

Contents

(English Version)

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I. Disclaimers, Exclusions and Limitations of Liability

PLEASE READ AND NOTE PRESIDIUM WARRANTY TERMS AND CONDITIONS as stated in the warranty card. Presidium warranty for its testers are subject to proper use by its users in accordance with all the terms and conditions as stated in the relevant user handbook and shall cover only manufacturing defects.

Due to continuous product improvement, Presidium reserves the right to revise all documents including the right to make changes to the handbook without notice and without obligation to notify any person of such revisions or changes. Users are advised to check Presidium's website <http://www.presidium.com.sg/> from time to time.

Presidium shall not be responsible for any damage or loss resulting from the use of this gauge or handbook, and under no circumstances shall Presidium, its manufacturer or any of its subsidiaries, licensors, distributors, resellers, servants and/or agents be liable for any direct or indirect damages, resulting from the use of this gauge.

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, under no circumstances shall Presidium, its manufacturer or any of its subsidiaries, licensors, distributors, resellers, servants and/or agents be responsible for any special, incidental, consequential or indirect damages howsoever caused.

The gauge or Presidium Gem Computer Gauge (PGCG) referred to in this handbook is provided and/or sold on an "as is" basis. Except as required by applicable law, no warranties of any kind, either expressed or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose.

II. About this book

Thank you for purchasing the Presidium Gem Computer Gauge ("PGCG" or "gauge").

This handbook is designed to help you set up your gauge and describes all you need to know about how to use your gauge accurately and take care of it in line with its requirements. Please read these instructions carefully and keep them handy for future reference.

This book also contains the terms and conditions in relation to the use of the gauge including the **Disclaimer, Exclusion and Limitation of Liability clauses stated above in Section I.**

III. About your Presidium Gem Computer Gauge

The Presidium Gem Computer Gauge has been developed as an extension to the existing Presidium Electronic Gemstone Gauge with additional features to perform more functions, including:

- Measures actual gemstone dimensions and estimates gemstone weight and identity
- Measures 74 gemstones and 9 different shapes
- Accurate measurement up to 0.01mm
- Direct carat conversion for round brilliant cut diamonds
- Clear and visible display for ease of reading measurements
- Light and portable instrument that can be used anywhere
- PC connectivity for ease of importing and printing measurement results

Product specifications:

Measurement range: 0.00mm to 25.00mm or 0.000ct to 57.343ct

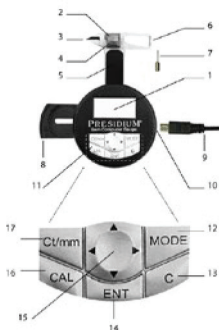
Recommended battery: CR 2450 3V or equivalent

Battery lifespan: generally about 26 hours of continuous usage

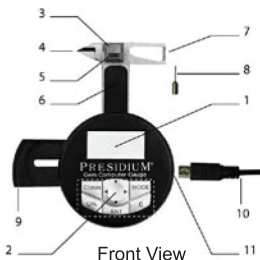
Included in your package:

- Presidium Gem Computer Gauge
- CR-2450 3V battery
- High setting jewelry attachment
- USB Cable
- Quick Guide
- QR Code Card
- Protective box

Gauge parts

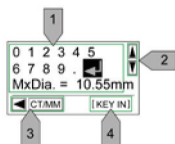


1	LCD Display
2	Base Anvil
3	Wedge-shaped Points
4	Slider
5	Slider Platform
6	Protruding Probe
7	Jewelry Attachment
8	Battery Compartment
9	USB Cable
10	USB Port
11	Selection Keypad
12	Mode Button
13	Clear Button
14	Enter Button
15	Navigation Button
16	Calculator Activation Button
17	Unit Conversion Button



Display Configuration

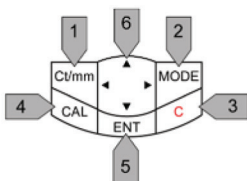
The LCD display of PGCG is generally divided into three sections.



1. Interactive display
2. Scroll bar
3. Instruction bar

Keypad Configuration

Please refer to table below for the function of each key on the selection keypad. Some keys will have more than one function.



	Name	Normal Function	Additional Function
1	Carat ↔ mm	Press to change measurement unit between millimeter (mm) and carat (Ct)	In “Weight Estimator” and “Stone Estimator” mode, press to toggle between “Measurement” and “Keypad” to input dimension
2	Mode	Press to display the function selection menu	
3	Cancel	Press to delete items	<ul style="list-style-type: none"> • Press to turn on PGCG • In ‘Measurement’ mode, press for tare/zero function
4	Calculator	Press to activate calculator mode	In “Weight Estimator” mode, press for price calculation
5	Enter	Press to confirm selection	
6	Navigation keypad	Press to navigate data in interactive display	

IV. IMPORTANT NOTICE

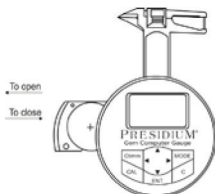
- Keep the gauge dry. Precipitation and all types of liquids or moisture can contain minerals that will corrode electronic circuits. If your gauge does get wet, remove the battery, and allow the gauge to dry completely before replacing it.
- Do not use, store or expose the gauge in dusty and dirty areas. Its moving parts and electronic components can be damaged.
- Do not use, store or expose the gauge in hot areas. High temperatures can damage or shorten the life of tester, damage batteries, and warp or melt certain plastics.
- Do not use, store or expose the gauge in cold areas. When the tester returns to its normal temperature, moisture can form inside the tester and damage electronic circuit boards.
- Do not attempt to open the gauge other than as instructed in this handbook.
- Do not drop, knock, or shake the gauge. Rough handling might break internal circuit boards and fine mechanics.
- Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the gauge.
- Do not paint the gauge. Paint can clog the moving parts and prevent proper operation.

If the gauge is not working properly, kindly contact Presidium Customer Service at service@presidium.com.sg or:

Presidium Instruments Pte Ltd
Unit 7, 207 Henderson Road
Singapore 159550
Attn: Customer Service Executive

1. GETTING STARTED with your Presidium Gem Computer Gauge

Inserting a battery into your Presidium Gem Computer Gauge



1. Pull the battery slider sideways outward using either fingernail or screw driver.
2. Place a CR 2450 3V battery with the (+) sign facing upward in the battery compartment and close by pushing the battery slider sideways inward.
3. The use of alkaline batteries is preferred, as it should generally give approximately two and a half hours of continuous operation, while the use of ordinary batteries will give a shorter working life.

Turning on your Presidium Gem Computer Gauge

1. Press the "C" button on the selection keypad.
2. The word "Presidium" will appear and the device will automatically go to "Measurement" mode.
3. The screen will display two lines; the first being measurement in millimeter unit and the second line being measurement in carat unit.

Please note that the PGCG will automatically shut down after 5 minutes of inactivity.

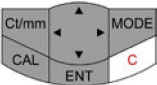
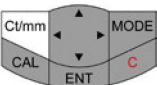
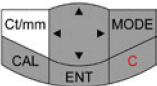
Battery information

Do not leave worn out batteries in the battery compartment as the batteries may corrode, leak or damage the gauge. Batteries should be removed when the instrument is expected to be stored for an extended period of time.

2. PERFORMING A TEST with your Presidium Gem Computer Gauge

1. By default, upon power up, the device will be in "Measurement" mode.
2. PGCG comes with the following functions:
 - a) Measurement
 - b) Weight Estimator
 - c) S.G. Dictionary
 - d) Gemstone Estimator
 - e) Calculator
 - f) Inventory
 - g) PC connectivity
3. To use other functions, press "Mode" on the selection keypad and choose a function from the list.

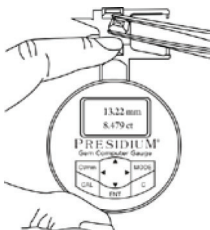
a. Measurement

	Requirement	Activation Key	Display
1	<p>Upon turning on, PGCG will display dimension in mm and weight in Carat:</p> <p>1. Press "C" to turn on</p>		0.00 mm 0.000 ct
2	<p>For display of dimension in mm only:</p> <p>1. Press "Ct/mm"</p>		0.00 mm
3	<p>For display of weight in Carat only:</p> <p>1. Press "Ct/mm"</p>		0.000 ct

- The Presidium Gem Computer Gauge should be held in the palm of either hand. Control the slider with the thumb.



- When measuring loose stones, pull the Slider and place the stone on the Slider platform. The base of the stone should be parallel to the platform to prevent it from moving.



- When measuring mounted stones, insert the jewelry attachment to the gauge and place the stone between the jewelry attachment and slider anvil.



- Slowly close the Slider. The reading will be displayed on the window immediately.



- Press “ct/mm” to alternate between the following displays:
 1. Display of both dimension in mm and weight in carat (by default)
 2. Display of dimension in mm only
 3. Display of weight in carat only

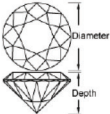
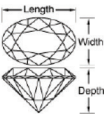
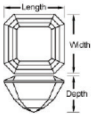
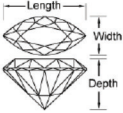
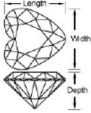
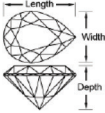
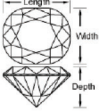
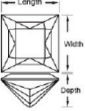
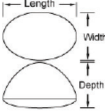
The default setting of Presidium Gem Computer Gauge (PGCG) is programmed for American Standard Round Brilliant Cut


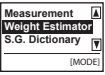
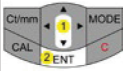

For other gemstones of other shapes, please directly proceed to the following steps.






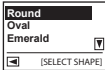
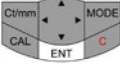

b. Weight Estimator



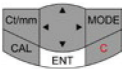
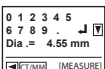
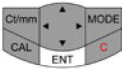
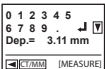
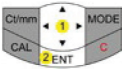

Presidium Gem Computer Gauge (PGCG) estimates the weight of the gemstone from the shape, diameter, depth and nature of the gemstone.

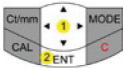

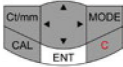
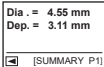

The different shapes of gemstones as shown in diagram below:

		
Round	Oval	Emerald
		
Marquise	Heart	Pear
		
Cushion	Rectangle	Cabochon

	Requirement	Activation Key	Display
1.	<p>⊖ Select Weight Estimator: Select Mode</p> <p>⊖ Scroll to Weight Estimator</p> <p>⊗ Press “ENT” to confirm</p>		
2.	<p>⊖ Select New or Previous Setting: Scroll to select</p> <p>⊖ Press “ENT” to confirm</p>		

3.1 New Settings	<p>Select Gem stone name:</p> <ul style="list-style-type: none"> ○ Scroll to select gemstone name by the first alphabet. ⊖ Press “ENT” to confirm 		
	<p>Select a Gem stone:</p> <ul style="list-style-type: none"> ○ Scroll to select ⊖ Press “ENT” to confirm 		
	<ul style="list-style-type: none"> ○ Select a Shape: Scroll to select ⊖ Press “ENT” to confirm <p>Note: The different dimensions to be input depend on the shape of the gemstone. Please refer to Page 16 for shape and their respective dimensions required.</p>		
3.2 Previous Settings	<p>Setting of previous gemstone will be displayed:</p> <ul style="list-style-type: none"> • Press “ENT” to confirm 		

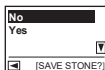
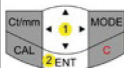
4	<p>Select method of measurement:</p> <ul style="list-style-type: none"> ○ Scroll to select from measurement or keypad ⊖ Press “ENT” to confirm 		
4.1 Measurement	<p>Measurement of Diameter:</p> <ul style="list-style-type: none"> • Place gem stone's diameter on base anvil • Press “ENT” to confirm 		
	<p>Measurement of Depth:</p> <ol style="list-style-type: none"> 1. Place gem stone's depth on base anvil 2. Press “ENT” to confirm 		
4.2 Keypad	<p>Keying of Diameter:</p> <ul style="list-style-type: none"> ○ Key in gem stone's diameter ⊖ To confirm entry, navigate ← cursor to and press “ENT” 		

	<p>Keying of Depth:</p> <ul style="list-style-type: none"> ⊖ Key in gem stone's depth ⊖ To confirm entry, navigate cursor to ↵ and press "ENT" <p>Please note that at any point, pressing Ct/mm will toggle between "Keypad" or "Measurement" input methods</p>		
5.	<p>Summary of gemstone's diameter and depth.</p> <ul style="list-style-type: none"> • Press "ENT" to confirm 		
6.	<p>Estimated weight of gemstone will be displayed. At this point, user can either press "Ent" to store or "Cal" for price calculation. Details will be given in 6.1 and 6.2 below</p>		

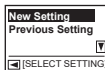
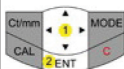
6.1 Storing Data

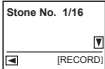
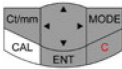


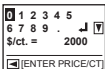
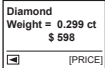
Storing of data into inventory:

- ⊖ Press “ENT” to store data
- ⊖ Scroll to select “YES/NO”



- ⊖ If user selects “NO”, display will return to “Select Setting” for next measurement. User will have the liberty to choose between previous or new stones setting.
- ⊖ Press “ENT” to confirm



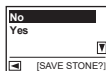
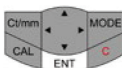
<p>6.1 Storing Data</p>	<p>⊖ If user selects “YES”, details of gemstone will be stored in “Inventory”</p> <p>⊖ Press “ENT” to confirm</p> <p>Upon storing of data, display will return to “Select Setting” for next measurement. User will have the liberty to choose between previous or new stones setting.</p>		
<p>6.2 Price Calculation</p>	<p>Price calculation of gemstone:</p> <ul style="list-style-type: none"> • Press “CAL” 		
	<p>Keying of price:</p> <p>⊖ For data entry, navigate cursor to ← selected data and press “ENT”</p> <p>⊖ To confirm price per carat, navigate cursor to and press “ENT”</p>		
	<p>Price of gemstone will be displayed</p>		

6.2 Price Calculation

Storing of data into inventory:

- Press “ENT” to store data
- Scroll to select “YES” in option to store
- Press “ENT” to confirm
- Upon storing of data, display will return to “Select Setting” for next measurement


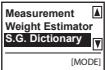




Please note only the settings of the stone are stored. Storing function is similar to section 6.1 above. Price of the gemstone will not be stored.



c. Specific Gravity (S.G.) Dictionary

Presidium Gem Computer Gauge enables the narrowing down of a gemstone by its S.G. Presidium Gem Computer Gauge (PGCG) includes a dictionary for S.G. values of selected gemstones for your reference.

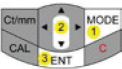
Please note that the weight of gemstone will be needed from other source for the identification of gemstone.


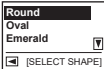
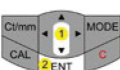
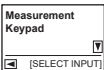
	Requirement	Activation Key	Display
1.	Select S.G. Dictionary: <ul style="list-style-type: none"> ⊖ Select Mode ⊖ Scroll to S.G. Dictionary ⊗ Press “ENT” to confirm 		
2.	Select Gem stone name: <ul style="list-style-type: none"> ⊖ Scroll to select gemstone name by the first alphabet ⊖ Press “ENT” to confirm 		
3.	Select Gem stone: <ul style="list-style-type: none"> ⊖ Scroll to select ⊖ Press “ENT” to confirm 		

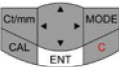
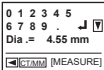
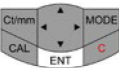
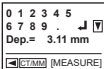

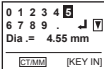
4.	S.G. value of selected gemstone will be displayed		<div> Diamond S.G. = 3.52 3.51 - 3.53 </div> <div> [S.G. VALUE] </div>
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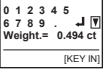
d. Gemstone Estimator


In order to determine the S.G. of the gemstone to be tested:

	Requirement	Activation Key	Display
1.	<p>⊖ Select Gem stone Estimator:</p> <p>⊖ Select Mode</p> <p>⊗ Scroll to Gem stone Estimator</p> <p>Press “ENT” to confirm</p>		<div> Weight Estimator S.G. Dictionary Gemstone Estimator </div> <div> [MODE] </div>

<p>2.</p>	<p>Select a Shape³:</p> <ul style="list-style-type: none"> ⊖ Scroll to select ⊖ Press “ENT” to confirm <p>³ Please refer to Page 16 for the picture illustrations of the shapes.</p> <p>⁴ The different dimensions to be input depend on the shape of the gemstone. Please refer to Page 16 for different shapes and their respective dimensions required.</p>		
<p>3.</p>	<p>Select method of measurement:</p> <ul style="list-style-type: none"> ⊖ Scroll to select from measurement or keypad ⊖ Press “ENT” to confirm 		


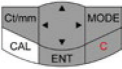
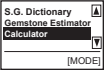
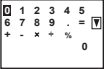

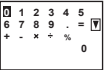
3.1 Measurement 4	<p>Measurement of Diameter</p> <ul style="list-style-type: none"> Place gem stone's diameter on base anvil Press "ENT" to confirm 		
	<p>Measurement of Depth:</p> <ul style="list-style-type: none"> Place gem stone's depth on base anvil Press "ENT" to confirm 		
3.2 Keypad	<p>Keying of Diameter:</p> <ul style="list-style-type: none"> ⊖ Key in gem stone's diameter ⊖ To confirm entry, navigate cursor to ↵ and press "ENT" 		

<p>3.2 Keypad</p>	<p>Keying of Depth:</p> <ul style="list-style-type: none"> ⊖ Key in gem stone's depth ⊖ To confirm entry, navigate cursor to ↵ and press "ENT" <p>Please note that at any point, pressing Ct/mm will toggle between "Keypad" or "Measurement" input methods</p>		
<p>4</p>	<p>Keying of weight:</p> <ul style="list-style-type: none"> ⊖ Key in gem stone's weight ⊖ To confirm entry, navigate cursor to ↵ and press "ENT" 		

5	<p>S.G. value of gemstone will be calculated. List of gemstones⁵ with associated SG value will be displayed</p> <p>⁵ Please refer to Page 32-33 for the list of gemstones included in PGCG</p>		
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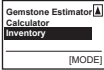


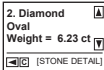
e. Calculator


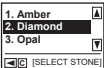
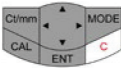




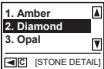
Presidium Gem Computer Gauge (PGCG) also allows you to do simple calculations.

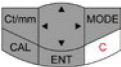

	Requirement	Activation Key	Display
1.	<p>Select Calculator:</p> <ul style="list-style-type: none"> ⊖ Select Mode ⊖ Scroll to Calculator ⊗ Press “ENT” to confirm Alternatively, press “CAL” to select Calculator 	 	 
2.	<p>Calculation:</p> <ul style="list-style-type: none"> • For data entry, navigate cursor to selected data and press “ENT” 		

f. Inventory

Presidium Gem Computer Gauge (PGCG) allows you to store details (e.g., identify of gemstone, shape, and weight) of gemstones for reference.

	Requirement	Activation Key	Display
1.	Select Inventory: <ul style="list-style-type: none"> ⊖ Select Mode ⊖ Scroll to Inventory ⊗ Press "ENT" to confirm 		
2.	All gem stones stored in memory will be listed		
3.	Select gem stone's details: <ul style="list-style-type: none"> ⊖ Scroll to select ⊖ Press "ENT" to confirm 		

<p>4</p>	<p>Deletion of selected gemstone's details:</p> <ul style="list-style-type: none"> ○ Scroll to selected gemstone record that you want to delete ⊖ Press "ENT" to confirm 		
	<ul style="list-style-type: none"> • Press "C" to delete 		
	<ul style="list-style-type: none"> ○ Select "Delete" from deletion option and press "ENT" to confirm ⊖ Select "Yes" and press "ENT" to confirm 		 
	<p>Deletion of all gemstone's details:</p> <ul style="list-style-type: none"> ○ Scroll to any gemstone record ⊖ Press "ENT" to confirm 		

<ul style="list-style-type: none"> • Press “C” to delete 		
<ul style="list-style-type: none"> ⊖ Select “Delete All” from deletion option and press “ENT” to confirm ⊖ Select “Yes” and press “ENT” to confirm 		<div data-bbox="761 296 968 439"> Delete Delete all [DELETE OPTION] </div> <div data-bbox="761 449 968 592"> No Yes [DELETE STONE?] </div>

g. PC Connectivity

The Presidium Gem Computer Gauge comes with a downloadable software providing access to more gemstones selection. Go to www.presidium.com.sg



This software is currently not yet compatible with Mac OS platform.

3. READING TEST RESULTS with your Presidium Gem Computer Gauge

The S.G. values for the following gemstones are stored in Presidium Gem Computer Gauge:

Common stones (in alphabetical order)	
Albite feldspar	Nephrite
Alexandrite	Obsidian
Almandite garnet	Oligoclase feldspar
Amber	Opal
Andalusite	Orthoclase
Andradite garnet	Pearl
Apatite	Peridot
Benitoite	Plastic
Beryl	Pyrope garnet
Brazilianite	Quartz
Calcite	Rhodochnrosite
Chalcedony	Rhodolite garnet
Coral	Rhodonite
Corundum	Sapphire
Cubic zirconium oxide	Scapolite
Diamond	Serpentine
Danburite	Shell
Diopside	Sinhalite
Diophtase	Sodalite
Fluorite	Sopodumene
Glass	Spessartite garnet
G.G.G.	Sphene
Hematite	Spinel
Idocrase	Strontium titanate

Iolite	Synthetic emerald
Ivory	Synthetic rutile
Jadeite	Synthetic spinel
Jet	TL grossularite garnet
Kornerupine	Topaz
Kyanite	Tourmaline
Labradorite feldspar	TP grossularite garnet
Lapis lazuli	Turquoise
Moissanite	Verdite
Malachite	Y.A.G
Microcline	Zircon (high)
Moldavite	Zircon (low)
	Zircon (medium)
	Zoisite

4. TAKING CARE of your Presidium Gem Computer Gauge

- Do not leave worn out batteries in the battery compartment as the batteries may corrode, leak or damage the gauge. Batteries should be removed when the gauge is expected to be stored for an extended period of time.

Your gauge is a product of extensive design and craftsmanship and should be treated with care.

Thank you for taking time to go through the user handbook which will enable you to understand your recent purchase better.

Presidium also recommends that you register your warranty by sending the warranty registration card to us or register online at <http://www.presidium.com.sg/>