

## Casio FX-82SX Plus

# Casio FX-82SX Plus Scientific Calculator User Manual

Model: FX-82SX Plus

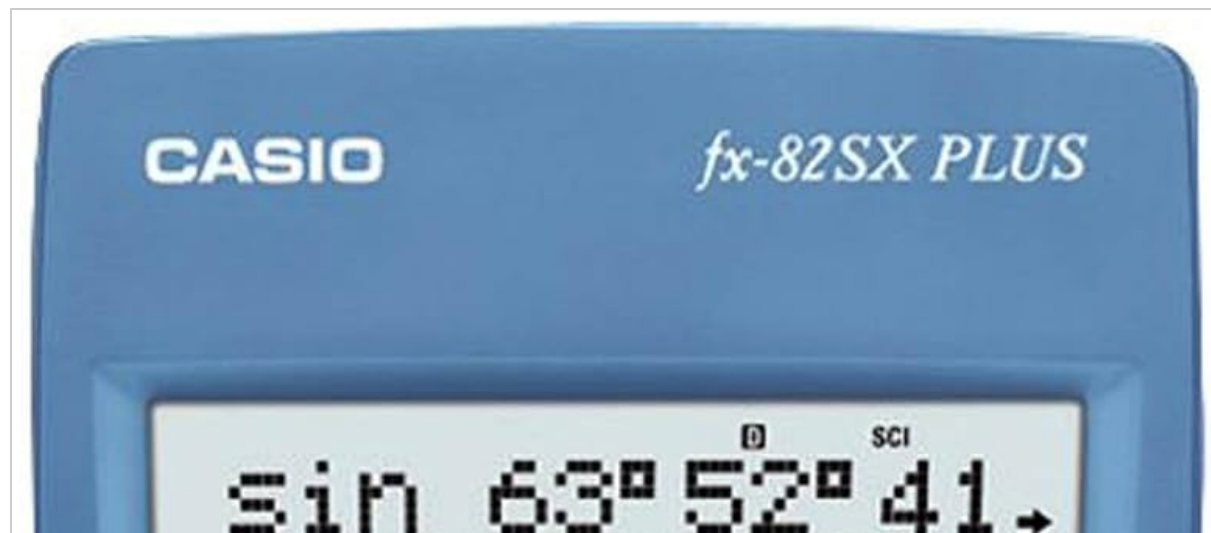
## INTRODUCTION

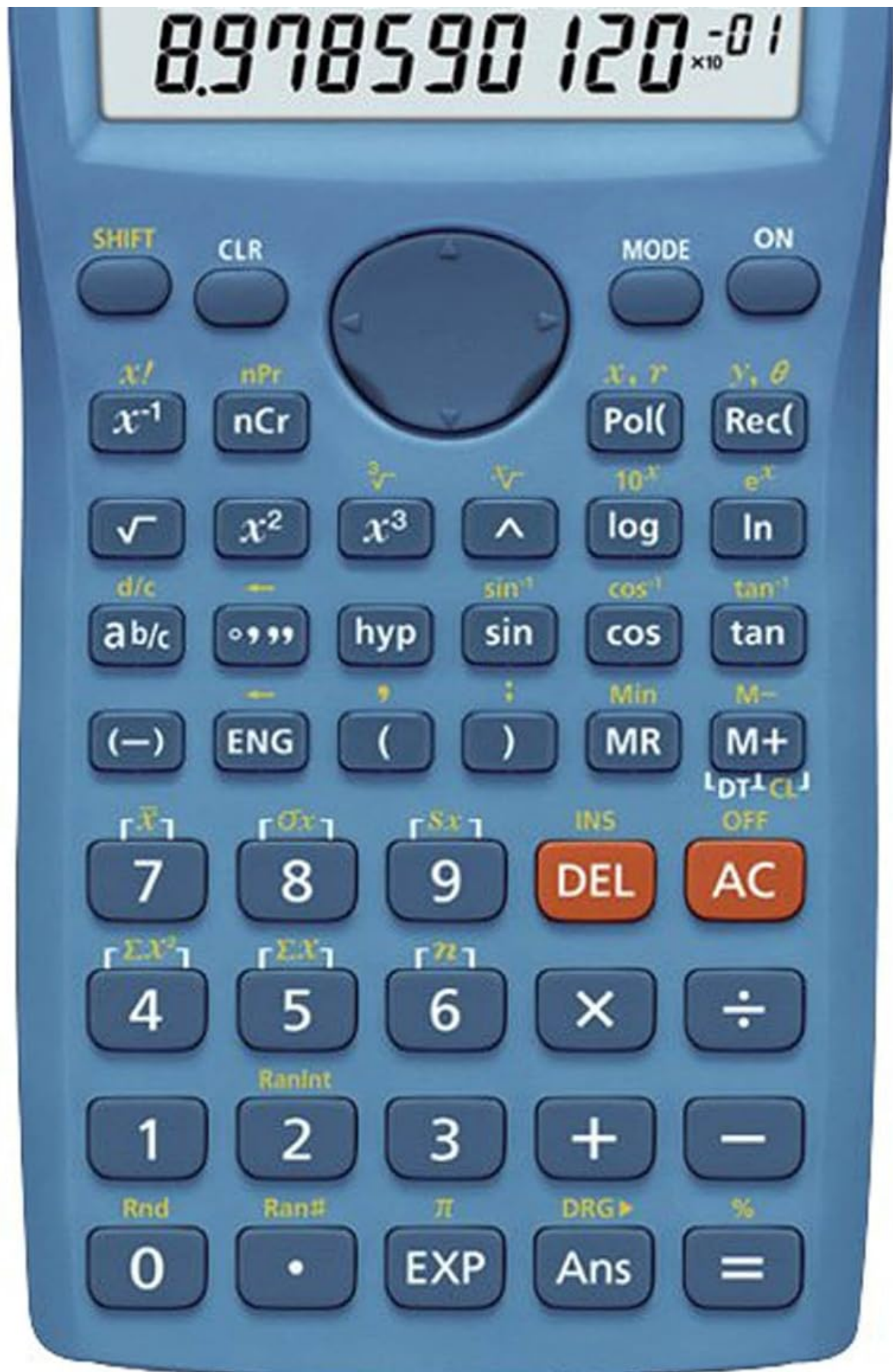
This manual provides detailed instructions for the proper use and maintenance of your Casio FX-82SX Plus Scientific Calculator. Please read this manual thoroughly before using the calculator to ensure correct operation and to maximize its functionality. Keep this manual for future reference.

## SAFETY PRECAUTIONS

- Do not expose the calculator to direct sunlight, extreme temperatures, or high humidity.
- Avoid dropping the calculator or subjecting it to strong impacts.
- Do not attempt to disassemble the calculator.
- Use only the specified battery type. Ensure correct polarity when installing batteries.
- Keep batteries out of reach of small children. If swallowed, seek medical attention immediately.
- Dispose of used batteries according to local regulations.

## PRODUCT OVERVIEW





This image displays the Casio FX-82SX Plus scientific calculator. It features a blue casing, a two-line LCD display at the top, and a comprehensive keypad below. The display shows an example calculation: 'sin 63° 52' 41.' with a result of '8.978590120-01'. The keys are arranged logically, including numerical keys, arithmetic operators, and dedicated function keys for trigonometry, logarithms, powers, and statistical calculations. A protective hard case is included with the product.

The Casio FX-82SX Plus is a scientific calculator designed for educational and general scientific use. It

features a clear two-line display, 177 built-in functions, and an intuitive key layout for ease of use. Key features include:

- Two-line LCD display (10+2 digits)
- 177 scientific functions
- S-V.P.A.M. (Super Visually Perfect Algebraic Method) input logic
- Trigonometric and inverse trigonometric functions
- Logarithmic and exponential functions
- Power and root calculations
- Statistical calculations (standard deviation, regression)
- Fraction calculations
- Random number and random integer generation
- Conversions between degrees, radians, and grads
- Battery-powered operation with automatic power-off
- Durable hard case for protection

## SETUP

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### Battery Installation

The Casio FX-82SX Plus calculator operates on one AA battery, which is included. To install or replace the battery:

1. Ensure the calculator is turned **OFF**.
2. Slide the hard case off the calculator.
3. Locate the battery compartment cover on the back of the calculator.
4. Using a small screwdriver, remove the screw securing the battery compartment cover.
5. Carefully remove the cover.
6. Insert one AA battery, ensuring the positive (+) and negative (-) terminals are aligned correctly as indicated inside the compartment.
7. Replace the battery compartment cover and secure it with the screw.
8. Press the **ON** key to turn on the calculator and verify operation.

*Note: If the display remains blank or shows abnormal characters after battery installation, remove the battery, wait a few moments, and then reinsert it. If the issue persists, contact customer support.*

## OPERATING INSTRUCTIONS

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### Turning On/Off

- To turn on: Press the **ON** key.
- To turn off: Press **SHIFT** then **AC** (OFF). The calculator also features an automatic power-off function to conserve battery life.

### Basic Arithmetic Calculations

Enter numbers and operators in sequence. Press **=** to get the result.

- Addition: **[Number] [+] [Number] [=]**
- Subtraction: **[Number] [-] [Number] [=]**

- Multiplication: **[Number] [×] [Number] [=]**
- Division: **[Number] [÷] [Number] [=]**

## Using Shift and Alpha Keys

Many keys have secondary functions printed above them. To access these functions:

- Press **SHIFT** (yellow) then the desired key to activate its yellow-printed function.
- (Note: This model does not appear to have an ALPHA key for red-printed functions, based on the image.)

## Mode Settings

Press the **MODE** key to change calculation modes (e.g., COMP, SD, REG) or angle units (Deg, Rad, Gra). Follow the on-screen prompts to select the desired setting.

## Memory Functions

- Store to Memory: **[Number] [SHIFT] [STO] [M+]** (or other memory variables if available).
- Recall from Memory: **[RCL] [M+]** (or other memory variables).
- Add to Memory: **[Number] [M+]**
- Subtract from Memory: **[Number] [M-]**
- Clear Memory: **[SHIFT] [CLR] [1] [=]** (for Memory) or **[SHIFT] [CLR] [ALL] [=]** (for all settings and memory).

## ADVANCED FUNCTIONS

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### Trigonometric Functions

Ensure the correct angle unit (Deg, Rad, Gra) is selected using the **MODE** key.

- Sine: **[sin] [Angle] [=]**
- Cosine: **[cos] [Angle] [=]**
- Tangent: **[tan] [Angle] [=]**
- Inverse Sine (arcsin): **[SHIFT] [sin<sup>-1</sup>] [Value] [=]**
- Inverse Cosine (arccos): **[SHIFT] [cos<sup>-1</sup>] [Value] [=]**
- Inverse Tangent (arctan): **[SHIFT] [tan<sup>-1</sup>] [Value] [=]**

### Logarithmic and Exponential Functions

- Common Logarithm ( $\log_{10}$ ): **[log] [Number] [=]**
- Natural Logarithm ( $\ln$ ): **[ln] [Number] [=]**
- 10 to the Power of X ( $10^x$ ): **[SHIFT] [10<sup>x</sup>] [Number] [=]**
- e to the Power of X ( $e^x$ ): **[SHIFT] [e<sup>x</sup>] [Number] [=]**

### Statistical Calculations

To perform statistical calculations:

1. Enter **MODE** and select **SD** (Standard Deviation) or **REG** (Regression) mode.
2. Input data points: **[Data Value] [M+]**. Repeat for all data points.
3. After entering all data, press **SHIFT** then the relevant statistical function key (e.g.,  $\bar{x}$  for mean,  $\sigma x$  for population standard deviation,  $sx$  for sample standard deviation).

## Fraction Calculations

Use the **a b/c** key for fraction input and conversion.

- Inputting a simple fraction: **[Numerator] [a b/c] [Denominator]**
- Inputting a mixed fraction: **[Whole Number] [a b/c] [Numerator] [a b/c] [Denominator]**
- Converting between mixed and improper fractions: Press **SHIFT** then **d/c**.
- Converting between fraction and decimal: Press **a b/c** again.

## MAINTENANCE

- **Cleaning:** Wipe the calculator with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- **Storage:** When not in use for extended periods, store the calculator in its hard case in a cool, dry place.
- **Battery Replacement:** Replace the battery promptly when the display becomes dim or calculations become erratic. Refer to the "Battery Installation" section for instructions.

## TROUBLESHOOTING

Problem	Possible Cause	Solution
Display is blank.	Calculator is off, battery is dead, or battery is incorrectly installed.	Press <b>ON</b> . Replace battery if necessary, ensuring correct polarity.
Incorrect calculation results.	Incorrect mode setting, incorrect angle unit, or input error.	Check <b>MODE</b> settings (e.g., COMP, SD, REG). Verify angle unit (Deg, Rad, Gra). Re-enter calculation carefully. Clear all memory and settings ( <b>SHIFT CLR ALL</b> $\Rightarrow$ ).
"Math ERROR" or "Syntax ERROR" displayed.	Mathematical error (e.g., division by zero, square root of a negative number) or incorrect expression syntax.	Review the calculation for mathematical impossibilities. Correct the input syntax. Press <b>AC</b> to clear the error.
Keys are unresponsive.	Low battery or internal malfunction.	Replace the battery. If the problem persists, contact customer support.

## SPECIFICATIONS

- **Model:** FX-82SX Plus
- **Brand:** Casio
- **Display:** 2-line LCD (10+2 digits)
- **Functions:** 177
- **Input Logic:** S-V.P.A.M.
- **Power Source:** 1 x AA battery
- **Battery Life:** Approximately 2 years (based on 1 hour of operation per day)
- **Dimensions (H x W x D):** 19.5 mm x 78 mm x 155 mm (0.77 in x 3.07 in x 6.10 in)
- **Weight:** Approximately 130 g (4.59 oz) (including battery)

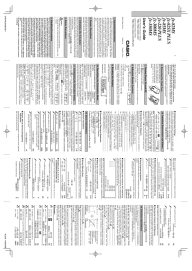


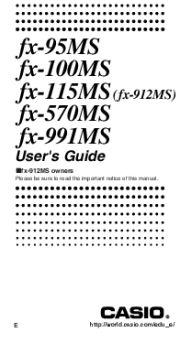
- **Operating Temperature:** 0°C to 40°C (32°F to 104°F)

## WARRANTY AND SUPPORT

For information regarding warranty coverage, service, or technical support for your Casio FX-82SX Plus Scientific Calculator, please refer to the warranty card included with your product or visit the official Casio website for your region. Contact details for customer service are typically available on the manufacturer's website.

You can find more information and support resources at the official Casio website: [www.casio.com](http://www.casio.com)

## Related Documents - FX-82SX Plus

	<p><a href="#">Casio fx-82MS Series User's Guide</a></p> <p>Comprehensive user's guide for Casio fx-82MS, fx-82SX PLUS, fx-85MS, fx-220 PLUS, fx-300MS, and fx-350MS calculators, covering basic and advanced functions, statistical calculations, error handling, and specifications.</p>
	<p><a href="#">Casio fx-82TL, fx-83WA, fx-85W, fx-85WA, fx-270W PLUS, fx-300W, fx-350TL, fx-911W User's Guide</a></p> <p>Comprehensive user's guide for Casio fx-82TL, fx-83WA, fx-85W, fx-85WA, fx-270W PLUS, fx-300W, fx-350TL, and fx-911W calculators, covering features, operations, safety, and specifications.</p>
	<p><a href="#">The Enjoyable Path to Math: CASIO Scientific Calculator Problem Solver</a></p> <p>Learn to solve a wide range of middle and high school math problems using CASIO Scientific Calculators. This supplementary reader provides step-by-step guidance for models like fx-991MS, fx-570MS, fx-115MS, fx-100MS, fx-95MS, fx-82MS, fx-350MS, and fx-85MS, making complex calculations accessible and math more enjoyable.</p>
	<p><a href="#">Casio fx-95MS, fx-100MS, fx-115MS, fx-570MS, fx-991MS User's Guide</a></p> <p>This user's guide provides comprehensive instructions for operating the Casio fx-95MS, fx-100MS, fx-115MS, fx-570MS, and fx-991MS calculators. It covers basic and scientific calculations, memory functions, statistical analysis, equation solving, and technical specifications.</p>



