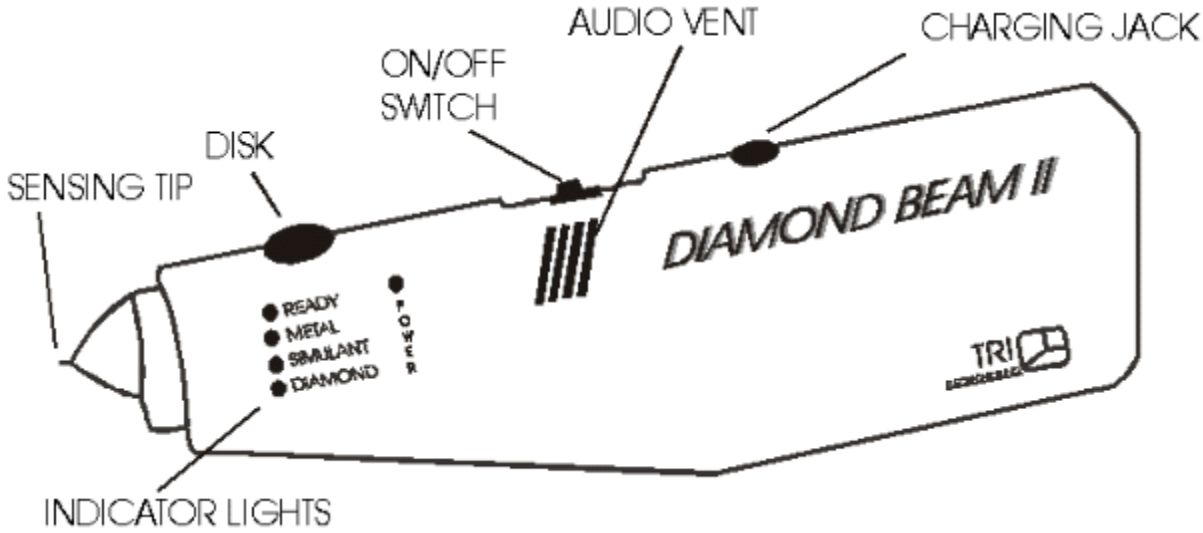
DIAMOND BEAM II
OPERATING INSTRUCTIONS



DIAMOND BEAM ™ II is a unique instrument which separates real diamonds from imitation diamonds. If the operator of this instrument does not carefully follow the instructions listed below, the end result might be incorrect operation and misleading test results.

1. **To Begin Operation:** Remove the protective Snap-On cap on the sensor end of the tester to expose the sensor tip. Slide On/Off switch to "ON" position. The red "Power" light will come on accompanied by the beep, signaling that the power is on. If the "Power" light blinks or does not appear, this means that the DIAMOND BEAM II needs to be charged as described below:

   Slide On/Off switch to "Off" position and plug the adapter into the instrument's charging jack. The batteries will be fully charged in 4 to 6 hours (maximum charging time is 6 hours). While powered by batteries only, unit can continuously operate for one hour and a half.
   Note: When battery is low, the red power light will begin flashing. This means the instrument needs to be recharged.

2. **Wait Approximately 10 Seconds.** The instrument is now warming up. A red "Ready" light will come on.
3. **Testing Diamonds:** Depress the sensing tip firmly against the table facet of the stone under test. Be sure that you depress the sensing tip on the stone until an audible "click" is heard. If the stone is a diamond, the green "Diamond" light will come on accompanied by a beep. The light and the sound will last for approximately two seconds. If the stone is an imitation, the yellow "Simulant" light will immediately come on and stay on for approximately one second.

If the sensing tip is touching metal, the "Metal" red light will come on. After every test, wait for 2-3 seconds for the instrument to reset itself for the next test. **NOTE:** When testing, be sure you place your index finger on the disk on the switch-side of the device to prevent false indications of diamond. The sensor tip must be in contact with the stone only (not metal).

4. **Turn off DIAMOND BEAM II: Slide ON/OFF switch to "OFF" position. Diamond Beam II has an automatic shut off feature. If the unit is left on and a test is not performed within four (4) minutes, the tester will automatically shut off.**
5. **Operating Temperature: Temperature range for Diamond Beam II is 60^0 F (15^0 C) to 105^0 F (40^{0}C), however best results are achieved at normal indoor room temperature 65^{0}F (18^{0}C) to 80^{0}F (27^{0}C).**
6. **Cleaning: Occasionally the sensing tip of the DIAMOND BEAM II will need to be cleaned. To clean: lightly touch the tip on a piece of white bond paper.**

SPECIAL FEATURES

- **Test stones as small as .01 carat.**
- **Operates on batteries continuously for more than two hours without recharge.**
- **Two sided display for customer and left handed operators.**
- **Automatic shut off after four (4) minutes.**

Operates directly from electrical outlets with power supplied by AC/DC adapter. (If battery is completely discharged, unit must be plugged in for at least 30 minutes before operation).

Special Battery Instructions

This unit is equipped with replaceable Ni Cad batteries. When "Power" light starts flashing this means that the battery is low and batteries will need to be recharged. However if after charging for approximately 2 hours the "Power" light continues to flash, the Ni Cad rechargeable batteries will need to be replaced.

The unit will also accept standard non-rechargeable AAA alkaline batteries. However **never use adapter charger when** there are alkaline batteries in place. This will permanently damage the unit. To open the battery door see use push in and push up action as shown.

SERVICE

If there are any problems regarding the DIAMOND BEAM II, please contact us:

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