



GemOro[®] AuRACLE[™] AGT2

ELECTRONIC MOBILE GOLD & PLATINUM TESTER
FOR APPLE iOS IPHONE, IPAD, IPOD TOUCH & ANDROID

EASY OPERATION GUIDE & OWNERS MANUAL

Congratulations on your purchase of the AuRACLE AGT2 mobile gold and platinum tester by GemOro Superior Instruments, the most trusted name in testing instrumentation for the jewelry industry.

PLEASE BE CERTAIN TO READ THE ENTIRE EASY OPERATION GUIDE AND OWNERS MANUAL BELOW BEFORE USING YOUR GEMORO AURACLE AGT2.

GemOro **AuRACLE™** AGT2
Mobile Gold & Platinum Tester
EASY OPERATION GUIDE

*The AGT2 **MUST** be used while following the below easy steps and recommendations to get accurate test results.*

Before downloading the application, please note the appropriate system requirements for your particular mobile device:

APPLE: Requires Apple iOS 5.1 or higher.

ANDROID: Requires Honeycomb 3.1 or higher, USB host and/or USB On-The-Go (“USB OTG”) support, (please check your hardware manufacturer’s documentation to ensure support for USB host or USB OTG).

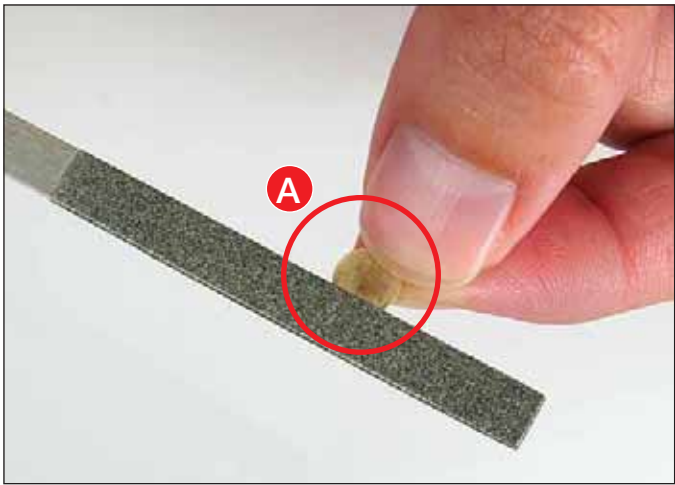
STEP 1: AGT2 APP DOWNLOAD AND COMPONENT ASSEMBLY

Turn on your mobile device and download the AGT2 app. After the app has been downloaded, launch it. Assemble the AGT2 components by attaching the cables, pen probe and testing plate to the AGT2 micro connection hub where indicated. The testing plate plugs into the jack labeled TRAY, the pen probe plugs into the jack labeled PEN and the mobile device plugs into the jack labeled DEVICE.

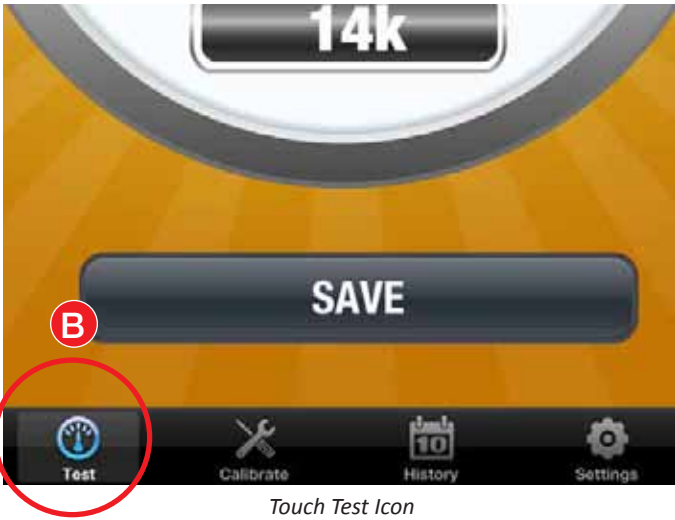
STEP 2: CHECK PEN PROBE & ELECTRICALLY CHARGE IT FOR USE

Remove the pen probe cap, then dab the pen probe’s felt tip on a clean, dry paper towel to clean it and absorb any excess pen probe solution, leaving the pen probe’s felt tip the consistency of a normal felt tip pen or marker. ***With new pen probes, they are typically slightly overfilled to provide maximum usage and consequently, excess solution will likely come out when the pen probe is initially used and for a period of time thereafter. Therefore, the need to continuously dab the pen probe’s felt tip on a clean and dry paper towel until the level of pen probe solution is reduced to the optimal level will be required.*** Be aware that if the pen probe solution drips from an overfilled pen probe and simultaneously touches both the gold or platinum and the testing plate it will not work. File a small area on the surface of the calibration piece that

is non-plated 10K, 14K, 18K, 22K, 24K or platinum **A**. Filing the metal is an important part of calibrating and testing gold as well as platinum, so always make sure this is done in order to get proper results. Rest the calibration piece on the testing plate with the filed area facing up. Touch the Test icon on your screen **B**. Check that the pen probe is working by holding it upright at an approximate 90° angle and gently yet firmly touching the very end of the pen probe's felt tip to the filed area of the calibration piece **C** until the reading settles **D**, which is typically in 2 to 3 seconds, yet sometimes it may take longer depending if the pen probe is new or has no charge at all. At this point the pen probe is charging and note that it is not important where the reading settles since it has not been calibrated yet. Repeat this process 3 times and wait for the reading to settle each time. By repeatedly touching the calibration piece it is electrically charging the pen probe for use, which is a vital part of the start up process.



File Calibration Piece



Touch Test Icon



Hold Pen Probe at 90° Angle to Gold



Test Results Settle in 2-3 Seconds

STEP 3: CALIBRATION PROCESS

- Always charge the pen probe as described in STEP 2 and calibrate it after each time it is turned on. Recalibrate it as necessary while in use. It is recommended to keep the AGT2 turned on throughout the day.
- **Use only common 10K, 14K, 18K, 22K, 24K or platinum that is non-plated to calibrate the AGT2.** Be aware that 14K yellow gold with a high silver content above 7% will not provide a proper calibration. Also, gold with an uncommon mixture of alloys may not provide a proper calibration. Using the optional AGT2 14K Yellow Gold Calibration Disc is recommended.

APPLE CALIBRATION

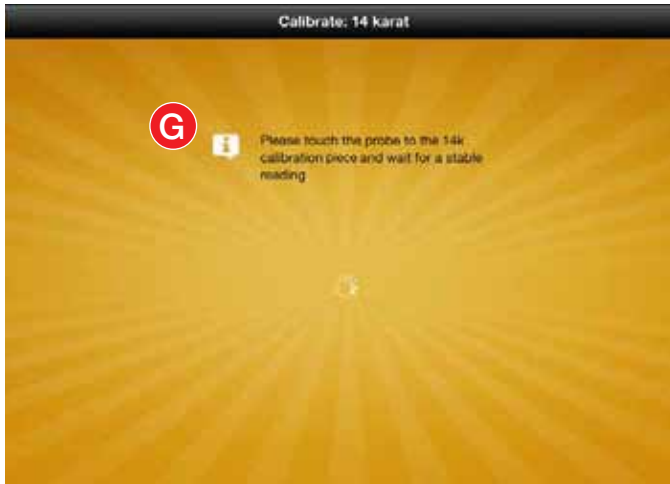
- Touch the CALIBRATE icon at the bottom of your screen **E** and then choose by touching the karat of gold or platinum you wish to use **F** to calibrate the AGT2. The AGT2 will then automatically prompt you to touch the very end of the pen probe's felt tip to the calibration piece **G**.
- Lightly yet firmly always only touch the very end of the pen probe's felt tip to the filled area on the calibration piece at an approximate 90° angle to the gold **H** and wait until the reading stabilizes.
- Once the calibration process has been completed, the screen will then display Calibration Successful **I**. You may now remove the pen probe's felt tip from the calibration piece.
- Touch the DONE button **J** on the screen and your AGT2 is now calibrated and will return you to the testing screen.
- At various times, the app will show a red indicator light and display Calibration Required **K**. By calibrating the AGT2 this indicator will go away.



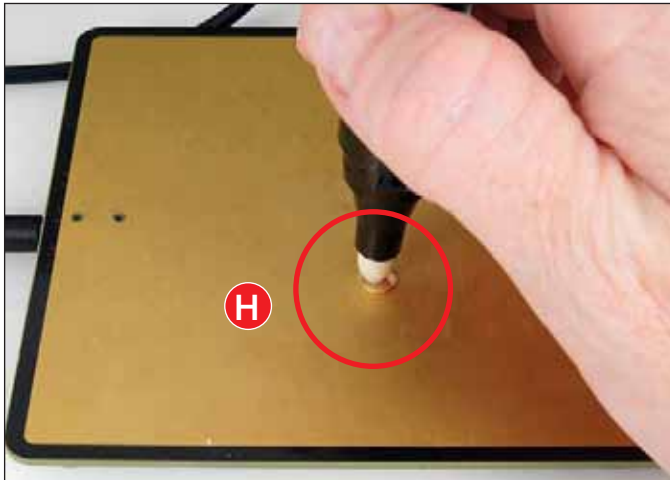
Touch Calibrate Icon



Touch Desired Karat or Platinum for Calibration



Prompt for Calibration Step



Hold Pen Probe at 90° Angle to Gold



Calibration Successful Message & Touch Done Icon to Complete Calibration



Calibration Required Reminder

ANDROID CALIBRATION

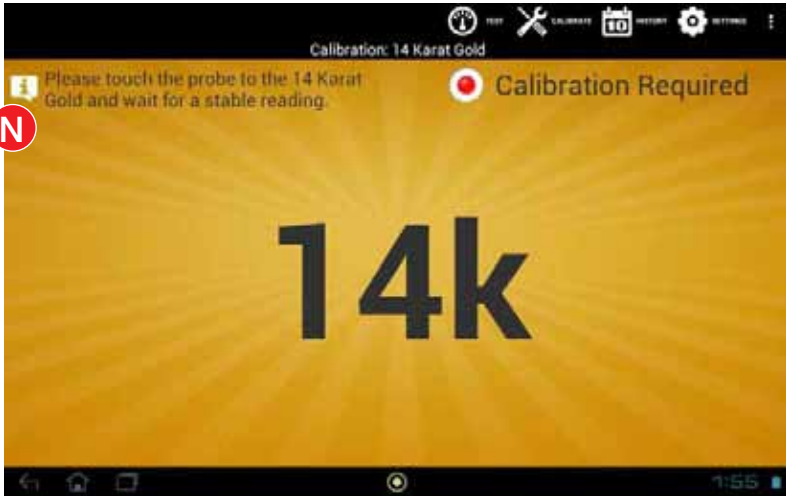
- Touch the CALIBRATE icon at the top of your screen **L** and then choose by touching the karat of gold or platinum you wish to use to calibrate **M** the AGT2. The AGT2 will then automatically prompt you to touch the very end of the pen probe's felt tip to the calibration piece **N**.
- Lightly yet firmly always only touch the very end of the pen probe's felt tip to the filed area on the calibration piece at an approximate 90° angle to the gold **O** and the display will show Calibration in Progress. Wait until the reading stabilizes.
- Once the calibration process has been completed, the screen will then display Calibration Complete **P**. You may now remove the pen probe's felt tip from the calibration piece to begin testing.



Touch the Calibrate Icon



Touch Desired Karat or Platinum for Calibration



Prompt for Calibration Step



Hold Pen Probe at 90° Angle to Gold



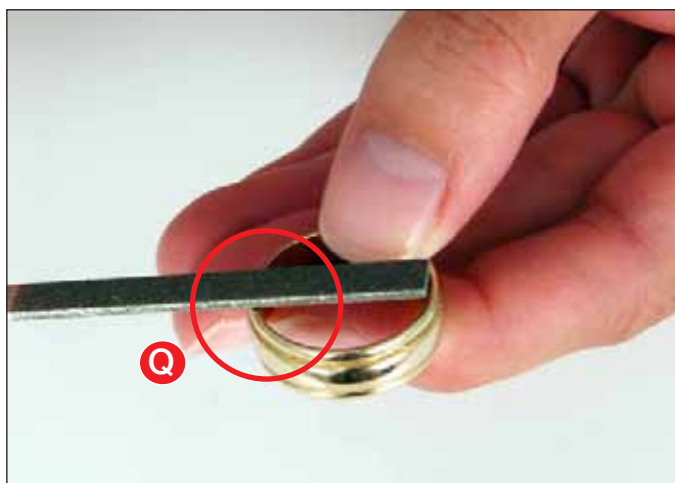
Calibration Successful Message

STEP 4: RE-CHECK READINESS

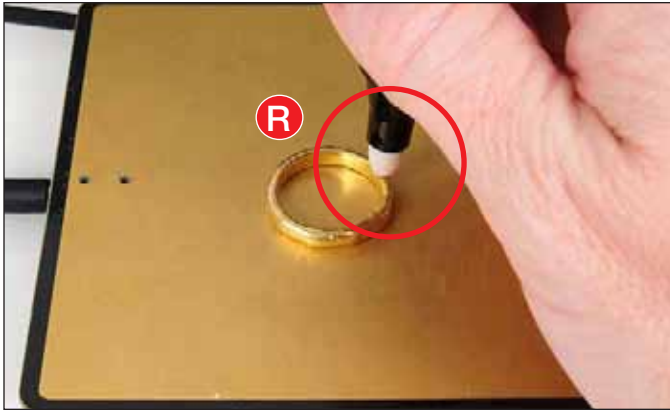
- Touch the very end of the pen probe's felt tip to the calibration piece again to make sure that your calibration piece tests correctly. Your AGT2 is now calibrated and ready to use.
- If your AGT2 does not test correctly when rechecking, dab the pen probe's felt tip on a clean, dry paper towel and repeat STEP 3. Trying an alternate calibration piece may also resolve the problem.

STEP 5: TESTING GOLD AND PLATINUM

- To test gold and platinum, always first file a small area on the surface of the metal **Q** and rest it on the testing plate with the filed area facing up and be prepared to test that area.
- Touch and hold the very end of the pen probe's felt tip to the filed area on the metal **R** until the reading settles. Only touch the very end of the pen probe's felt tip to the gold or platinum being tested. **BE CERTAIN NOT TO TOUCH THE SIDE OF THE PEN PROBE'S FELT TIP WHEN TESTING GOLD OR THE TEST RESULTS WILL RISE TO A HIGHER KARAT THAN IT IS.** Due to the various shapes of jewelry it may be beneficial to hold the jewelry on the testing plate with your fingers to stabilize it and make certain you are making good contact with the pen probe's felt tip and the metal during the test. Depending on the alloys and percentages of each used to make the specific karat gold, the test results will vary within the range of that karat. Be aware that platinum will test as PT or alternate between PT and the NA on the far right of the bar graph.
- If inconsistent test results are experienced always dab the pen probe's felt tip on a clean, dry paper towel and as needed recalibrate the AGT2 while in use.
- Always replace the pen probe's cap until it snaps on when not in use to avoid contamination and keep the pen probe's felt tip from drying out.



File Gold Before Testing



Touch Filed Area of Gold When Testing



Apple Test in Progress



Apple Test Complete



Android Test in Progress



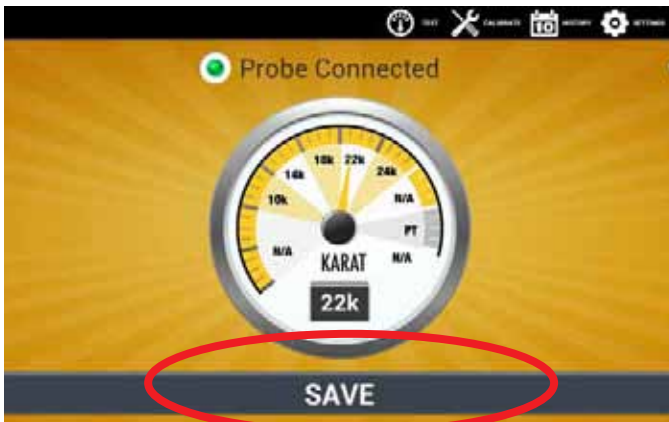
Android Test Complete

STEP 6: SAVE

By touching this button on your screen this allows you to save the last test results to your AGT2's history.



Apple Save Button

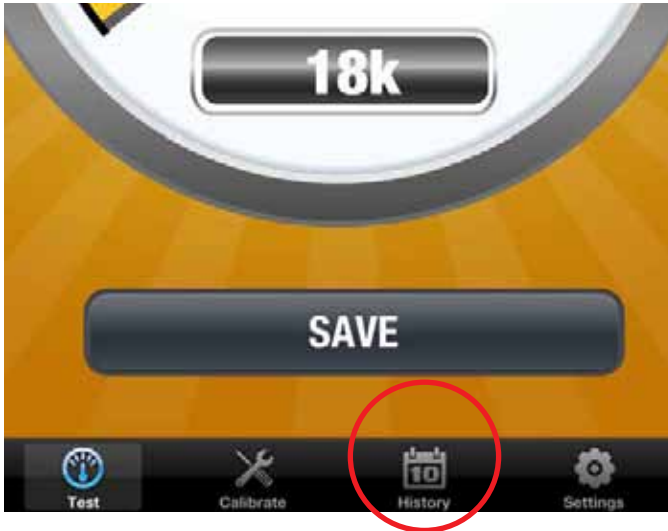


Android Save Button

STEP 7: HISTORY

APPLE HISTORY

To access your AGT2's saved testing history, touch the History icon on the bottom of your screen. Touch any test result and an input screen with a keyboard will appear, allowing you to insert any specific notes about that test.



Touch History Icon to View Previous Tests



Displayed Test History Screen

ANDROID HISTORY

To access your AGT2's saved testing history, touch the HISTORY icon on the top of your screen. Touch any test result and a field will appear to the right of your screen. Touch the field and a keyboard will appear to allow you to insert any specific notes about that test.



Touch History Icon to View Previous Tests



Displayed Test History Screen

STEP 8: SETTINGS

APPLE SETTINGS

- To access the AGT2 settings, touch the Settings icon at the bottom of your screen.
- Choose between the two display options by touching the style display you want to use and then touch Test at the bottom of your screen to begin testing.
 - Analog Dial Meter:** This display features a convenient dial format that shows you the test results by a needle moving to the appropriate reading.
 - Horizontal Bar Meter:** This display features a convenient bar graph reading and an alphanumeric digital karat, platinum or NA reading.
- Prevent screens auto-off function from engaging by touching Prevent Lock-Screen so AGT2 may be used continuously.
- Demo mode automatically simulates testing gold, platinum and using the various functions.



Touch Settings Icon



Touch Display Option, Prevent Lock-Screen or Demo

ANDROID SETTINGS

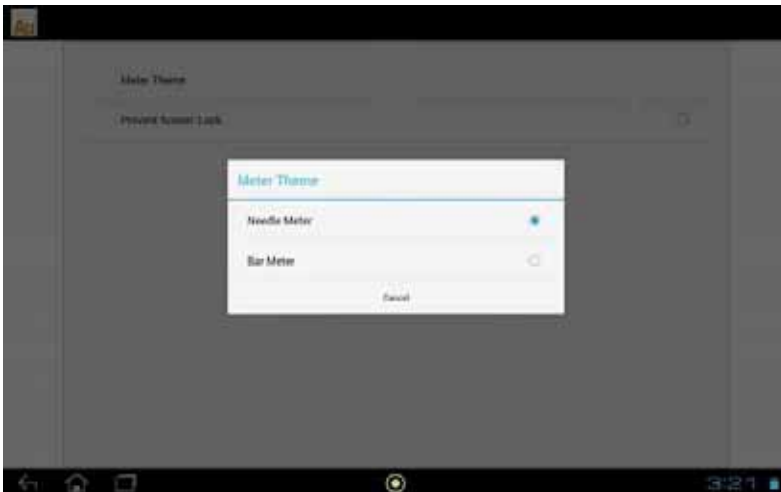
- To access the AGT2 settings, touch the SETTINGS icon at the top of your screen.
- Choose between the two display options by touching the Meter Theme and then the style display you want.

Needle Meter: This display features a convenient dial format that shows you the test results by a needle moving to the appropriate reading.

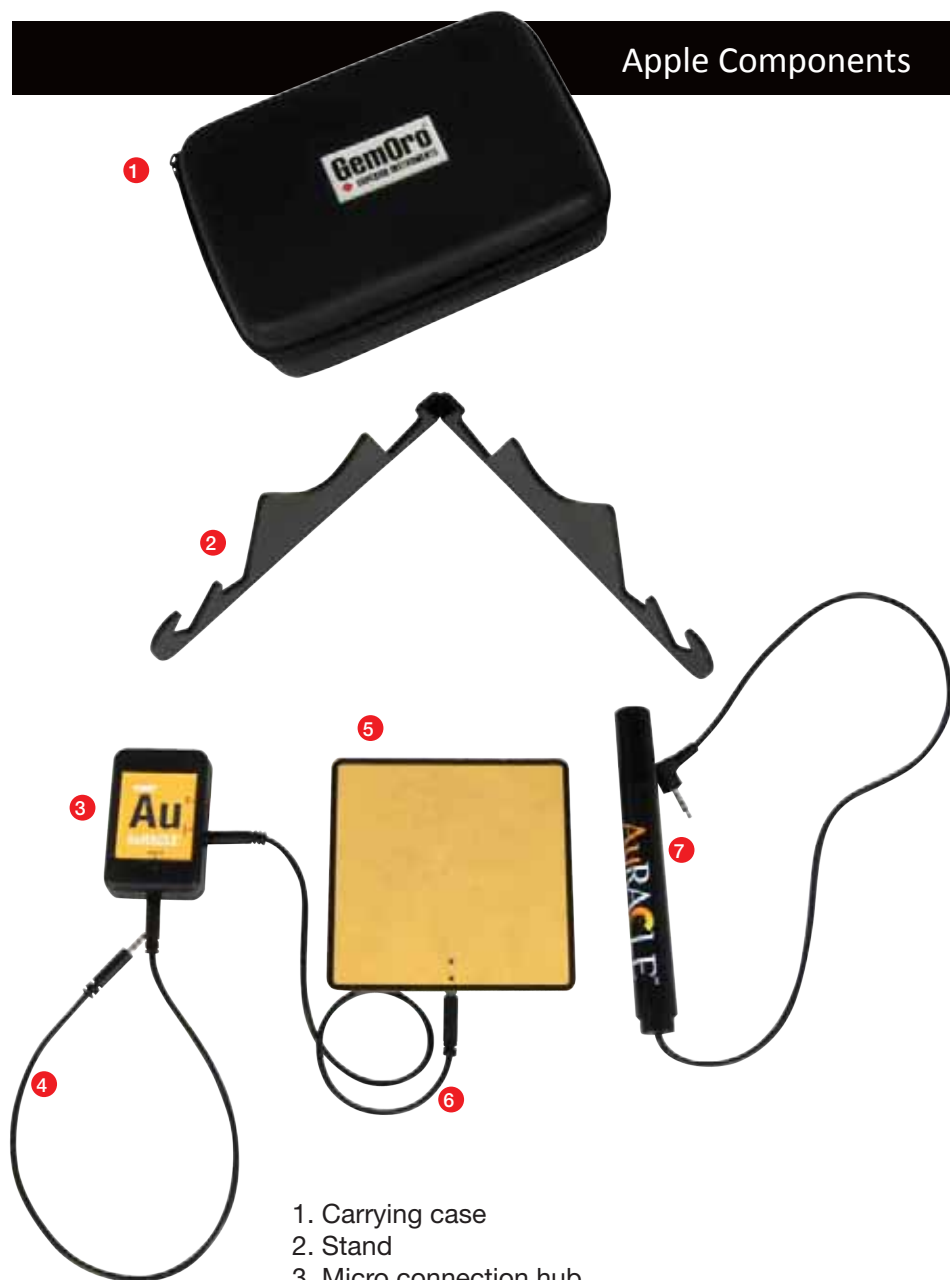
Bar Meter: This display features a convenient bar graph reading and an alphanumeric digital karat, platinum or NA reading.



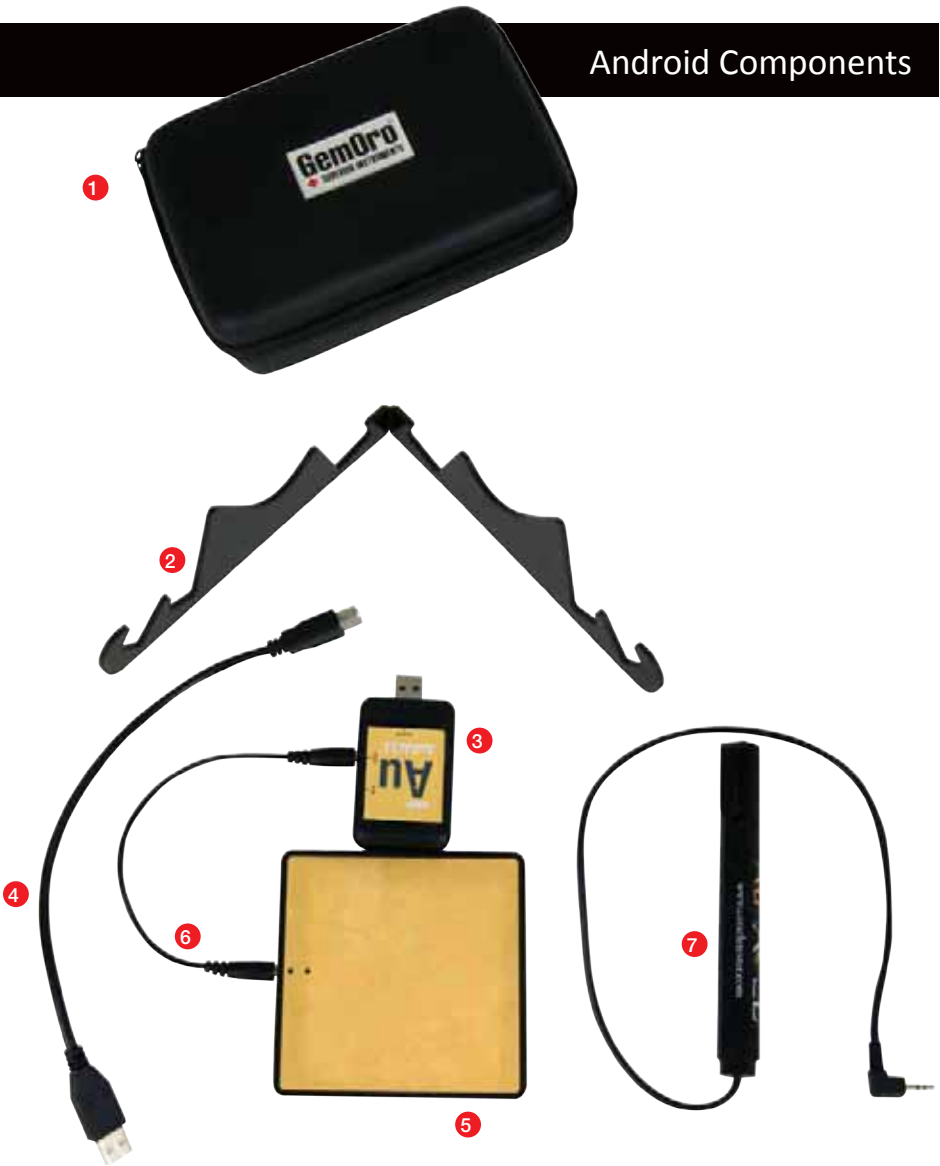
Touch Settings Icon



Touch Display Option



1. Carrying case
2. Stand
3. Micro connection hub
4. Cable connecting hub to Apple device
5. Testing plate
6. Cable connecting hub to testing plate
7. Pen probe



1. Carrying case
2. Stand
3. Micro connection hub
4. Cable connecting hub to Android device
5. Testing plate
6. Cable connecting hub to testing plate
7. Pen probe

The **PATENTED AGT2** is an accurate testing device meant for the purposes of quickly and easily purchasing standard karat gold as well as platinum. It has been designed with the needs of a gold and platinum buyer in mind. Although both the AGT1 and AGT2 are considered the most accurate electronic testers in their class, they are not meant to be used as a tool for rigorous scientific assay. There are many alloys used to create gold jewelry of the various colors (white, yellow, green and red). As the vast majority of gold being purchased is 10K, 14K and 18K, your AGT2 has been designed to primarily focus on these ranges, while still providing reasonably good, yet at times inconsistent testing results in the 22K and to a lesser degree in the 24K ranges.

As the gold content of a piece of gold moves closer to pure, the presence of other metals becomes smaller and the electro-chemical reaction has less contaminants to detect. As such, gold higher than 18K may test inconsistently among the higher karat ranges. It is important to note that over 99% of all gold stamped or cast of this quality is marked or stamped or backed by the mint that has produced it. Coins made of high karat gold are almost exclusively produced by government mints and there are many reference sources that one can turn to for their identification. From a practical perspective the gold of this purity is easy to identify by its rich color and you will observe that it is very heavy in the hand. All high karat gold will test with reasonable accuracy above the 18K+ ranges of your AGT2, but it is best to rely on the visual karat marks, reference sources and common sense.

TROUBLESHOOTING & HELPFUL TIPS

ELECTRICALLY CHARGE THE PEN PROBE, CORRECT FOR INCONSISTENT READINGS AND RECALIBRATE: Each time the AGT2 is turned on **YOU MUST ELECTRICALLY CHARGE THE PEN PROBE (STEP 2) PRIOR TO CALIBRATING.** The AGT2 must then always be calibrated before using (STEP 3). It is also necessary to recalibrate the AGT2 as needed and dab the pen probe's felt tip on a clean, dry paper towel if inconsistent results are experienced. Recognize that the chemistry inside the pen probe is constantly changing over time as it is exposed to gold and other metals, contaminants, the environment and dirt. By recalibrating the AGT2 periodically and cleaning the pen probe's felt tip as needed, this allows the AGT2 to adjust itself to the chemistry in the pen probe at that time. Since the AGT2 can be calibrated in only a matter of seconds or the pen probe's felt tip may be quickly and easily cleaned if needed, these simple steps should be a regular part of problem solving and your testing process.

INCONSISTENT TEST RESULTS: RECALIBRATION WILL TYPICALLY FIX THIS PROBLEM SINCE THIS INDICATES THE AGT2 IS OUT OF CALIBRATION. Make sure the pen probe's felt tip is clean by dabbing it with a clean, dry paper towel and then follow the calibration STEP 3 of the Easy Operation Guide. If the AGT2 will not calibrate, the pen probe may be defective, spent or in need of replacement. Please note that it is recommended that for best results that you should consider replacing the pen probe if it is worn or it becomes excessively dirty from repeated exposure to costume jewelry, fake gold or other contaminates. A pen probe in this condition will begin to deliver erratic readings and these are good indicators that it should be replaced.

REGULAR CLEANING OF THE PEN PROBE'S FELT TIP AND TESTING PLATE: Always wipe off the gold particles and other metal particles coming from costume, gold-plated or gold-filled jewelry that may remain on the pen probe's felt tip to avoid contamination. The metal particles remaining on the pen probe's felt tip that are naturally rubbed off during the testing process, and especially metal filings from other karat gold, copper, brass or other base metals that have been filed and remain on the pen probe's felt tip could potentially cause incorrect test results. Therefore, regular cleaning when needed is important.

The pen probe contains a special saline solution that is safe, non-acidic, and non-toxic. Remove salt crystal buildup by dabbing the pen probe's felt tip with a clean and dry paper towel. Salt crystal buildup is a natural occurrence with this device. Using a warm, moist (from water only) paper towel, wipe off any salt crystal buildup from the calibration piece and the AGT2 testing plate area only. **Be aware that the pen probe solution will leave a stain or in some instances it may ultimately over time produce corrosion on the testing plate if not wiped off immediately after it makes contact, so cleaning it right after this occurs is advised.** While this staining or corrosion may occur, it will affect the testing plates cosmetic appearance only and not impact the accuracy of the AGT2. Remember to dry both the calibration piece and AGT2 testing plate thoroughly. **Never expose the pen probe's felt tip to water or other chemicals.** Always replace the pen probe cap until it snaps on when not in use.

FILE ALL METAL BEFORE TESTING AND CLEAN THE FILE: Gold, platinum, gold-plated, gold-filled, tungsten and stainless steel must be filed below the surface before testing to produce accurate results. Do not file the metal over the AGT2 testing plate, as particles of the metal being filed will fall on it and potentially have an effect on the test results. This is a surface tester and the tester will read gold-plated and gold-filled as solid gold if not filed to the base metal. **Always wipe off the file.** Be aware that gold and other metal particles on the file that came from other karat gold, gold-plated or gold-filled jewelry that has also been filed with it could cause contamination from the metal to spread to the next piece you are testing if it is not regularly cleaned off.

TEST RESULTS ARE TOO HIGH: This is an indication that the AGT2 is out of calibration, or perhaps there is a presence of a high silver content, palladium or rhodium or possibly the side of the pen probe's felt tip is touching the gold while being used incorrectly by mistake.

IMPORTANT NOTE: If the calibration was not successful and the AGT2 will not provide accurate test results. If repeated attempts to calibrate the AGT2 are unsuccessful, it is likely that your calibration piece may have a higher karat flashing on it or something unusual about its composition that makes the reading inconsistent. If this occurs, an alternate calibration piece should be tried. Please never hesitate to call the GemOro AGT2 HELPLINE at 800.527.0719 or 214.351.0380 if needed and we will gladly assist you to quickly troubleshoot and fix any problems you may encounter.

OTHER PRECIOUS METALS

TUNGSTEN AND STAINLESS STEEL: Be aware that if tungsten or stainless steel isn't filed first it may test in the high karat range or even as platinum, but if it is filed it will then test as NA. **ALWAYS FILE IT FIRST!**

RHODIUM: Be aware that rhodium will react as platinum on the AGT2. It is rarely used as solid finished jewelry, but instead is commonly used as a plating material to make white gold or platinum appear brighter or whiter. If white gold is plated with rhodium and filed, it will then test accurately or possibly as a higher karat than marked since it is taking an average reading of the two metals. **ALWAYS FILE IT FIRST!** If white gold tests higher than marked, it is probably rhodium plated.

PALLADIUM: Be aware that pure palladium will test somewhere between 18K and 24K on the AGT2. In the case of palladium being mixed with gold it will drive the reading up to a higher karat than it is. If you see a reading on white gold that is higher than marked, it may very well be mixed with palladium. Since white gold doesn't exist in the 22K or 24K ranges, if you see a reading on a white metal in this range, be suspect.

WHITE GOLD WITH HIGH NICKEL OR HIGH SILVER CONTENT: Be aware that white gold with high nickel content may test as a lower karat than marked. While it could be under karat gold in this instance, it is likely the karat marked. White gold commonly has 4% to 7% silver content. If white gold has high silver content above 7% it may test as a slightly higher karat than marked, while reacting with a slow and consistent rise in the reading as a telltale sign.

GemOro AuRACLE™ AGT2

Owners Manual

CONDITIONS FOR IDEAL OPERATION

The GemOro AuRACLE AGT2 should ideally be used in the following environmental conditions. By not following these instructions you could possibly risk compromising the accuracy of the test.

- **USE AT ROOM TEMPERATURE.** The AGT2 is a workhorse and is capable of performing well in most any normal or professional environment, with a room temperature of approximately 65-75F being the best. While it has proven to work just fine in temperatures as high as 100F, ideally it is suggested to avoid using the AGT2 in extreme temperatures so you may always obtain the best results.
- **TEST DRY METAL.** The metal being tested must be dry. If the surface of the metal is wet or has any type of surface moisture or chemical contaminants it may not test correctly.
- **TEST CLEAN METAL.** The metal being tested must be clean of any obvious dirt or chemical contaminants that might interfere with the electro-chemical reaction between the pen probe and the metal. The tester may be used otherwise with minimal concern for normal or light surface dirt.

AuRACLE AGT2 ADVANCED FEATURES

- The world's first mobile electronic gold and platinum tester that works with Apple iPhone, iPad, iPod Touch and Android devices.
- Assists to identify the karat of 6K-24K yellow, white, green and pink gold with a non destructive test.
- If simple steps are followed, also assists to identify non-gold, gold plate and gold-filled material as NA.
- Assists to identify platinum.
- Test results are indicated on your mobile device.
- Tests most any size piece of gold and platinum jewelry that has a larger surface area than the end of the pen probe's felt tip.
- Immediate test results may be achieved with no waiting between tests.
- Replaceable pen probe provides up to approximately 5000 tests if used properly.
- Pen probe uses no messy gel, no staining chemicals and no dangerous acid.
- Easy and fast push button calibration. Common 10K, 14K, 18K, 22K, 24K or platinum is required to perform the AGT2 calibration.
- Includes: AGT2 app, micro connection hub, testing plate, pen probe and file.
- Assembled in the USA
- One year limited factory warranty

CAUTION:

Disassembling the AGT2 micro connection hub will void the warranty.

USE COMMON SENSE BEFORE INTERPRETING THE TEST RESULTS.

You should always follow some common sense guidelines before making your final determination of the karat or authenticity of the precious metal being tested. Please keep in mind that those misrepresenting fake jewelry as real can be extremely clever and will use many tricks to make you think it is real. Be aware that scam artists may allow you to test a real piece of gold jewelry and then while distracting you they will switch the piece for a fake.

SOME COMMON SENSE GUIDELINES:

GUIDELINE A. Check the markings on the piece for a karat stamp (10K or .417, 14K or .585, 18K or .750, 22K or .916, 24K or .999, GF or gold-filled, GEP or gold electroplated, YGF or yellow gold-filled, RGP or rolled gold plated, etc.) and then if when tested the results indicate anything to the contrary, the metal should be suspect. Test results below the 10K range must be interpreted by the user and estimated whether it is 6K-9K. In the UK while 9K gold may be found, gold below this karat range is extremely rare, and the gold content is minimal. If the metal you are testing tests in a lower karat than you estimate as 9K or in a lower karat than is marked, it is advised to simply not buy it to avoid the risk.

GUIDELINE B. Be aware that any piece that tests as NA is not gold.

GUIDELINE C. Check the weight of the metal you are about to test and if it seems too light, while it could be hollow gold, it should be suspect as it is likely costume jewelry, gold-plated or gold-filled. Gold is a dense metal and has an associated greater weight than most other non-precious metals. Platinum is an even denser metal than gold, while weighing approximately 1/3 more than 18K gold.

GUIDELINE D. Check the color of the gold, and be aware that non-gold base metals are often flashed or gold-plated with 24K gold to enhance its color and consequently the gold color will look too yellow. Since 24K gold is a rich yellow color and this pure gold is very uncommon in jewelry, any rich yellow gold color should be suspect. Look for tarnishing or variations in the color and finish of the jewelry as a sign of it being a fake.

GUIDELINE E. Check the clasp used on the jewelry. Costume jewelry often has a spring ring style clasp and this should be suspect. Karat jewelry more often than not will have a lobster style clasp. Do not test the clasp only as it is common for a karat gold clasp to be attached to a fake gold necklace or bracelet in an attempt to fool you.

While these facts and common sense guidelines will prove to be very helpful when buying gold and platinum, they should not be your only tools to determine the authenticity of the jewelry in question.

WARRANTY:

Your AGT2 features a **ONE YEAR LIMITED WARRANTY** against defects in materials and workmanship as determined by the factory. The pen probe is covered by a 30 day limited warranty against defects in materials and workmanship as determined by the factory. The pen probe is not covered against overuse, misuse and drying out due to the user not replacing the protective cap after use. These warranties become effective from the date of original purchase after the purchaser fills out the **WARRANTY REGISTRATION FORM** at www.gemoroproducts.com/warrantyregistration within 30 days of its purchase. If this criteria is not followed, the AGT2 will automatically be covered by a **90 DAY LIMITED WARRANTY** from the date of your AGT2 purchase, as noted on the bill of sale (if supplied) or through the AGT2 serial number tracking system as interpreted by the factory. The purchaser shall incur the cost for return postage, insurance and handling for all warranty and non-warranty repairs and/or replacements. Warranty repairs and/or replacements will be shipped back to the customer FOB Destination to the location of the customer's choosing if located within the Continental United States (U.S.). 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 U.S., 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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