

GEMORO[®] Testerossa[™]

SIMULTANEOUS DIAMOND,
MOISSANITE & WHITE
SAPPHIRE TESTER

**NEW ADVANCED
EXCLUSIVE TECHNOLOGY**



The GemOro TESTEROSSA is the ultimate tester for diamond fraud protection that's exclusively **RECOMMENDED BY CHARLES & COLVARD**, the manufacturer of created moissanite! The TESTEROSSA features **NEW ADVANCED EXCLUSIVE TECHNOLOGY** capable of identifying the widest range of the electrically conductive moissanite material available, including the new super-low electrically conductive moissanite.

OPERATING PROCEDURE & OWNERS MANUAL

Congratulations on your purchase of the TESTEROSSA by GemOro Superior Instruments, the most trusted name in gemological instrumentation for the jewelry industry. You've made a smart choice, because the TESTEROSSA has been determined to be the world's best, most accurate, and durable option in diamond testing devices to assist you to separate true diamonds from moissanite, white sapphire, CZ, and other known diamond simulants.

IMPORTANT: PLEASE BE CERTAIN TO READ THE FOLLOWING COMPLETELY BEFORE USING.

THERMAL CONDUCTIVITY & ELECTRICAL CONDUCTIVITY TESTING METHODS:

The recognized method for separating diamond from all known diamond simulants (except moissanite and synthetic diamond) is the thermal conductivity test. The thermal conductivity test works consistently well since a diamond's heat conductivity property is significantly greater than all other gemstones (except moissanite and synthetic diamond). White sapphire is also thermally conductive, yet not as conductive as diamond and moissanite,

therefore, it can be separated from those two types of stones.

The recognized, most practical way for separating the vast majority of moissanite gemstones from diamond is the electrical conductivity test; since most moissanite conducts electricity while diamonds, as well as other known diamond simulants, do not. It should be noted that while the vast majority of moissanite may be electrically conductive, in some moissanite gemstones there might only be electrical conductivity in varying degrees and in some instances the electrical conductivity may be dependent upon the location on the stone's surface being tested. But have no fear. With the new PATENT PENDING technology built into the TESTEROSSA, you can identify the widest range of electrically conductive moissanite material available, including the new super-low electrically conductive moissanite. It works so amazingly well, the TESTEROSSA has been recommended by Charles & Colvard, the manufacturer of created moissanite, as their tester of choice. It doesn't get any better than that!

Other than some rare and natural colored diamonds, as well as some lab grown synthetic diamonds, natural white diamonds do not conduct electricity. If a stone does not conduct heat or electricity, it will be determined to be more than likely a common CZ or other diamond simulant. **Because hand-oil is electrically conductive and the stone being tested may not be clean, any test result that indicates moissanite, especially on smaller size stones that haven't been cleaned, should be suspect, cleaned, and retested.** Due to the electrical conductivity properties of some of the chemicals commonly used in the production of lab-grown synthetic

diamonds, when the TESTEROSSA's probe tip touches these stones the metal alert feature or moissanite indication may be set off.

The GemOro Superior Instruments TESTEROSSA utilizes both the thermal conductivity and electrical conductivity testing methods in one seemingly simultaneous test, and it will quickly help in identifying and separating the stone in question. The TESTEROSSA is an advanced, technologically based tool and it should be used as a helpful device only. The TESTEROSSA is not meant to replace the trained gemologist.

NATURAL COLORED DIAMONDS & TREATED COLORED DIAMONDS:

Because some fancy natural colored diamonds and some fancy treated colored diamonds are electrically conductive, the GemOro TESTEROSSA should ideally be used on colorless stones only. This limitation applies to all testers that utilize thermal and electrical conductivity methods for testing the authenticity of the stone.

IMPORTANT DISCLAIMER: The TESTEROSSA is a helpful screening tool that by design is to be used as a quick method for helping to identify diamond, moissanite, and white sapphire. The TESTEROSSA should not be used as the final method for determining the authenticity or identity of the gemstone being tested. The final determination of the identity of any gemstone, whether genuine or not, should only be made by a trained gemologist. Neither GemOro nor any of its affiliates, dealers, or distributors shall be held liable for any loss and/or damages associated with the use of the TESTEROSSA. No warranties exist with respect to the TESTEROSSA or its use

other than those expressly contained herein. All other warranties of any kind or character whatsoever, whether expressed or implied, including warranties of merchantability or fitness for a particular purpose, are hereby disclaimed and are excluded from the warranties hereunder. In the event that a claim is made with respect to the TESTEROSSA or its use, the maximum liability of GemOro, and its affiliates, dealers, and distributors shall be the amount paid for the TESTEROSSA.

PLEASE READ BEFORE USING THE PROVIDED NiMH RECHARGEABLE BATTERIES:

Before using the NiMH rechargeable batteries that have been provided with your tester, the batteries should be fully charged as indicated by the small round LED indicator next to the power button glowing green when the TESTEROSSA is plugged in. While the batteries are being charged, the tester may be used as desired while powered by the AC current.

CONDITIONS FOR IDEAL OPERATION:

1. The TESTEROSSA should be used in the following environmental conditions. Both the tester and the stone being tested must be the same temperature. By not following these instructions you risk compromising the accuracy of the test.
 - a. Temperature: 65°F-80°F (18°C-27°C)
 - b. Air Relative Humidity: 45%-75%
2. The stone being tested must be dry. If the surface of the stone is wet or has any type of surface moisture it may not test correctly.

3. The stone being tested must be clean. Aside from obvious visible dirt that may be present on the stone, there may also be hand oil or other contaminants on the stones surface that may not be visible and which could impact the accuracy of the test. Always be certain to clean the stone being tested with an ultrasonic or steamer or other appropriate means, and thoroughly dry it and/or remove any cleaning chemicals remaining on the stone prior to testing.
4. It is imperative that the probe tip be cleaned regularly or ideally prior to performing a test. Please be aware that there may be hand oil or other contaminants that may not be visible on the probe tip, which could impact the accuracy of the test. To clean the tip, take a piece of uncoated white printer or copy paper and lay it on a table or counter or other flat surface. Place the tester in a 90-degree angle against the paper with the probe tip lightly touching it. Apply enough pressure to gently depress the spring loaded probe tip slightly inside the housing while carefully rubbing the probe tip on the paper in a forward motion a few times to clean it. Repeat this process routinely or prior to testing each time to ensure the cleanliness of the probe tip.
5. Always allow the stone being tested to cool off for 5-10 seconds prior to retesting. Blowing on the stone is recommended and will speed up this process. Please be aware that if while testing a stone the TESTEROSSA's light pipe turns pink, unless it is a white sapphire or sapphire watch crystal, odds are that the stone has been overheated from prolonged exposure to the probe tip and,

therefore, you must wait for the stone to cool off prior to retesting.

TESTEROSSA FEATURES:

1. Helps to identify diamond, moissanite, and white sapphire, including genuine sapphire watch crystals. The test results are shown via its PATENTED color-coded light pipe and simultaneously it is also spoken verbally in one of nine different user-programmable languages (English, Spanish, German, Italian, French, Japanese, Mandarin Chinese, Russian, and Arabic). Instead of talking, alternatively the tester may be programmed to provide unique ring tones when identifying the various materials or providing other alerts, both of which are PATENT PENDING.
2. Quickly assists with testing most any size diamond and moissanite, including low conductivity moissanite, whether mounted or loose.
3. The sleek and ergonomic shape comfortably rests in and on your hand when held, and the tester has PATENT PENDING intuitive finger grip pads for increased user-friendliness and ease of use.
4. The LED illuminator and UV fluorescence detector are positioned under the probe tip. The LED Illuminator is a super bright LED that illuminates the stone being tested and, since it is a UV LED, it also helps to identify fluorescence in diamonds.
5. The tester is equipped with a spring-loaded probe tip designed to protect the probe tip if excessive force is used while testing or if it is accidentally dropped.

6. The tester housing is made from virtually indestructible polycarbonate, and has a molded rubber base for increased impact resistance.
7. Powered by (3) supplied 1.5V AAA NiMH rechargeable batteries. The rechargeable batteries may be substituted with AAA alkaline batteries if a suitable power outlet is unavailable to recharge the NiMH batteries.
8. The tester is also designed to have its batteries charged with the TESTEROSSA's PATENTED GemOro UltraDock 3 charging station accessory, which is included with the tester.
9. Includes a premium GemOro carbon-fiber style protective carrying/storage case, aluminum loose stone holder, as well as (3) user-replaceable AAA NiMH rechargeable batteries, a universal multi-voltage 100V-240V AC adaptor/charger cube with micro-USB cord. It also comes with a handy PATENT PENDING GemOro Test Stone Magnifier attachment, which when clipped onto the tester's tip cone area allows the user to more easily see and test small diamonds without accidentally touching the setting or prongs.
10. The tester has an auto-off function to preserve the battery life and it will automatically turn itself off after a period of 5 minutes of non-use. After powering down, if you wish to resume using the TESTEROSSA, simply touch the tester's power button and within seconds the tester will turn itself back on again.

11. Glowing LED Light Pipe / Probe Tip
Cone Indicator (see image):

GREEN = Diamond

BLUE = Moissanite

PINK = Sapphire

RED = Metal Alert



DIAMOND



MOISSANITE



SAPPHIRE



METAL ALERT

12. Round LED indicator (see image)

RED = Low Batteries

YELLOW = Charging Batteries

GREEN = Fully Charged Batteries



BATTERY LED INDICATOR

13. Bright blue LED illuminated power button.

14. Pocket-sized and portable.

15. Simple to operate.

SPECIFICATIONS:

- Working Voltage: DC 1.2V (3) × AAA NiMH, DC 1.5V, (3) × AAA alkaline batteries or its universal voltage 100V-240V AC adapter cube.
- Probe Tip Warm-Up Time: Approximately 25 seconds.
- NiMH and Alkaline Battery Working Time: Approximately two hours of continuous use.
- Working Temperature: 65°F-80°F (18°C-27°C).
- Air Relative Humidity: 45%-75%.
- Net Weight: Approximately 100g (including batteries).

CAUTION:

- DO NOT disassemble the TESTEROSSA other than to replace the batteries or the warranty will become void.
- UV EYE HAZARD - Avoid looking directly into the UV LED.

OPERATION:

1. NiMH Battery Usage and Alkaline Battery Installation: Remove the battery compartment door located on the end of the TESTEROSSA by using your thumb to slide the textured area down and in the direction of the arrow (see image).



TESTER BATTERY COMPARTMENT

To activate the (3) NiMH rechargeable batteries, REMOVE THE BATTERY DISCHARGE INSULATOR TAB located at the end of the batteries and then carefully replace the battery compartment door (see image).

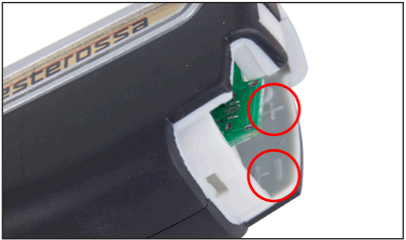
To increase the life of the NiMH rechargeable batteries, after removing the discharge insulator tab in the battery compartment, fully charge the batteries prior to use.



BATTERY DISCHARGE INSULATOR TAB

If you wish to replace the NiMH batteries with alkaline batteries, after removing the battery compartment door as described above, insert (3) high-quality AAA 1.5V alkaline batteries

into the battery compartment. The proper polarity positioning is indicated on the side of the battery compartment wall showing the direction of positive (+) and negative (-) polarity (see image) so that it is correctly positioned in the battery holder. Carefully replace the battery compartment door.



BATTERY POLARITY

2. The TESTEROSSA's batteries may be charged by placing the tester in its included UltraDock 3 battery charging station with the micro-USB power cord plugged into the rear of the charging station or by plugging its micro-USB power cord into the rear the tester and the USB adapter cube directly into a wall outlet. Once the tester is connected to the AC adapter or the charging station, the tester will switch to its DC power mode. The tester's built-in Intelligent Charging Circuit ICC will automatically identify the type of batteries installed (NiMH rechargeable batteries or alkaline batteries). If alkaline batteries are installed, the circuit will automatically cut off the power supply to the batteries so that the alkaline batteries will not be recharged. If NiMH rechargeable batteries are installed, the batteries will be recharged and at the same time the tester may be used with the AC adapter.

3. To turn the TESTEROSSA ON, press the oval shaped power button located on the top center edge of the tester (see image) and hold it down for approximately one second, then release the button. The power button's blue LED indicator will begin flashing. The warm-up time is approximately 25 seconds. When it has fully warmed up, the flashing blue LED light will become solid. At this time the tester will say, "READY" or if in the ring tone setting, a bell will chime twice. You may now begin using the tester.



POWER BUTTON

4. When using the TESTEROSSA for the first time, the factory setting is designed to indicate by default to the English-speaking mode. While in this mode it has the ability to identify and say "READY," "DIAMOND," "MOISSANITE," "METAL ALERT," and "POWER DOWN". To change the indication, while the tester is powered on and the blue power switch is illuminated, press and hold the power button down until the indicator begins scrolling through the various options. The options include: English, Ring Tone, Spanish, German, Italian, French, Japanese, Mandarin Chinese, Russian, and Arabic. Once the desired indication has been found, remove your finger from the button. The TESTEROSSA's indicator will remain

in that mode the next time the unit is powered up or until it is physically changed.

5. The TESTEROSSA is also equipped with a PATENTED color-coded light pipe and probe tip cone indicator. This line of sight colored indicator allows the user to easily see the test results while keeping their eyes on the stone being tested.

GREEN = Diamond

BLUE = Moissanite

PINK = Sapphire

RED = Metal Alert

6. **Prior to using the TESTEROSSA, be certain to REMOVE THE WHITE PROBE TIP CAP at the front end of the tester that serves to protect the probe tip from accidentally being bent or broken.** The cap may be easily removed by simply applying a minimal amount of pressure to the top and bottom sides of the cap, as you hold it between your thumb and forefinger. Then gently pull it down, out and off. Always replace the cap when the TESTEROSSA is not in use.



PROBE TIP CAP

7. To properly hold the TESTEROSSA, it is important to grasp the tester similarly to how you'd hold a pen, but with your thumb and forefinger touching the PATENT PENDING finger pads located on either side of the tester (see image). This will allow you to easily manipulate the tester and make the best contact with the stone being tested. While holding the tester, its ergonomic shape allows it to comfortably rest in and on the top of your hand. If you hold the tester without touching the finger pads, the metal alert feature will not function.



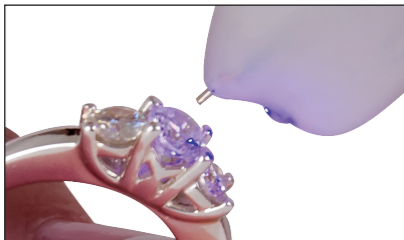
HOW TO PROPERLY HOLD THE TESTER

8. The LED Illuminator allows the user to easily see the stone being tested to confirm that only the stone is being tested and that the setting or prongs are not accidentally being touched. This LED is a special UV type that may also be used to identify the fluorescence characteristic found in approximately 30% of all diamonds.



FLUORESCENCING STONE

9. Testing Mounted Stones: **With one hand, hold the ring or setting that contains the stone you wish to test and in your other hand hold the TESTEROSSA.** Position the stone's table (see image) in front of the testers probe tip. Quickly, yet firmly touch the testers probe tip to the stone's table, while being certain not to allow the probe tip to make contact with the metal setting or prongs. While firmly depressing the spring-loaded probe tip all of the way in until you hear a click sound, touch the stone just long enough to allow the tester to indicate a reading (1 or 2 seconds) and then take the probe tip away from the stone. **Be aware that a stone that has been overheated by prolonged exposure to the probe, or from body heat due to wearing or the environment, may not test accurately.** Always allow the stone and setting a few seconds to cool off to room temperature before testing. Blowing on the stone will speed up this process.



TESTING A MOUNTED STONE

10. Testing Loose Stones: Place the loose stone in the supplied aluminum loose stone testing plate positioned with the stones culet (see image) pointing down into the recessed hole part of the testing plate. **Then hold the testing plate steady with one hand (see image), as**

this will also allow the electrical current to pass through your body, permitting the tester to function as designed and test properly. While holding the TESTEROSSA in your other hand, firmly touch the probe tip to the loose stone's table (see image) until the test result is indicated. **YOU MUST FOLLOW THIS PROCEDURE WHEN TESTING LOOSE STONES OR THE TESTER MAY NOT TEST CORRECTLY. DO NOT ATTEMPT TO TEST LOOSE STONES WHILE HOLDING THEM IN YOUR FINGERS OR THE TESTER MAY NOT TEST CORRECTLY.**



TESTING LOOSE STONES WITH TESTING PLATE

11. The probe tip must be cleaned routinely to ensure proper contact with the stone being tested. To clean the tip, take a piece of uncoated white printer or copy paper and lay it on a table or counter or other flat surface. Place the tester in a 90-degree angle against the paper with the probe tip lightly touching it. Apply enough pressure to gently depress the spring loaded probe tip slightly inside the housing while carefully rubbing the probe tip on the paper in a forward motion a few times to clean it. Repeat this process routinely or prior to testing each time to ensure the cleanliness of the probe tip.

12. Using the UltraDock 3: Place the charging station in a convenient location near where it will be used, such as on a desk, showcase or repair area counter. Take the testers micro-USB power cord and plug it into the rear of the UltraDock 3, while plugging the USB into its AC power cube adapter. Plug the adapter into a convenient wall outlet. When the charging station is plugged in and has power, the diamond shaped indicator on the front end of the dock will remain glowing green. You may now simply place the TESTEROSSA in the charging stations cradle with its bottom edge facing down, and the rear of the TESTEROSSA facing the back end of the cradle. When placed in the cradle, always confirm the tester is properly seated in the UltraDock 3 and is charging, as indicated by the round LED indicator on the TESTEROSSA next to the testers power button glowing either yellow for charging batteries or green for fully charged batteries. The TESTEROSSA will automatically have its NiMH batteries charged while in the UltraDock 3 (see image).



TESTER IN ULTRADOCK 3

13. Using the Test Stone Magnifier: This accessory will allow you to see a magnified view of the stone being tested and help ensure that you're making proper contact with the probe

tip and stone while not accidentally touching the setting or prongs. After removing the testers probe tip cap, take the Test Stone Magnifier's wider side of its oval shaped frame and insert it over the TESTEROSSA's probe tip cone in the direction of the arrows inside of the frame and clip it into place. Depending on whether you are right or left handed, you may conveniently position it on either side of the tester. Pivot the hinged magnifier so that it is positioned in front of the testers probe tip. You may now view the stones you are testing under magnification (see image). To remove the Test Stone Magnifier, carefully grasp it near the oval shaped frame for leverage and with a slight twisting motion it will expand the opening on the frame so you may then gently pull it off.



HOW TO USE THE MAGNIFIER



HOW TO REMOVE THE MAGNIFIER

MAINTENANCE:

1. The TESTEROSSA is not user serviceable other than battery replacement, probe tip cleaning, and recalibration. If service is required, please contact your supplier or the factory. **Any other attempt to repair the tester by a user will void the warranty.**
2. Always replace the protective probe tip cap to keep the probe tip from becoming damaged.
3. If using alkaline batteries, always replace the batteries after long periods of time to prevent premature corrosion or battery leakage, which is common with old or spent alkaline batteries after a period of time. Be aware that damage to the TESTEROSSA may occur if there is battery leakage and it will void the warranty.
4. In the event the TESTEROSSA is not used for an extended period of time, the batteries should be removed.
5. Routinely clean the probe tip.
6. The TESTEROSSA is not user serviceable other than battery replacement, probe tip cleaning, and recalibration. If service is required, please contact your supplier or the factory. Any other attempt to repair the tester by a user will void the warranty.

HELPFUL SUGGESTIONS:

1. If substituting alkaline batteries for the NiMH rechargeable batteries, only use high-quality AAA alkaline batteries.
2. The TESTEROSSA is designed to be able to easily test faceted or rough

stones of virtually all sizes. However, please keep in mind that small stones will naturally heat up much faster after being touched by the probe tip. After each test be certain to cool off the stone by blowing on it or waiting a few seconds until it cools if a retest is required. If testing diamonds in a pave setting, please note it is easy to accidentally overheat the stones next to the one being tested. Therefore, it is very important that you test the stones while alternating testing one area of the ring and then another, while regularly blowing on the stones to cool them off.

3. The TESTEROSSA has been calibrated at the factory and should not require further calibration. If after using the TESTEROSSA it is determined that recalibration is required, please contact the factory for calibration instructions, which can be easily accomplished by any user. GemOro may be reached at 800.527.0719, 214.351.0380 or service@gemoro.com.

WARRANTY

Congratulations on your purchase of the GemOro® TESTEROSSA! Your TESTEROSSA features a 10-YEAR PROBE TIP AND BATTERY WARRANTY and LIFETIME LIMITED WARRANTY on the rest of the tester. The UltraDock 3 and Test Stone Magnifier accessories feature a 1-year warranty. Damage caused by abuse will void these warranties. These warranties become effective from the date of the original purchase assuming the purchaser fills out the WARRANTY REGISTRATION FORM at www.gemoroproducts.com/warrantyregistration or the purchaser provides a copy of their invoice (bill of sale) when making a warranty claim. In the event the tester's owner has not registered their tester or provided a copy of their invoice for when they purchased the TESTEROSSA, warranty service will be determined by the serial number tracking system as interpreted by the factory. In the event the TESTEROSSA is no longer available or has been discontinued and warranty coverage is applicable, at the factory's sole discretion, an equivalent tester may be substituted for the defective TESTEROSSA. The purchaser shall incur the cost for postage, insurance, and handling for all warranty and non-warranty repairs. Warranty repairs and/or replacements will be shipped back to the customer FOB Destination to the location of the customer's choosing if within the continental United States. Non-warranty repairs will be shipped back to the customer FOB Factory. Should the customer require the repair and/or replacement unit(s) to be shipped outside the continental United States, the customer will be required to pay

any related shipping charges and any related taxes / duties for the respective destination country, regardless of whether it is a warranty or non-warranty claim.



GEMORO[®]

 SUPERIOR INSTRUMENTS

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Warranty Registration
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warrantyregistration](http://www.gemoroproducts.com/warrantyregistration)
www.gemoroproducts.com