

# Contents

(English Version)

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## **I. Disclaimers, Exclusions and Limitations of Liability**

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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 tester 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 tester.

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 tester or Presidium Carat Scale (PCS-100n) 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

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Thank you for purchasing the Presidium Carat Scale (PCS-100n).

This handbook is designed to help you set up your scale and describes all you need to know about how to use your scale 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 tester including the **Disclaimer, EXCLUSION and Limitation of Liability clauses stated above in Section I.**

### **III. About your Presidium Carat Scale**

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The Presidium Carat Scale utilizes a strain gauge load-cell to provide output in terms of millivolts, which is then converted to weight by a micro-controller inside the scale.

#### **The Presidium Carat Scale features the following:**

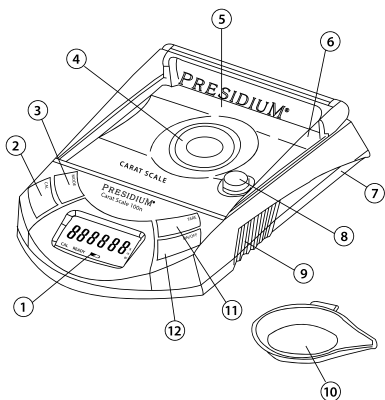
- Four conversion options (gram, carat, ounce, grain)
- Three trays for different uses

#### **Product specifications:**

- Weighing capacity: 100.00ct/20.000g
- Division size: d=0.01ct/0.002g

#### **Included in your package:**

- Presidium Carat Scale (PCS-100n)
- Tray
- Quick Guide
- QR Code Card
- Protective carrying case



1	Display Window
2	Calibration Button
3	Mode Button
4	Tray
5	Transparent Lid
6	Opening Recess
7	Battery Cover
8	Reference Load (20g)
9	USB Inlet
10	Vessel
11	TARE Button
12	ON/OFF Button

#### IV. IMPORTANT NOTICE

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

If the tester is not working properly, kindly contact Presidium Customer Service at [service@presidium.com.sg](mailto: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 Carat Scale

### Powering up your Presidium Carat Scale

This scale can be powered by either the use of an USB adaptor (optional item sold separately) or through the use of batteries. If AC adaptor is used, connect one end of the AC adaptor to the tester and the other end directly into a suitable electrical outlet. Please ensure that only the adaptor supplied by Presidium is used (**Fig. 1.1**).

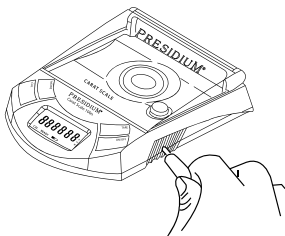


Fig. 1.1

If batteries are used (4 x AAA batteries), take note of the positive (+) and negative (-) directions of batteries when inserting the batteries into the scale (**Fig. 1.2**). 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.

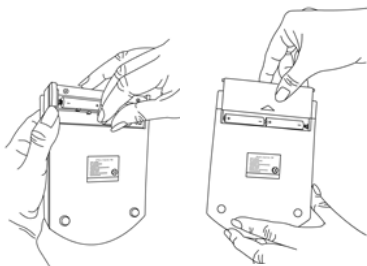


Fig. 1.2

## Turning on your Presidium Carat Scale

Place the scale on flat level surface. Lift the transparent lid. Place the tray on the weighing arm, then close the lid (**Fig. 1.3**).



Fig. 1.3

Press the **[ON/OFF]** button (**Fig. 1.4**) to turn on the scale.



Fig. 1.4

All segments on the Display should blink three times (**Fig. 1.5**) for self-testing to ensure that the LCD is functioning properly.

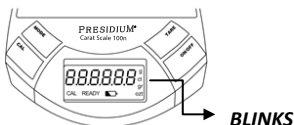


Fig. 1.5



## Calibration

Press the CAL button and [CAL] will appear and start blinking. When the display prompts, make sure the Calibration Weight (20g) is placed on the weighing tray (Fig. 1.6). Close the transparent lid.



Fig. 1.6

"CAL" will become stable and after a few seconds, "20.000g" will appear, this signifies the completion of calibration (Fig. 1.7).

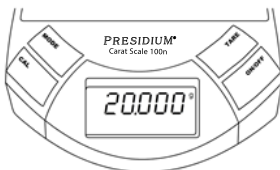


Fig. 1.7

The unit is now ready for use after calibration

If required to calibrate again, press "CAL" to initiate calibration process (Fig. 1.6 – Fig. 1.7) of unit.

## 2. PERFORMING A TEST with your Presidium Carat Scale

Place the gemstone to be measured on the weighing tray (Fig. 2.1) after the word “READY” appears. The result will be displayed immediately on the LCD.

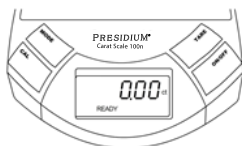


Fig. 2.1

For accurate reading, take the reading only after the word “READY” appears (Fig. 2.2).



Fig. 2.2

For conversion between different measuring unit, press “MODE”. It will change the measuring units (g, ct, gr, ozt) (Fig. 2.3).

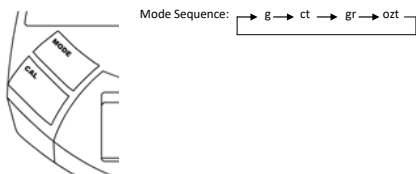


Fig. 2.3

In case a "Vessel" is required, place it on the weighing arm, press "TARE" to offset the weight of the vessel.

### **Tips for using your Presidium Carat Scale**

Keep the transparent lid closed when the scale is in operation.

It is advisable to take multiple readings if any doubt exists regarding the test results indicated.

### 3. TROUBLESHOOTING your Presidium Carat Scale

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**[CAL]** does not stop blinking:

- The calibration weight was removed from the tray during calibration and calibration was terminated. The calibration process must be repeated.

**[Error]** sign appears during calibration:

- The calibration weight was placed onto the tray before the [CAL] started blinking.

**[Err LO]** sign appears during calibration:

- The calibration weight is below the standard weight (20g).

**[Err HI]** sign appears during calibration stage:

- The calibration weight has exceeded that standard weight (20g).

**[EEEEEE]** sign appears:

- The weighing range exceeds 100ct/20g weighing capacity.

#### 4. TAKING CARE of your Presidium Carat Scale

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- For accuracy of reading, avoid shocks (such as dropping the instrument) or vibrations to the unit. Do not shake or cause impact to the unit.
- Do not attempt to dismantle the unit.
- Do not leave worn out batteries in the battery compartment as the batteries may corrode, leak or damage the scale. Batteries should be removed when the instrument is expected to be stored for an extended period of time.

Your scale 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 registering online at <http://www.presidium.com.sg/>