – Slotted ring holder trays (each holds up to 108 rings)

1 – USB data cable for the tablet

1 – Worldwide power supply 100-240V

ON/OFF:

At the back of the detector you will find the **ON/OFF** power button. In order to turn the box **ON** or **OFF**, please press and hold the button for 3 seconds. An **LED** indicator at the front of the box will show when it is **ON** or **OFF**. The battery powered Dr. Watson will automatically power down by itself after 5 minutes of being idle.

Dr. Watson Charging Instructions:

In order to charge the battery in the Dr. Watson, simply connect the USB cable to it in the same way you would charge your mobile phone. To fully charge its battery, keep it plugged in overnight. In your **YEHUDA** app you will see a battery indicator that will advise you when it needs recharging. The Dr. Watson may be used while charging. A full charge should provide about 2 weeks of operation.

Warranty:

YEHUDA detectors feature a full **ONE YEAR WARRANTY** under normal use. Opening the detectors body or tampering with any of the screws will void the warranty, and result in the factory's refusal to repair the detector. The warranty does not cover user abuse, water damage, being hit, dropped or any other type of improper care. The purchaser shall incur the cost for shipping, insurance, and handling for all warranty and non-warranty repairs. Warranty repairs will be shipped back FOB Destination. The tablet provided with the Big Sherlock is not covered under this warranty. Within the first month of registering your detector you have the option of purchasing an extended warranty. If you would like to purchase an extended warranty, this must be done through the **YEHUDA** app.

HOW TO RUN A TEST

After you have completed your registration, connect your phone to your detector to start the test.

Please follow these steps:

1. Make sure your phone's Bluetooth is turned ON.
2. Hold the power button on the back of the detector for 3 seconds to power your diamond detector on.
3. Tap *"Menu"* at the bottom right of your screen.
4. Tap *"Connect box"*
5. Tap *"Scan Device-off"*
   (It will change to "Scan Devices-on")
6. Tap on the corresponding Yehuda device.
7. Tap the Camera icon. A white light will appear inside your detector once the camera is active.
8. Aim the camera at the object you wish to test, zoom in or out as necessary.
9. Focus by tapping on the screen
10. Tap *"Run test"*

Congratulations! You have just completed your first test.

To run a new test, tap the orange button located at the bottom left of the screen.

To add more files tap *"Continue"*, then you can continue to save the results to your cloud.

To log into your cloud account go to *Cloud.Yehuda.com*

For further information and more detailed instructions, please visit our website for the full manual and instructional videos.

IMPORTANT DETECTION GUIDELINES

(Detailed instructional videos are also available.)

The proven *YEHUDA* detection process involves illuminating the diamonds being tested using a proprietary lighting system and software to determine their identity. This special light causes *ALL* the diamonds being tested to emit light (fluoresce), while *SOME* diamonds will continue to emit light or glow in the dark (phosphorescence) after our light is shut off.

PLEASE PAY ATTENTION!

During the test procedure our special light will cause all diamonds to show fluorescence. We also test the fluorescence of the diamonds under a regular *LONG UV* light which, as you know, causes some diamonds to show fluorescence.

UNDERSTANDING THE TEST RESULTS:

When the testing process is completed, 5 pictures will be shown:

1. *RESULT*   - Default
2. *LUV*   - Long UV fluorescence
3. *GLOWING* - Phosphorescence or glowing in the dark when the light is shut off
4. *COLORED* - Fluorescence or glowing when illuminated
5. *ORIGINAL* - A picture of the goods under white light

IMPORTANT :

To correctly identify the stones being tested, you cannot stop and make your determination by only looking at the **RESULT** picture. You MUST also look at the LUV picture, and then the **GLOWING** picture. In other words, if you did not look at all 3 of these pictures you may make a wrong determination of a stone's identity.

Result Picture:

It is the default picture result that you get at the end of the test.

1. Any diamond that shines in *ONLY* blue color is a *NATURAL DIAMOND*.
2. Any diamond that shines in *NON* blue color or is painted in red is a *LAB GROWN DIAMOND.*

To fully understand the result picture please first read about all other results and then read the explanation in the bottom.

LUV (LONG UV) PICTURE:

The long UV test result is *superior* to all other results.

If in the *RESULT* picture a diamond is determined as a lab grown diamond but in the *LUV* test it is determined as a natural diamond- *THEN IT IS A NATURAL DIAMOND.*

IMPORTANT DETECTION GUIDELINES (CONT)
(Detailed instructional videos are also available.)

ACCORDING TO THE SCIENCE KNOWN TODAY:
- If a diamond shines in blue in the **LONG UV** test results, it is a **100% NATURAL** diamond.
- If a diamond shines very strongly in a non-blue color in the **LUV TEST**- it is a natural diamond as well.
- If it shines in very light non blue color – it may be a natural diamond OR a lab grown diamond. In this case the **LUV TEST** did not help us.

If a diamond was determined to be a natural diamond at the long UV test, it is 100% natural diamond! Even if it gave a lab grown diamond result in the RESULT picture. This means that when you get a lab grown diamond test result – **YOU ARE NOT DONE**. It is therefore critical that **YOU ALWAYS CHECK THE LONG UV PICTURE TO MAKE YOUR FINAL DETERMINATION.**

GLOWING PICTURE:
Some LAB GROWN DIAMONDS show phosphorescence. (Emit light "glow" after the light source is shut off.) If a diamond shines after the light is shut off – it is a lab grown diamond.

COLORED PICTURE:
When our proprietary lamp emits light on the diamonds, they fluoresce in different colors.

ORIGINAL PICTURE:
This is the untouched picture of the diamonds and jewelry that you are testing.

RESULT PICTURE:
This is the default picture that you see when the test has been completed. It is a combination of the COLORED picture and the GLOWING picture.

- If the diamond fluoresces **100% BLUE** - it is always a **NATURAL** diamond.
- If the diamond fluoresces in any other color but blue, and/or is painted in red - it is a **LAB GROWN** diamond.
- If the diamond is painted in red, even if the diamond fluoresces in blue, it is a **LAB GROWN** diamond.

To simplify this for you, our software identifies the diamonds that glow in the dark or show phosphorescence, and paints them in a distinctive bright red color in the *RESULT* picture.

Even though our software paints these diamonds red in the **RESULT** picture, sometimes the painting is too strong or very light. We suggest to always go to the **GLOWING** picture to understand which diamonds glow in the dark (show phosphorescence). For your convenience, at the bottom of the RESULT picture you can change the amount of red painting by pressing the sensitivity buttons.

In order to be more accurate and reduce the false positive rate, you **MUST** always also look at the **LUV** and **GLOWING** pictures before making your final determination.

NOTE: BLACK IS NOT CONSIDERED A COLOR.

IMPORTANT DETECTION GUIDELINES (CONT)

(Detailed instructional videos are also available.)

SIMULANTS:

Stones that do not emit light in any color (black) under our proprietary lighting are considered simulants. (This is elaborated further in the instructional videos.)

FLASHLIGHT EFFECT:

As explained previously, **NATURAL** diamonds do not have phosphorescence. They will not glow in the dark after the light is shut off except in rare occasions (false positive).

Sometimes we may see a diamond or diamonds that show a blue color that are also painted with some red. In this case, we must be sure that there is no stone nearby the diamond that shows very strong phosphorescence. These glowing stones could act like a flashlight and consequently illuminate the natural diamond to the extent that it seems like it is glowing in the dark by itself. In this case, we must take out the diamonds that are painted in full red and check again. Please see an example of this in the picture section below.

IS IT A CVD OR HPHT LAB GROWN DIAMOND?

HPHT lab grown diamonds will usually fluoresce in a blue color and will show a very strong phosphorescence. In the RESULT picture, these diamonds will usually be completely painted in a bright red color to the extent that you will not be able to see the color of the diamond. (You can see the color of the diamond in the COLORED result.) When viewing the GLOWING picture result you can easily identify HPHT lab grown diamonds, since they will glow very strongly in blue.

CVD lab grown diamonds will usually fluoresce in a NON-BLUE color, and they may or may not show slight phosphorescence. In the RESULT picture it will either show a non-blue and/or some visible red painting. When viewing the GLOWING picture result, CVD lab grown diamonds may glow. However, the glow will be very weak as compared to the bright glow of HPHT lab grown diamonds.

A PICTURE IS WORTH A THOUSAND WORDS

So Please Pay Attention.

The diamonds in the pictures you are about to see in the next few pages are positioned with the table facing down. This is done for demonstration purposes.

When testing loose diamonds, we recommend to always position them on the pavilion side as well.

A test cannot be fully done UNLESS the diamond was checked on both the table and on the pavilion.
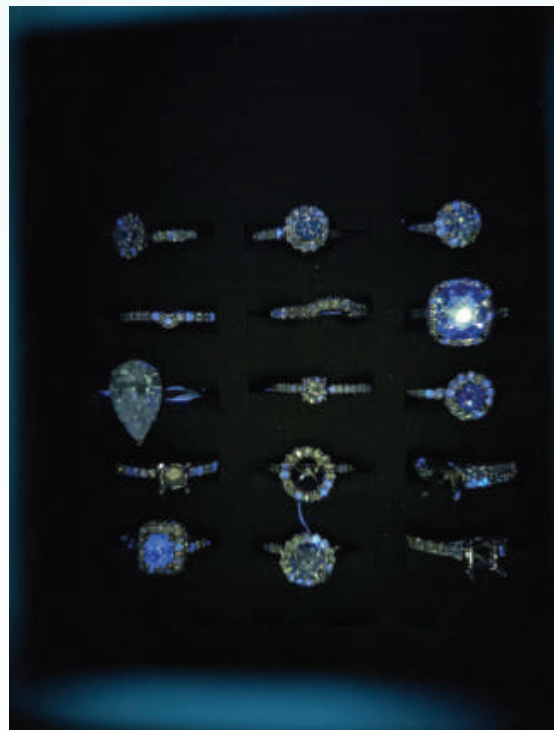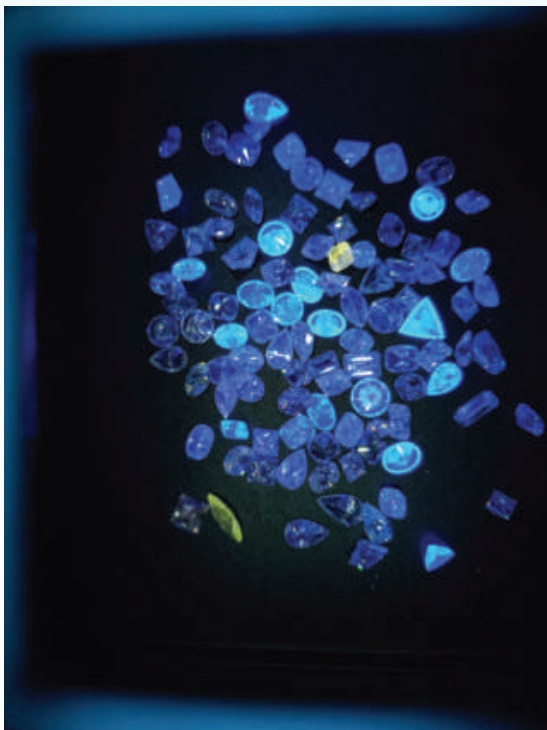
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BLUE = NATURAL

Natural diamonds show blue with no red painting.

RESULT PICTURES
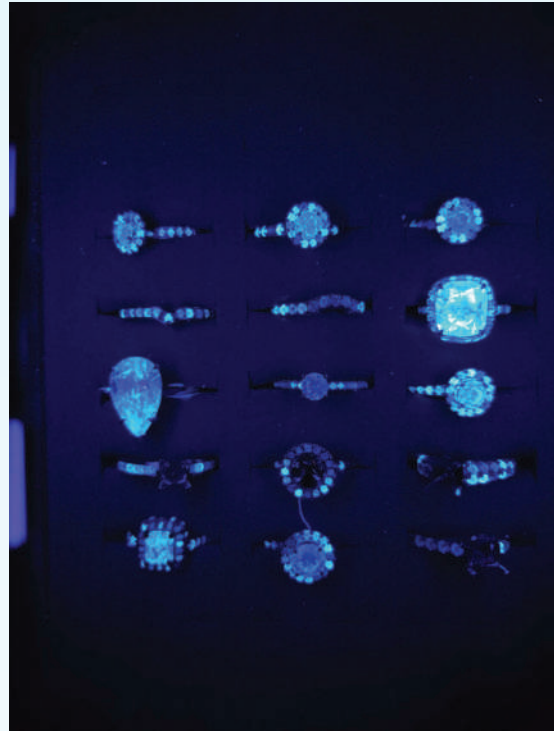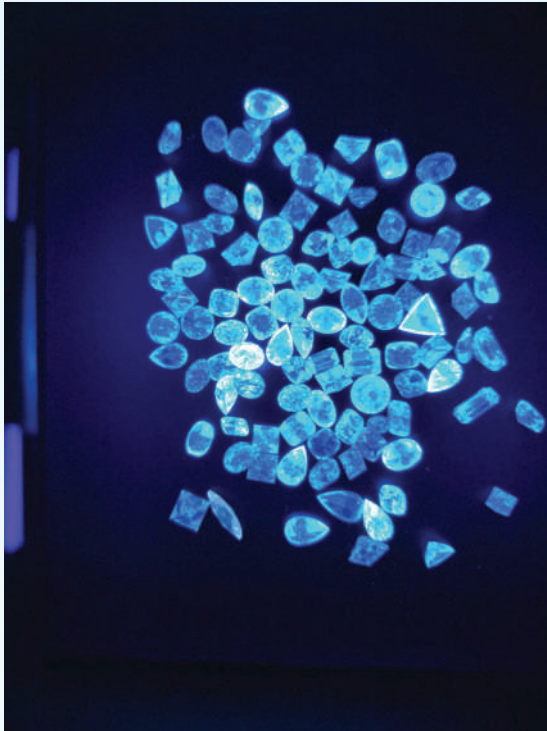
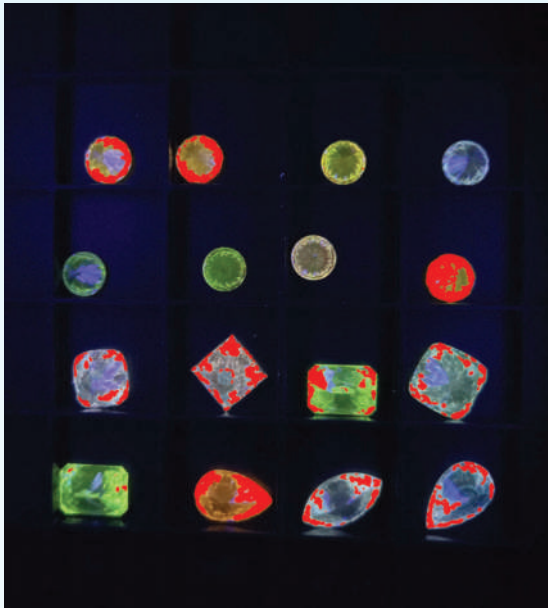Natural Diamonds will shine in *ONLY* blue color. Any kind of blue.

LUV PICTURES

Some natural diamond show fluorescence under Long UV illumination.
(Lab grown diamonds *NEVER* show blue florescence under Long UV illumination.)

CVD LAB GROWN DIAMONDS

The following is an example of CVD lab grown diamonds which show a different NON-BLUE color and/or blue with some red painting.
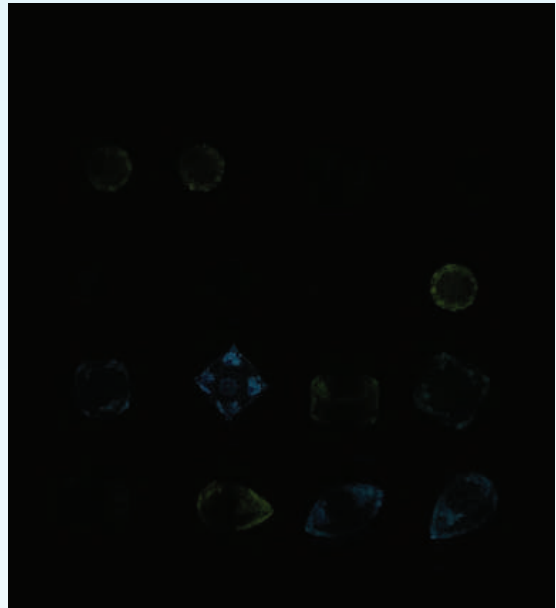
RESULT PICTURE

GLOWING RESULT
Phosphorescence

Lab grown diamonds will shine in a NON blue color and/or be fully or partially painted in red.

A CVD lab grown diamond may or may not have phosphorescence. If it has phosphorescence it will be painted in red in the *RESULT* picture.

AN HPHT LAB GROWN DIAMOND

RESULT PICTURE
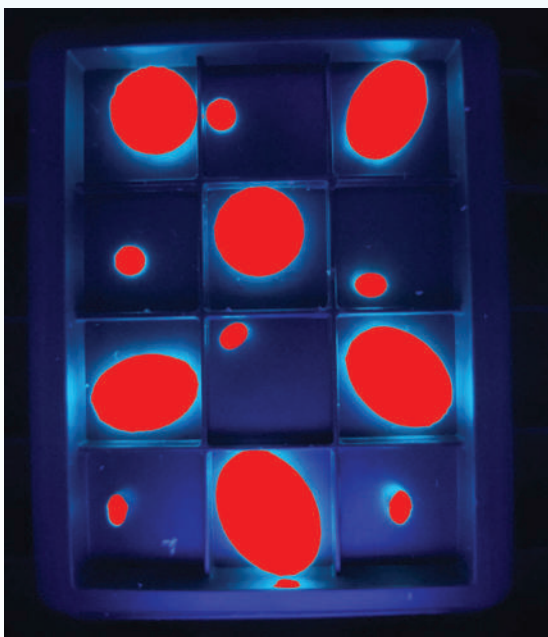
GLOWING RESULT

The HPHT lab grown diamonds in the picture above are fully painted in red.
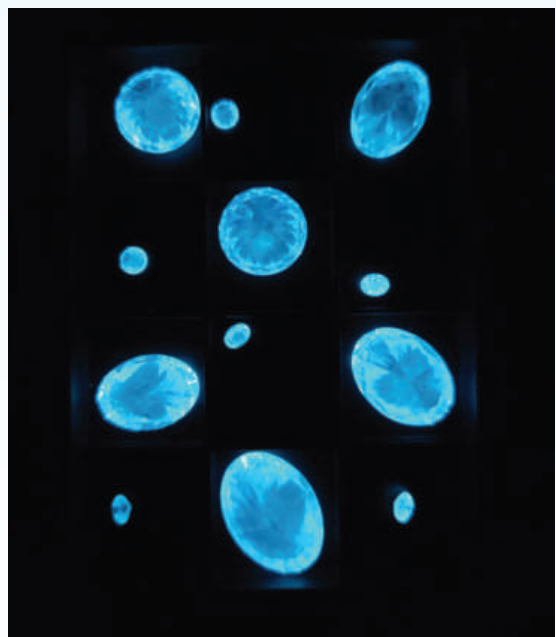
HPHT lab grown diamonds show very strong phosphorescence. *ALWAYS IN BLUE*. The glowing of these diamonds is converted by the software into red painted in the *RESULT* picture.

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HPHT & CVD LAB GROWN DIAMONDS TOGETHER

RESULT PICTURES
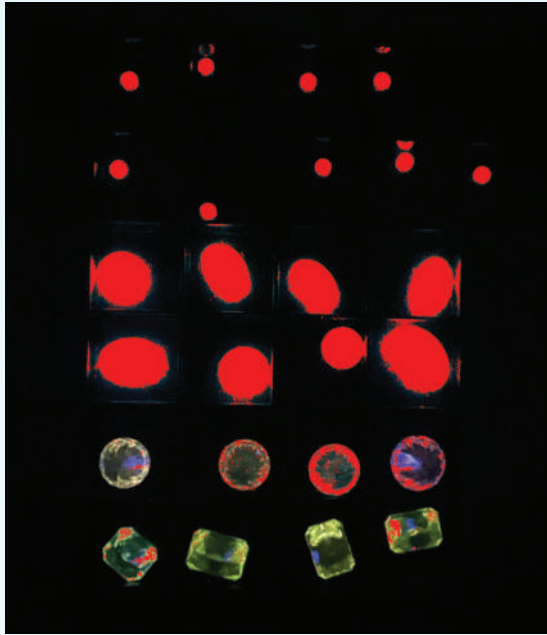
All of the diamonds at the top part of this picture are HPHT lab grown diamonds and they are fully painted in red. The 8 diamonds at the bottom part of the picture are CVD lab grown diamonds. They show a **NON-BLUE** color and some are partially painted in red.

COLORED PICTURES
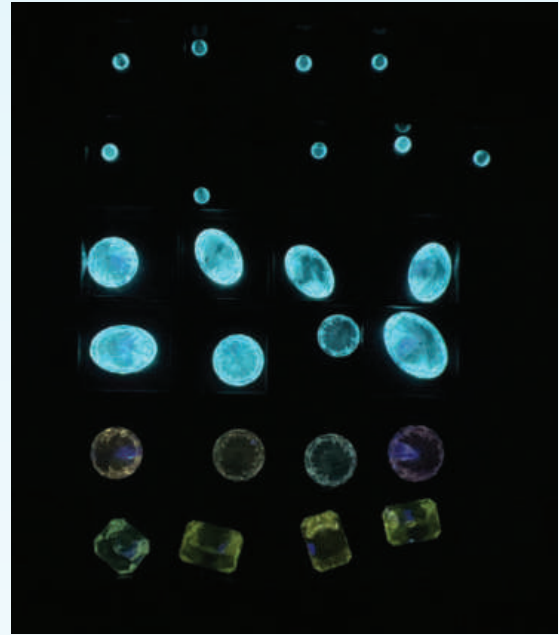
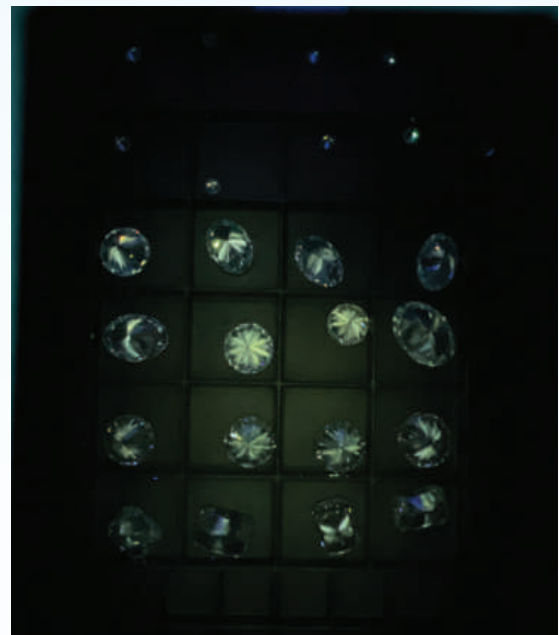HPHT lab grown diamonds show blue fluorescence but will be painted in red due to their phosphorescence.

CVD lab grown diamonds fluoresce in non-blue colors.

GLOWING RESULT
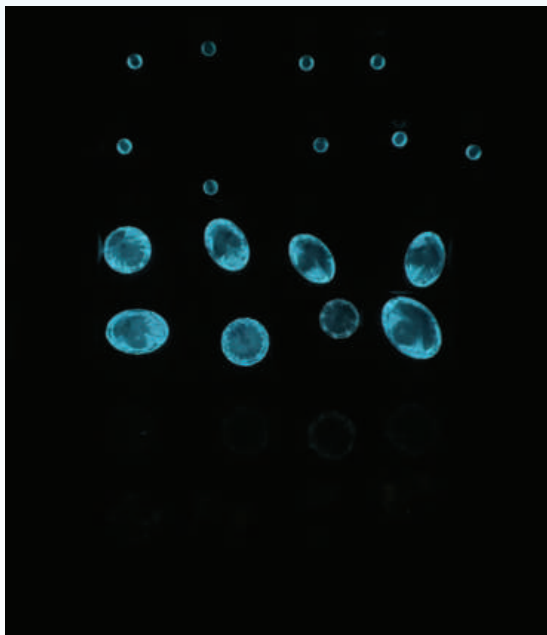
HPHT lab grown diamonds show very strong phosphorescence in a blue color.
CVD lab grown diamonds show a very weak phosphorescence or none at all.

LUV RESULT

HPHT and CVD lab grown diamonds do not show any fluorescence under Long UV illumination.

FLASHLIGHT EFFECT

GLOWING PICTURES
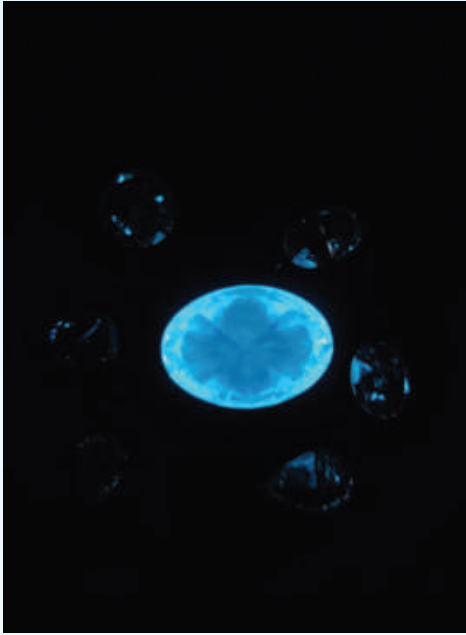
The oval HPHT lab grown diamond above is showing very strong phosphorescence and acts like a flashlight illuminating the natural diamonds near it. Thus some red painting will be applied on them at the *RESULT* picture.
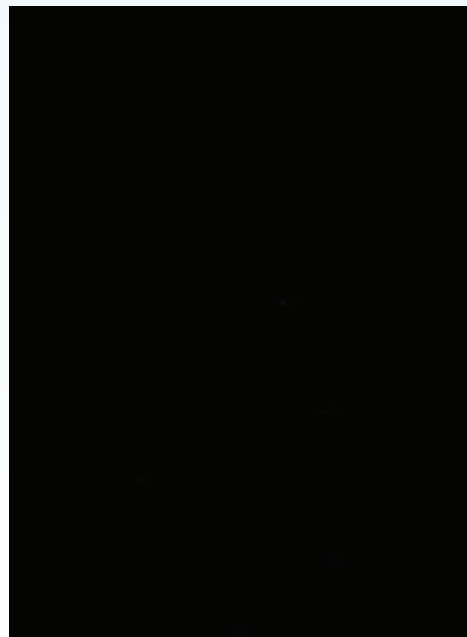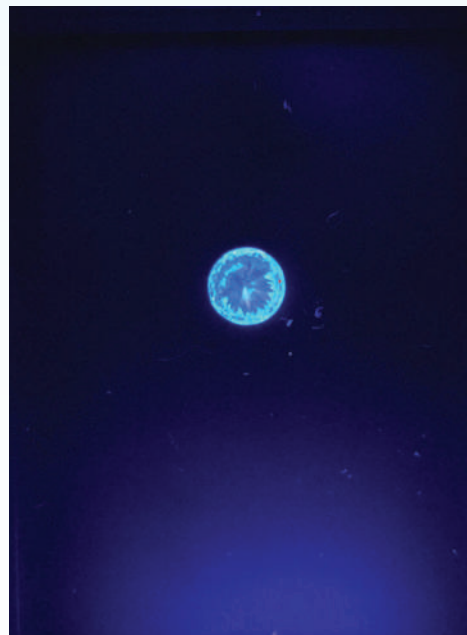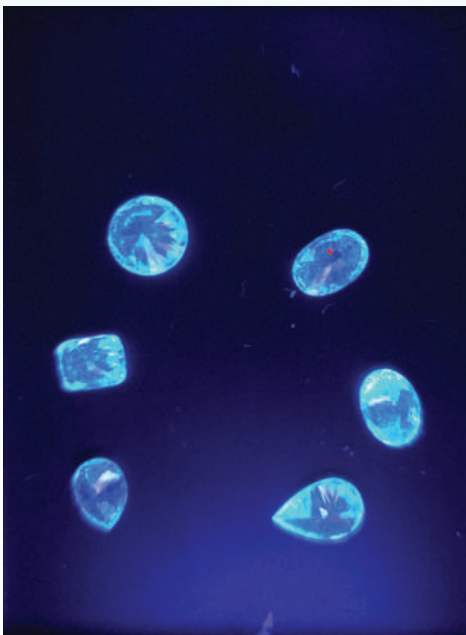

As seen above, after taking out the oval stone that acts like a flashlight, natural diamonds do not show phosphorescence.

FLASHLIGHT EFFECT

RESULT PICTURES
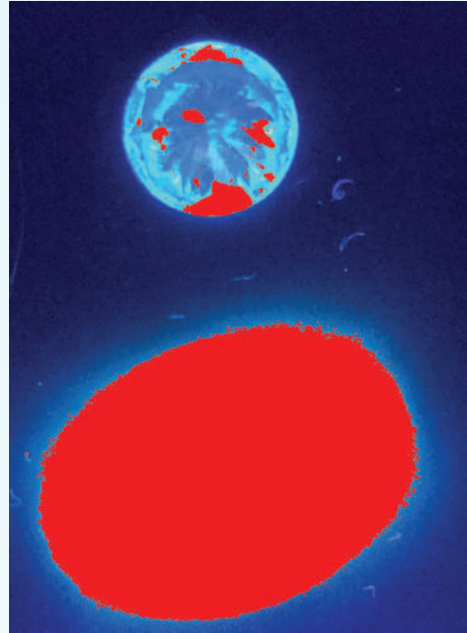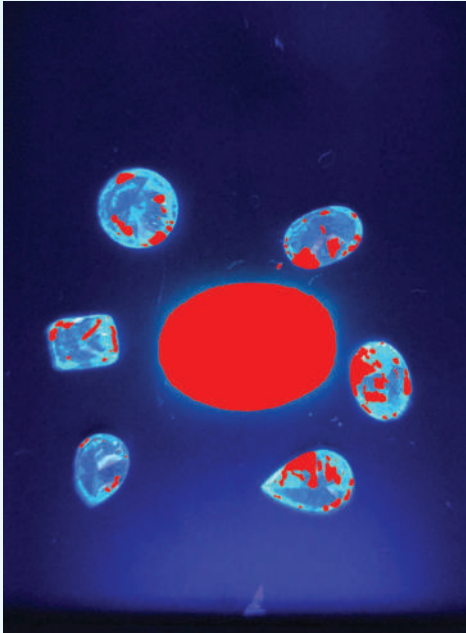
The above oval is an HPHT lab grown diamond. The diamonds next to it are natural diamonds, but they are partially painted in red. You must always take a diamond that is fully red painted out to be sure of the results of the other diamonds.
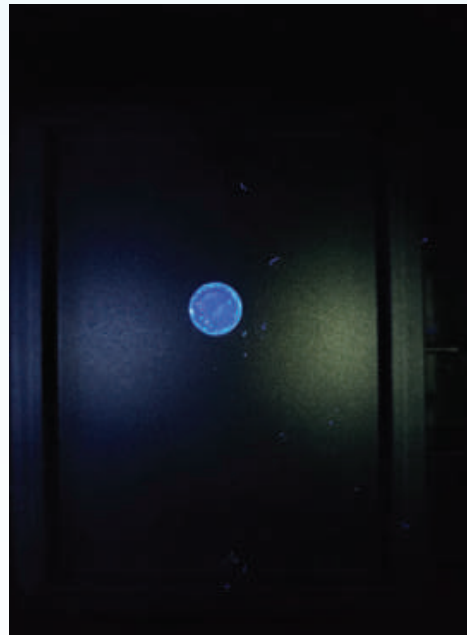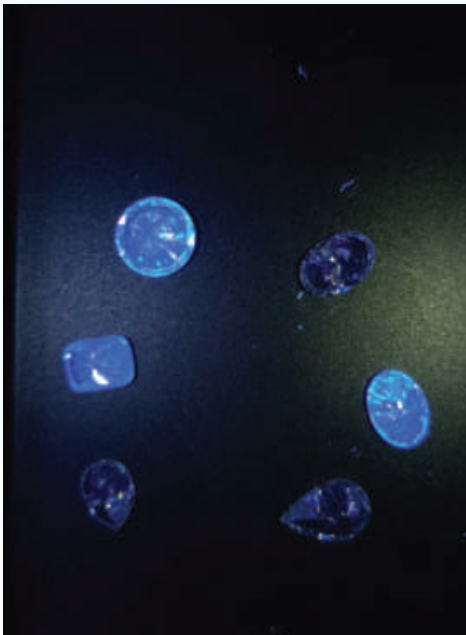

As seen above, after taking out the OVAL stone that acts like a flashlight, there is
NO RED PAINTING - THE STONES ARE NATURAL.
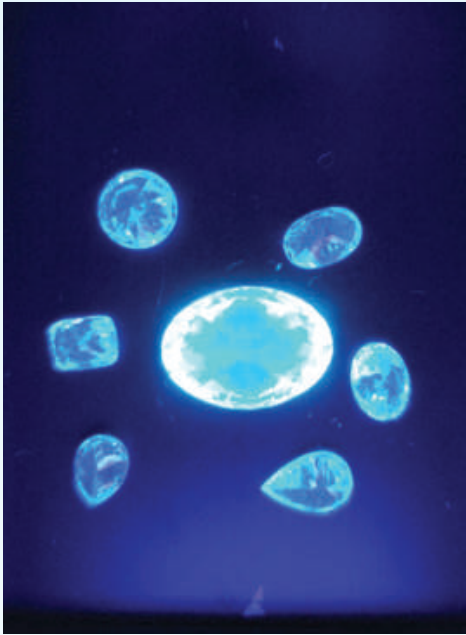
FLASHLIGHT EFFECT

LUV PICTURES
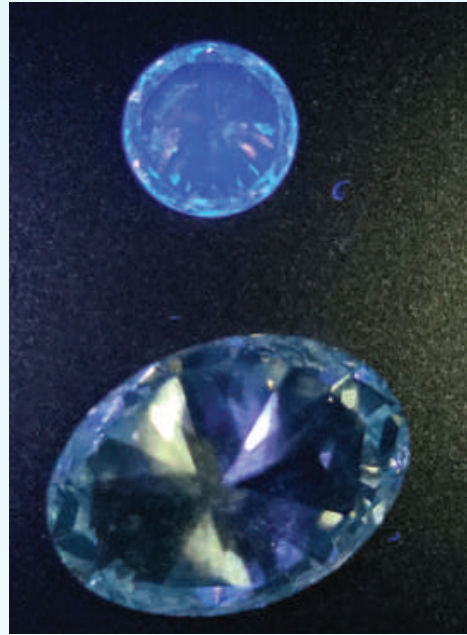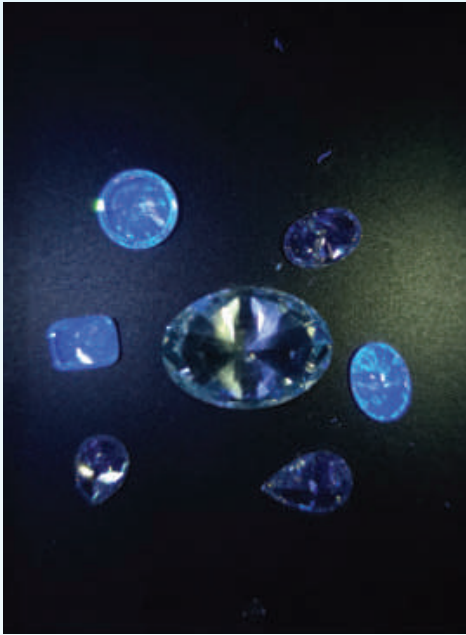
Under Long UV illumination, the oval (which is an HPHT lab grown diamond) does not show any fluorescence. Some of the natural diamonds show fluorescence.
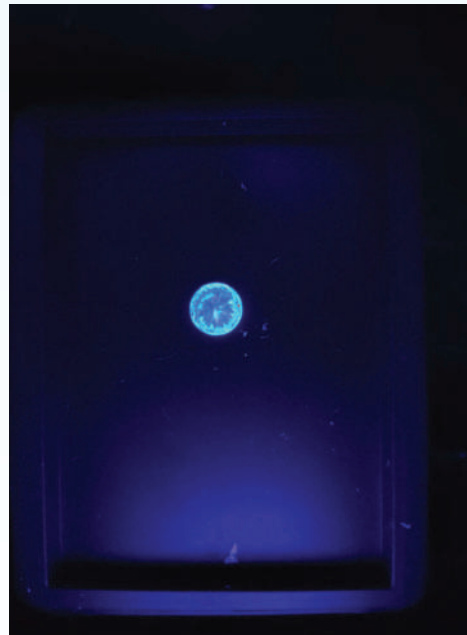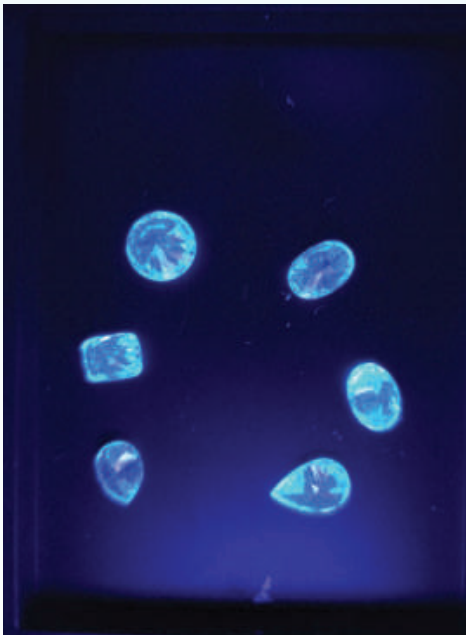

As seen above, after taking out the oval stone that acts like a flashlight, some natural diamonds show fluorescence under Long UV illumination.

# FLASHLIGHT EFFECT

COLORED PICTURES

The HPHT lab grown diamonds and NATURAL diamonds fluoresce in blue. However, due to the fact that HPHT lab grown diamonds show phosphorescence, it will be marked in red in the *RESULT* picture.

As seen above, after taking out the HPHT lab grown oval diamond that acted like a flashlight, natural diamonds show blue color under our proprietary light.

SIMULANTS

Non-diamonds do not show fluorescence or phosphorescence at all. That means they will not emit light under our proprietary light or under the long UV illumination. If they show any color at all, please understand that it is only a REFLECTION. You can easily discern if the stone shines or just reflects some light.
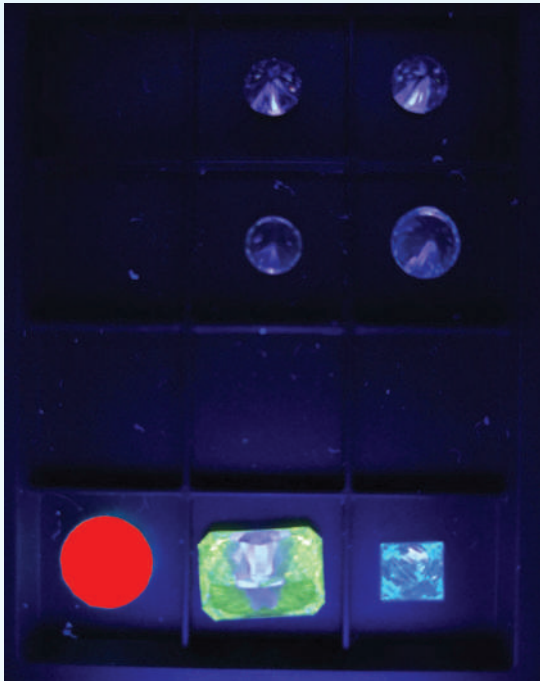
RESULT AND COLORED PICTURES

The top 2 stones are moissanite.

The 2nd row of stones are CZ.

The bottom 3 stones:
- The left one is an HPHT lab grown diamond.
- The middle one is a CVD lab grown diamond.
- The right one is a natural diamond.

COLORED PICTURE

GLOWING RESULT
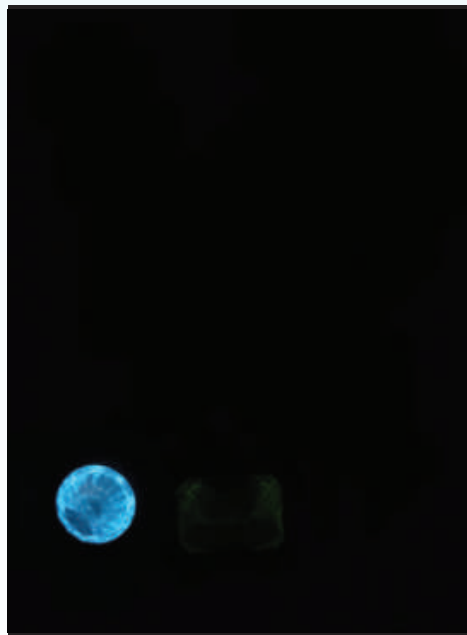
These HPHT and CVD lab grown stones show phosphorescence. Simulants and natural diamonds show NO phosphorescence whatsoever.

LUV RESULT

Only the natural diamond on the bottom right shows some blue fluorescence. Simulants and lab grown diamond will never show fluorescence under Long UV illumination.

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FALSE POSITIVE

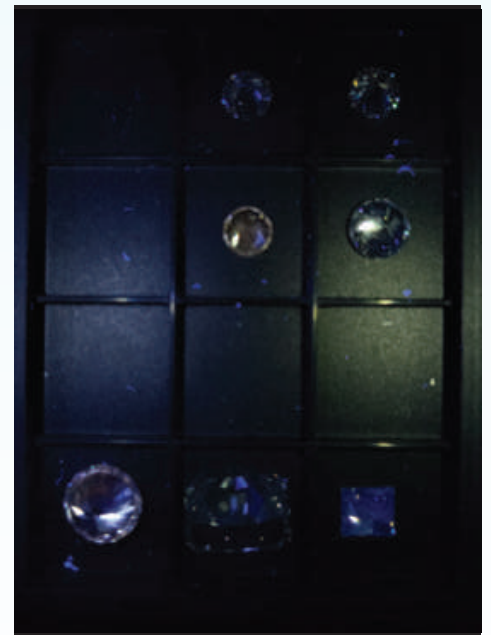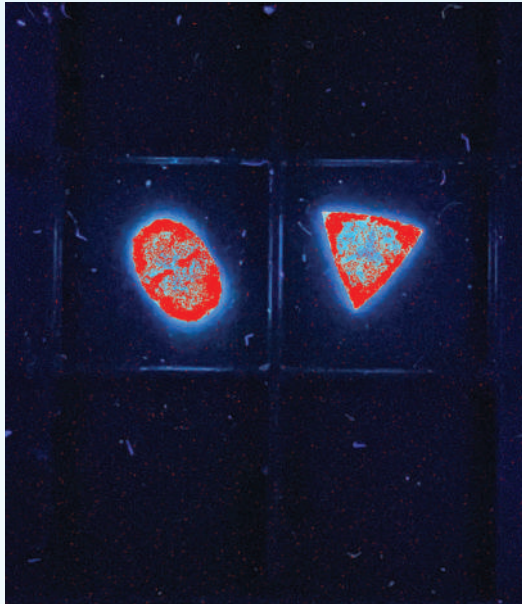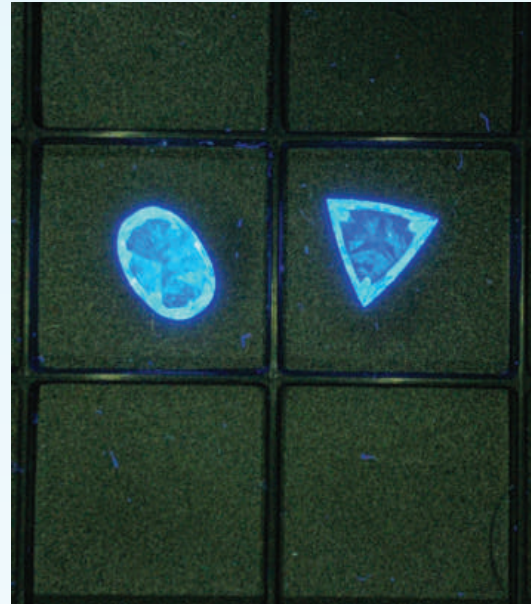False positive means that a natural diamond gets a result of a lab grown diamond. It happens in about 2.5% of natural diamond. In order to further reduce this rate we **MUST** check the LUV (LONG UV) result.
If a diamond show **BLUE** fluorescence under the LUV illumination- it is 100% natural diamond.

RESULT PICTURE

Here we have a result of a lab grown diamonds

LUV PICTURE

HOWEVER: when we go the LUV (LONG UV) result – both diamond show blue fluorescence.
That means that both are NATURAL diamonds!!!

Pay Attention: Some natural diamonds that give a false positive result will NOT shine under the Long UV illumination.

ASSURE TESTING

The **ASSURE Instrument Testing Program** is an ongoing initiative of the Natural Diamond Council. They used an independent 3rd party, Underwriters Laboratories (UL), to impartially test and verify the effectiveness of all the CVD/HPHT detection devices submitted for a comprehensive review. Underwriters Laboratories tested 31 different detectors. Of these, 15 were the preferable types that could simultaneously check multiple diamonds and jewelry. Of the 15 tested, ONLY TWO were determined to be capable of detecting 100% of all lab grown diamonds.

The two they certified as having this perfect detection rate included:

Sherlock Holmes 2.0 by **YEHUDA.**
SYNTHdetect by DeBeers ($18,000-$25,000)

Our new generation detectors have not yet been evaluated by Underwriters Laboratories in the ASSURE program. However, it is important to note that these new generation **YEHUDA** detectors use the **IDENTICAL DETECTION WAVELENGTHS**, and based upon our rigorous testing, we are confident that their accuracy is identical to the Sherlock Holmes 2.0.

Explaining the *ASSURE* test results:
• The Sherlock Holmes 2.0 was verified to detect 100% of all lab grown diamonds.
• It was also found to have a false positive rate of 2.5%.

What this means for you:

If the result is that a diamond glows a blue color - it is 100% a natural diamond. Period.
You can always be 100% certain that the diamond is natural if this occurs.
If the result is a lab grown diamond, there is small (2.5%) chance that it is a natural diamond. In other words, only 2.5 diamonds out of every 100 natural diamonds will give a result of a lab grown diamond. This is called false positive. (With the addition of the Long UV test we have further reduced the false positive rate.)

What this means from a practical perspective:

• If the result is that a diamond glows in a non-blue color or is painted in red, it is most likely a lab grown diamond, since only 2.5% of all natural diamonds will give a false positive result showing a lab grown diamond.
• Thanks to the Long UV test, we have actually reduced the 2.5% false positive results from our prior generation models.

The bottom line is:
• *When you get a natural result - it is 100% natural.*
• *When you get a lab grown result - there is a very small chance that it is a natural diamond.*

TROUBLE SHOOTING

For any problems, please visit our www.yehuda.com website and watch the video that addresses your concern. We have created numerous short instructional videos and we are certain that you will find the one that will address the problem you are experiencing.

Customer support:
You can send a question through the app. Go to 'CONTACT US", describe the issue and send it. We will send you an email with a solution or call you ASAP.

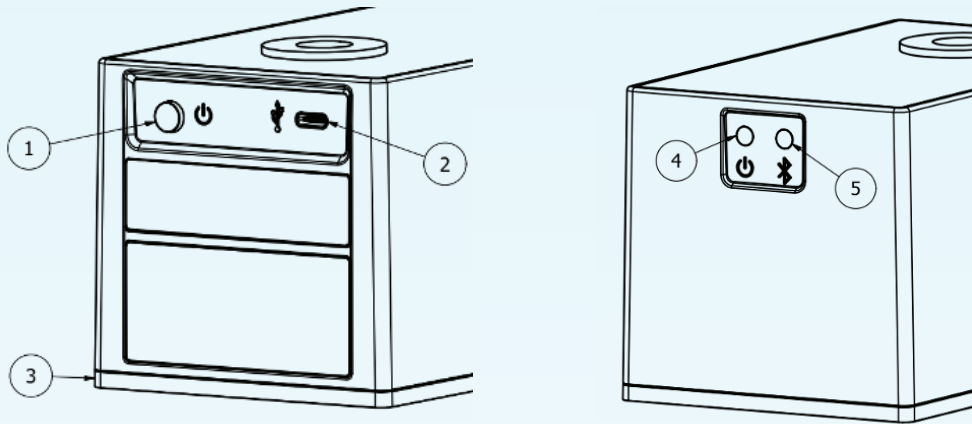Phone numbers:
Israel   +972-3-575-1456
New York   +1-212-221-5985
India   +91-98205-11479
Email   sh@yehuda.com
Website   www.yehuda.com

Sherlock Holmes Detect LTD.
16 Haharoshet street
Or Yehuda
Israel

DR WATSON

POWER

Device is powered by internal rechargeable Lion 200mAh battery

REAR PANEL

1   Power button
2   Charging and service connector
3   Jewelry tray

FRONT PANEL

4   Charged LED: OFF- Not charging or OFF
    Blink – Charging in progres. Green – Charging complete
5   Bluetooth LED: OFF- Device is OFF
    Slow blink - Device is ON and ready to communicate.
    Fast blink - Device is Connected and communicating.

POWER ON/OFF

To power ON the device, push the power button (1) for more than 0.5Sec.
To power off the device push the power button (1) for more than 2Sec.

CHARGING

Charge with USB 5V/2A charger. Charging port type: USB-C.

OPERATION

Make sure device is on tray before running a test. A message will appear in the application if not on tray. Test cannot be performed with device not on tray.

SPECIFICATIONS

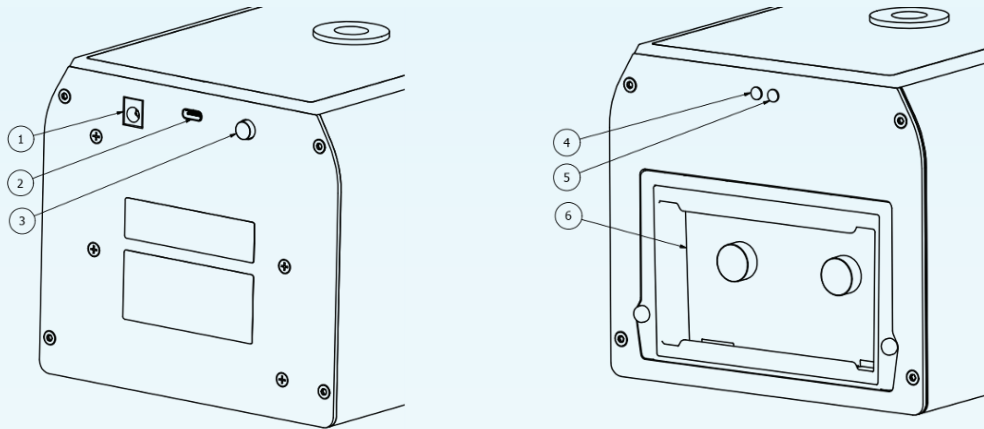| Weight	0.85Kg [1.9lbs]
Charging Power rating	5V/1A
Dimensions WxLxH	90x140x102mm [3.5"x5.5"x4"]
Operating temperature	0-40°C [32-104°C]
Altitude	1500m [4920ft]

SHERLOCK 4.0

POWER

Wall mount power supply (Supplied with equipment).

Input: 100-240VAC 47-63Hz

Output: 24VDC / 48W

REAR PANEL

1 Power Input Connector
2 USB Connector for service.
3 Power button

POWER ON/OFF

To power ON the device, plug in the power and push the power button (3) for more than 0.5Sec.

To power off the device push the power button (3) for more than 2Sec.

REAR PANEL

4 Power LED: OFF- No Power or device is OFF.
   GREEN- Device is ON. RED- General failure, contact service.
5 Bluetooth LED: Slow blink: Device is ready to communicate.
   Fast blink: Connected and communicating.
6 Jewelry Drawer

OPERATION

Make sure tray is closed before running a test. A message will appear in the application if tray is out.

Test cannot be performed with tray out.

SPECIFICATIONS

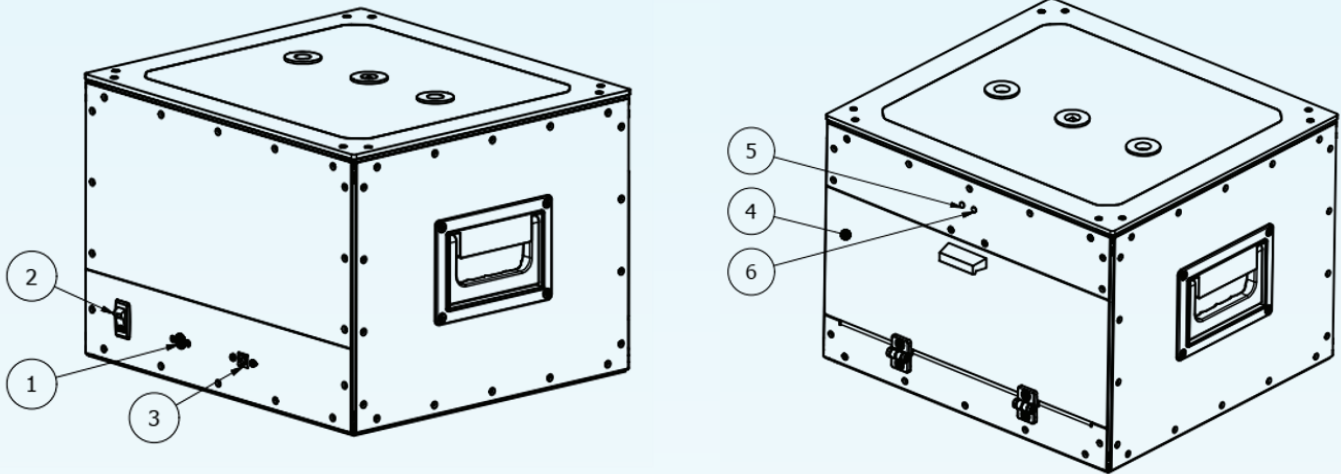|	
Weight	3.7Kg [8.2lbs]
Charging Power rating	24V/1A
Power supply (included)	Input: 100-240 VAC 47-63Hz Output: 24V/48V
Dimensions WxLxH	350x330x255mm[13.8"x13"x10"]
Operating temperature	0-40°C [32-104°C]
Altitude	1500m [4920ft]

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BIG SHERLOCK

POWER

Desktop power supply (Supplied with equipment).
Input: 90-264VAC 47-63Hz
Output: 24VDC / 90W

REAR PANEL

1 Power Input Connector
2 Main power switch
3 USB connector for service

REAR PANEL

4 Jewelry Drawer
5 Power LED: OFF- No Power or device is OFF. GREEN- Device is ON.
   RED- General failure, contact service.
6 Bluetooth LED: Slow blink: Device is ready to communicate.
   Fast blink: Connected and communicating.

OPERATION

Make sure door is closed before running a test. A message will appear in the application if door is open. est cannot be performed with open door.

SPECIFICATIONS

Weight	10.5Kg [23lbs]
Charging Power rating	24V/3A
Power supply (included)	Input: 100-240VAC 47-63Hz Output: 24V/90W
Dimensions WxLxH	350x330x255mm [13.8"x13"x10"]
Operating temperature	0-40°C [32-104°C]
Altitude	1500m [4920ft]

WARNING AND SAFTEY

	High Voltage is used in the operation of this equipment. To avoid risk of electrical shock do not remove any cover. No user serviceable parts inside. Refer servicing to qualified service personnel.
	Ultraviolet light is used in the operation of this equipment. Do not remove any cover.

Place the device in a place with easy access to power connection.

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