

CATIGA CS-102II

CATIGA CS-102II Advanced Scientific Calculator User Manual

1. INTRODUCTION AND OVERVIEW

The CATIGA CS-102II Scientific Calculator is designed for a wide range of mathematical and scientific tasks. This robust calculator features a two-line LCD display and over 400 integrated functions, making it suitable for professional, high school, and college use.

Key capabilities include percentages, trigonometry, statistics (1- and 2-variable, linear regressions, trend line analysis, permutations, combinatorics), and 5-variable memories. Its Multi-Replay Function allows storage of up to 9 variable memories, enhancing calculation efficiency and reducing errors.

2. PRODUCT FEATURES

- **Over 400 Integrated Functions:** Includes general, trigonometric, and scientific functions, fractions, combinations, permutations, statistics, and 5-variable memories. Supports degrees/radians, floating/fix, and number format modes.
- **Multi-Replay Function:** Stores up to 9 variable memories, allowing recall of previous calculations without re-entry.
- **Two-line Display:** Facilitates data manipulation and result viewing, minimizing errors.
- **Robust Design:** Features a hard-plastic case and a sliding cover for durability. Applied buttons are designed for long-term use, with color contrast for clarity.
- **Versatile Application:** Ideal for Algebra 1 & 2, Geometry, Trigonometry, Statistics, Calculus, and Biology.

3. SETUP

3.1 Battery Installation

The CATIGA CS-102II calculator requires one LR44 battery, which is typically included. To install or replace the battery:

1. Ensure the calculator is powered off.

2. Locate the battery compartment cover on the back of the calculator.
3. Use a small screwdriver (if necessary) to open the battery compartment.
4. Insert the LR44 battery with the correct polarity (+/-) as indicated inside the compartment.
5. Securely close the battery compartment cover.

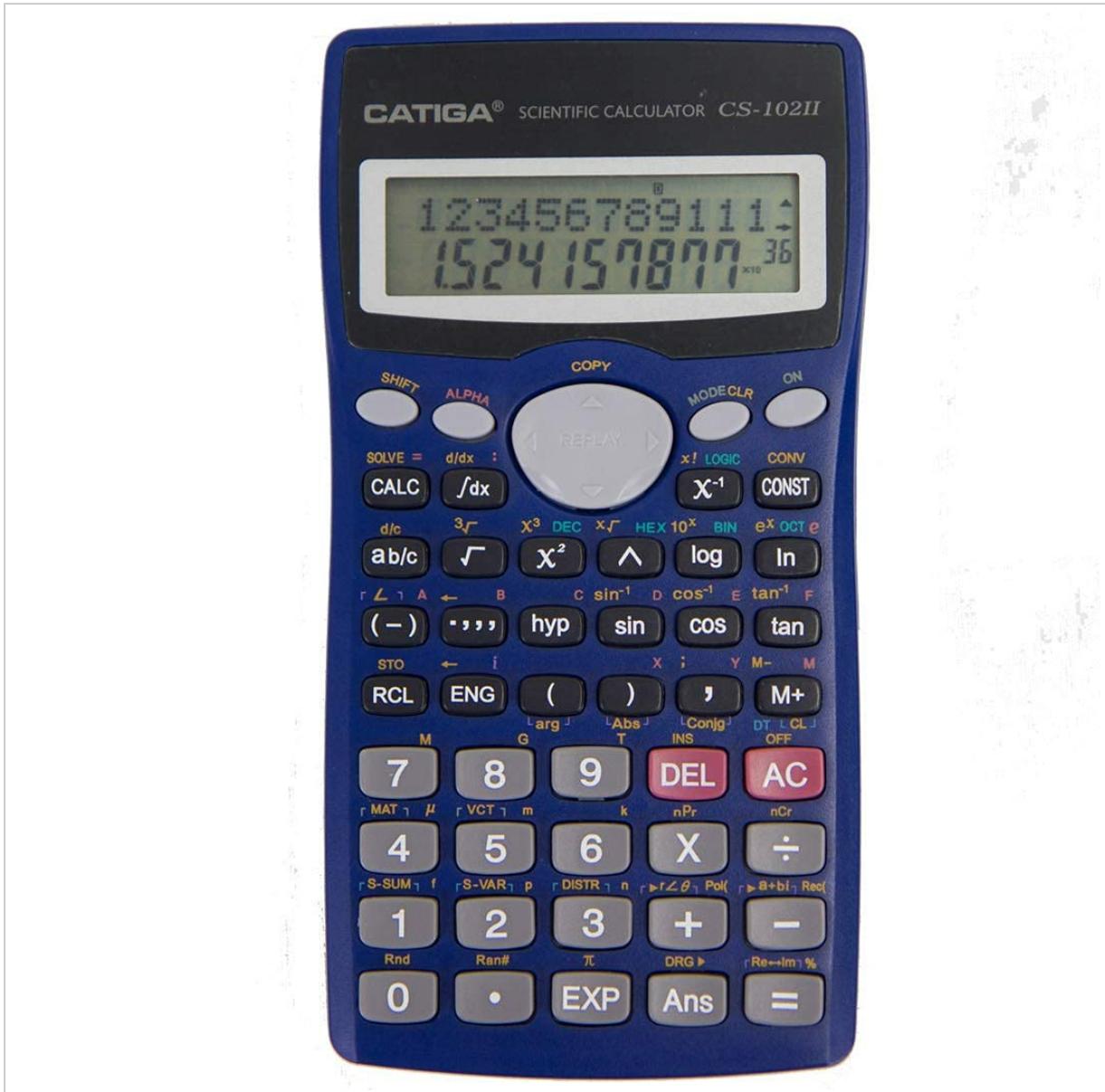


Figure 1: Front view of the CATIGA CS-102II Scientific Calculator, showing the two-line LCD display and the arrangement of numeric and function keys. The display shows example calculations, and key labels for SHIFT, ALPHA, MODECLR, ON, REPLAY, CALC, $\int dx$, sin, cos, tan, and numeric input are visible.

3.2 Initial Power On

After battery installation, press the **ON** button located at the top right of the keypad to power on the calculator. The display should show a clear screen or a default calculation mode.

4. OPERATING INSTRUCTIONS

4.1 Basic Operations

To perform basic arithmetic:

- Enter the first number.

- Press the desired operation key (+, -, X, ÷).
- Enter the second number.
- Press = to display the result.

4.2 Advanced Functions

The calculator offers over 400 functions. Many advanced functions are accessed using the **SHIFT** or **ALPHA** keys.

- **SHIFT Key:** Press **SHIFT** (blue text) followed by a function key to activate the blue-labeled secondary function. For example, **SHIFT** + **sin** activates **sin⁻¹**.
- **ALPHA Key:** Press **ALPHA** (red text) followed by a function key to activate the red-labeled alpha function. This is often used for variable input or specific constants.
- **Trigonometric Functions:** Use **sin**, **cos**, **tan** keys. Ensure the correct angle unit (degrees, radians, gradians) is selected via **MODECLR**.
- **Logarithmic Functions:** Use **log** (base 10) and **ln** (natural logarithm) keys.
- **Power and Root Functions:** Use **x²** for squaring, **√** for square root, and **SHIFT** + **x²** for **x³** (cubing) or **SHIFT** + **√** for **∛** (cube root).

4.3 Display and Memory

- **Two-line LCD:** The top line displays the input expression or previous calculation, while the bottom line shows the result or current input.
- **Multi-Replay Function:** Use the directional arrow keys (within the **REPLAY** pad) to scroll through previous calculations and answers.
- **Variable Memories:** The calculator has 9 variable memories. Use **STO** (Store) to save a value to a variable (A-F, X, Y, M) and **RCL** (Recall) to retrieve a stored value.

4.4 Mode Selection

Press the **MODECLR** button to access different calculation modes (e.g., COMP, STAT, EQN) and settings (e.g., angle units, display format). Follow the on-screen prompts to select the desired mode.

5. MAINTENANCE

- **Cleaning:** Wipe the calculator with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- **Storage:** Store the calculator in a cool, dry place, away from direct sunlight and extreme temperatures. Use the included sliding cover to protect the keys and display.
- **Battery Replacement:** Replace the LR44 battery when the display becomes dim or calculations are inconsistent. Refer to Section 3.1 for battery installation instructions.

6. TROUBLESHOOTING

- **Calculator does not turn on:** Check battery installation and ensure the battery is not depleted. Replace if necessary.
- **Incorrect results:** Verify the calculation mode (e.g., degrees vs. radians) and ensure correct input. Clear all memory (**SHIFT** + **CLR** or similar function) and reset the calculator if needed.
- **Display is dim or blank:** Replace the battery. If the issue persists, contact customer support.

- **Keys are unresponsive:** Ensure no debris is lodged under the keys. If the issue continues, contact customer support.

7. SPECIFICATIONS

Brand	CATIGA
Model Name	CS 102 II
Item Part Number	CS-121
Display Type	LCD (Two-line)
Number of Functions	Over 400
Power Source	1 x LR44 Battery (included)
Battery Cell Composition	Alkaline
Material	Plastic
Product Dimensions	18.08 x 11.43 x 2.03 cm
Item Weight	136 g
Manufacturer	Jeoly / Catiga Electronic Co. Ltd

8. WARRANTY AND SUPPORT

For warranty information and customer support, please refer to the documentation included with your purchase or visit the official CATIGA website. Keep your purchase receipt as proof of purchase for any warranty claims.