# NY-991MS

● ENGLISH ●

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## 1. Important Information

- ♦ The displays and illustrations (such as key markings) shown in this User's Guide are for illustrative purposes only, and may differ somewhat from the actual items they represent.
- ♦ The contents of this manual are subject to change without notice.
- ♦ In no event shall us be liable to anyone for special, collateral, incidental, or consequential damages in connection with or arising out of the purchase or use of this product and items that come with it. Moreover, our company shall not be liable for any claim of any kind whatsoever by any other party arising out of the use of this product and the items that come with it.
- Be sure to keep all user documentation handy for future reference.

## 2. Sample Operations

♦ Sample operations in this manual are indicated by icon. Unlessspecifically stated, all sample operations assume that the calculator is in its initial default setup. Use the procedure under "3. Initializing the Calculator" to return the calculator to its initial default setup.

## 3. Initializing the Calculator

♦ Perform the following procedure when you want to initialize the calculator and return the calculation mode and setup to their initial default settings. Note that this operation also clears all data currently in calculator memory.

ON/C MODE 0

## 4. Safety Precautions

## **⚠** Caution

◆ This symbol is used to indicate information that can result in personal injury or material damage if ignored.

- Keep batteries out of the reach of small children. If accidentally swallowed, consult with a physician immediately.
- ♦ Use only the type of battery specified for this calculator in this manual.
- ♦ Never dispose of the calculator by burning it. Doing so can cause certain components to suddenly burst, creating the risk of fire and personal injury.
- ♦ Never try to take the calculator or the battery apart. Never charge batteries, or allow batteries to become shorted. Never expose batteries to direct heat or dispose of them by incineration.
- ♦ Misuse of batteries can cause them to leak and damage nearby items, and can create the risk of fire and personal injury.
- ♦ A dead battery can leak, causing damage to and malfunction of the calculator. Never leave the dead battery in the calculator.
- ♦ Always make sure that the battery's positive and negative ends are facing correctly when you load it into the calculator.

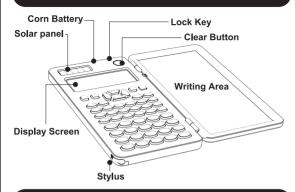
## 5. Handing Precautions

replace it with a new product.

- ♦ Be sure to read the following safety precautions before using this calculator. All example operations in this manual assume that the calculator uses the initial default settings.
- ♦ If you have just received the product, open your calculator and find that the writing screen is green, please don't worry, it is due to the liquid crystal reaction caused by the weather, as long as the lock key fluctuates to the unlock state, you can clear the green mark on the screen and use it normally. If the writing screen is protrusion or uneven, please put the product in an environment of 5 C-40 C for 10 minutes before using the product. If the writing screen is still raised or uneven after standing, the product may be damaged during transportation. Please contact our customer service to return the product and

- ♦ If the content on the writing board cannot be cleared, please check whether the clear lock key is in the locked side. If yes, please turn it to unlock side. If the content still cannot be cleared after the operation, please replace the battery.
- ♦ Use the side stylus to write on the writing area, and press the clear button to clear the written content.
- Even if the calculator is operating normally, replace the battery at least once every year.
- ♦ The battery that comes with this unit discharges slightly during shipment and storage. Because of this, it may require replacement sooner than the normal expected battery life.
- ♦ Low battery power can cause memory contents to become corrupted or lost completely. Always keep written records of all important data.
- ♦ Avoid use and storage in areas subjected to temperature extremes. Very low temperature can cause slow display response, total failure of the display, and shortening of battery life. Also avoid leaving the calculator in direct sunlight, near a window, near a heater or anywhere else it might become exposed to very high temperatures. Heat can cause discoloration or deformation of the calculator's case, and damage to internal circuitry.
- ♦ Avoid use and storage in areas subjected to large amounts of humidity and dust. Take care never to leave the calculator where it might be splashed by water or exposed to large amounts of humidity or dust. Such elements can damage internal circuitry.
- ♦ Never twist or bend the calculator.Never drop the calculator or otherwise subject it to strong impact.
- ♦ Never press the keys of the calculator or write with a ballpoint pen or other pointed object.
- ♦ If the calculator becomes very dirty, wipe it off with a cloth moistened in a week solution of water and mild neutral household detergent. Wring out all excess moisture before wiping the calculator. Never use thinner, benzene or other volatile agents to clean the calculator. Doing so can remove printed markings and can damage the case.

## 6. Product Structure



## 7. Take out the Stylus

Before using the writing tablet, take out the stylus from the side of the product.

When you are finished, please put the stylus back in the storage bin.



## 8. The clear key of writing tablet

Before clearing the contents on the writing tablet, please check that the clear key is in the unlocked side, if not, please turn it to the unlocked side.



## 9. Turning Power On and Off

Press ON/C OFF to turn on the calculator.

Press 2ndF ON/C OFF to turn off the calculator.

**Auto Power Off** 

Your calculator will turn off automatically if you do not perform and operation for about 6 minutes.

## 10. Reading the Display

The display of the calculator shows expressions you input, calculation results, and various indicators.

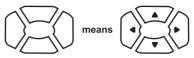


## 11. Key Markings

Many of the calculator's keys are use to perform more than function. The functions marked on the keyboard are color coded to help you find the one you need quickly and easily.

> © M- M □ — M+

		Color	Key Operation	
1	M+		M+	
2	м-	yellow	<u>Indfl</u> M+ Press <u>Indfl</u> and then the key to perform the marked function.	
3	М	White	(ALPHA) M+ Press@pm and then the key to perform the marked function.	



These four buttons represent four different directions of the selection buttons of "up a, down e, left e, and right e",When the cursor appears or the page needs to be turned, these keys can be used to move the cursor or turn the page.

## 12. Specifying the Calculation Mode

#### Specifying the Calculation Mode

When you want to perform this type of operation	Perform this key operation
General calculations	MODE 0 COUNT
Standard deviation	MODE 1 STAT
Regression calculations	MODE MODE 2 REG
Complex number	MODE MODE 3 CMPLX

Note: Mode indicators appear in the upper part of the display, The initial default calculation mode is the COUNT mode.

## 13. Configuring the Calculator Setup

Specifies the number of digits for display of a calculation result. After pressing the key repeatedly, you can see the characters "Fix 0~9?" or "Sci 0~9?" on the screen

Fix 0~9: The value you specify (from 0 to 9) controls the number of decimal places for displayed calculation results. Calculation results are rounded off to the specified digit before being displayed.

Example:press F/S 3 100 ÷ 9 = 11.111 (Fix 3)

Sci 0~9: The value you specify (from 1 to 10) controls the number of significant digits for displayed calculation results. Calculation results are rounded off to the specified digit before being displayed.

Example:press  $\overline{F/S}$   $\overline{F/S}$   $\overline{4}$  1 ÷ 9 = 1.111 × 10 –01 (Sci 4) After the calculation is completed, the calculator can be restored to the normal operation state by pressing the key again.

#### ♦ Angle Input and Unit Conversion

The system default angle unit is degrees for value input and calculation result display, if you want the radians unit, you can press the key. There is a small character "D" or "R" on the top of the calculator screen, which represent the angle unit is degrees or radians.

The following example is the input format for a sexagesimal value:

30°25′0"		
30 DMS 25 DMS = (Converts sexagesimal to decimal)	2nd E DEC	30°25°0 30.41666667
(Converts decimal to sexagesimal)		30°25°0
(Converts degrees to radians) (Converts radians to degrees)	2nd F DIR (D→R) 2nd F DIR (D→R)	0.53087098 30.41666667
(Converts radians to degrees)		30.41000007

#### Calculation Priority Sequence

When the priority of two expressions is the same, the calculation is performed from left to right.

1st	Function with parentheses: Pol( $x$ , $y$ ), Rec( $r$ , ), RanInt#( $a$ , $b$ )
2nd	Type A functions: With these functions, the value is entered and then the function key is pressed. ( x 3 , x 2 , x –1 , x !, ° ' ", m, m1 , m2 , n, °, r , g )
3rd	Powers and roots: ^( x y ), x '
4th	Fractions
5th	Implied multiplication of $\pi$ , e (natural logarithm base), memory name, or variable name: 2 $\pi$ , 3 e , 5A, $\pi$ A, etc.
6th	Type B functions: With these functions, the function key is pressed and then the value is entered. (', 3', log, ln, e x , 10 x , sin, cos, tan, sin $-1$ , cos $-1$ , tan $-1$ , sinh, cosh, tanh, sinh $-1$ , cosh $-1$ , tanh $-1$ , (-))
7th	Implied multiplication of Type B functions: 2 '3, Alog2, etc.

	8th	Permutation ( n P r ), combination ( n C r )
	9th	Multiplication, division ( × , ÷)
Ī	10th	Addition, subtraction (+, –)

♦ Correcting and Clearing an Expression

To delete a single character or function: 1234 → ♠ ♠ 2nd F MODE (DEL)→124

To insert a character or function into a calculation:

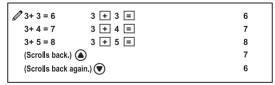
124  $\rightarrow$  (a) 3  $\rightarrow$  1234

While a calculation result is on the display, you can press or bedit the expression you used for the previous calculation. After the cursor moves under the number, the corresponding number and the cursor will flash together.

To clear all of the calculation you are inputting: Press ON/C

### 14. Basic Calculation

In the COUNT Mode, the calculator remembers up to approximately 150 bytes of data for the newest calculation. You can scroll through calculation history contents using (a) and (v).



Note: Calculation history data is all cleared whenever you press  $\boxed{\text{ON/C}}$ , when you change to a different calculation mode, or whenever you initialize modes and settings.

Fraction Calculations

 $\sqrt[2]{\frac{2}{3} + \frac{1}{2}} = 1\frac{3}{6}$  2 ab/c 3 + 1 ab/c 2 = 1.1.6

 $\sqrt[3]{4-3\frac{1}{2}=\frac{1}{2}}$  4 - 3 ab/c 1 ab/c 2 = 1.2

#### Note:

- 1)Mixing fractions and decimal values in a calculation will cause the result to be displayed as a decimal value.
- 2) Fractions in calculation results are displayed after being reduced to their lowest terms.

To switch a calculation result between improper fraction and mixed fraction format: Press 2nd F ab/c

To switch a calculation result between fraction and decimal format: Pres ab/c

◆ Percent Calculations

Calculate what percentage of 880 is 660. (75%)

660 ÷ 880 2nd F • % = 75

## 15. Function Calculation

1) $\pi$ :  $\pi$  is displayed as 3.141592654, but  $\pi$  = 3.141592654 , but  $\pi$  = 3.14159265358980 is used for internal calculations.

2)e is displayed as 2.718281828, but e = 2.7182818284590 4 is used for internal calculations.

3)sin, cos, tan, sin-1, cos-1, tan-1: Trigonometric functions. Specify the angle unit before performing calculations. See ∅ 1.

4) x2 , x3 ,  $x^y$ ,  $\sqrt{}$ ,  $\sqrt[3]{}$ ,  $\sqrt{}$  : Powers, power roots, and reciprocals. See  $\sqrt[a]{}$  2.

5)log, In, 10<sup>x</sup>, e<sup>x</sup>: Logarithmic function, Natural logarithm to base e, Exponential functions. See **2** 3.

6) n!,  $A_n^m$ :,  $C_n^m$ : Factorial function, Permutation  $A_n^m$  and combination  $C_n^m$  functions. See  $\mathcal{Q}$  4.

7)

Random 1: Generates a 3-digit pseudo random number that is less than 1

Random 2: For input of the function of the form Random (a, b), which generates a random integer within the range of a to b. See  $\mathscr{D}$  5.

Note: Using functions can slow down a calculation, which may delay display of the result. To interrupt an ongoing calculation before its result appears, press ON/C

	<pre>   2 2×10<sup>4</sup>=0.0002 </pre>	2 × 10 y (-) 4 =	0.0002
ı	2.5 <sup>2</sup> =6.25	2.5 x <sup>2</sup> =	6.25
ı	√32=2	5 2nd F y ( $\hat{V}$ 32 =	2
ı	<sup>2</sup> √64=8	2nd F x² (√) 64 =	8
ı	The reciprocal of 8	8 x <sup>-1</sup> =	0.125
ı	2.3 <sup>6</sup> =148.03588	9 2.3 y <sup>x</sup> 6 =	148.035889
ı	ı		

Ig100=10 In45=3.80666249 10 <sup>1.5</sup> =31.6227766	log 5   125   =	3 10 3.80666249 31.6227766
e5=148.4131591	2nd F In (e <sup>x</sup> ) =	148.4131591

Ø 4 5!=120	5 2nd F log (n!) =	120
A <sub>8</sub> =336	8 A <sub>n</sub> 3 =	336
C <sub>10</sub> =210	10 2nd F A <sup>m</sup> (C <sup>m</sup> )	210

5 TO obtain two random th	ree-aigit integers	
2nd F (-) (RANDOM) 1	=	0.489
	=	0.668
To generate random inte	gers in the range of	f 50 to 100

2nd F (-) (RANDOM) 2 (RANDI) 50 100 = 92

(Actual results will differ.)

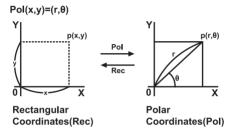
Coordinates Convert

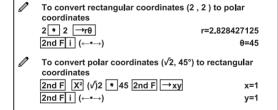
 $\rightarrow$ r $\theta$ ,  $\rightarrow$ xy:  $\rightarrow$ r $\theta$ converts rectangular coordinates to polar coordinates, while  $\rightarrow$ xy converts polar coordinates to rectangular coordinates.

 $\rightarrow$ r $\theta$ :Pol(x,y)=(r, $\theta$ )  $\rightarrow$ xy:Rec(r, $\theta$ )=(x,y)

Specify the angle unit is degrees before performing calculations.

Calculation result  $\theta$  is displayed in the range of -180° <  $\theta$  ≤180°.





## 16. Complex Number Calculation

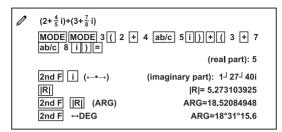
Press the <u>MODE</u> key to enter the complex operation mode, and the small character "CMPLX" will be displayed on the top of the screen.

i : imaginary number

|R| : modulus of a complex number

2nd F R (ARG): argument of a complex number 2nd F i (←•→):Convert between real number and

imaginary number



Note: If you need to exit the complex operation mode, just press the MODE key, then choose the COUNT 0 mode.

## 17. Calculus Calculation

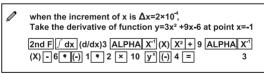
#### 1) Differential Equation

 $d/dx(f(x), a, \Delta x)$ 

f(x): Function of the variable  $x(all\ non-X\ variables\ are\ treated\ as\ constants)$ 

a: Input a value to specify the point for which the derivative should be obtained (differential point)
Δx: the incremental value of the variable x,
∫ (, d/dx(, Pol(, Rec( and Σ ( can not be used within f(x)))

 $\int$  (, d/dx(, Pol(, Rec( and  $\sum$ ( can not be used within f(x),a,  $\Delta x$ 



#### 2) Integral Equation

∫ dx : integral calculation key, this calculator performs integration using the Gauss-Kronrod method of numerical integration.

 $\int$  (f(x),a,b,n)

f(x): Function of the variable x (all non-X variables are treated as constants)

a: Integration interval lower limit b: Integration interval upper limit

n: Interval partition number, n is integer

You can omit specification of the Interval partition number. A default value of 2 is used when you do.

 $\int$  (, d/dx(, Pol(, Rec( and  $\sum$ ( can not be used within f(x).a.b

The integration result will be negative when f(x)<0 within an integration interval that conforms with a $\le x \le b$ .

## 18. Statistical Calculation

This calculator is mainly designed for statistical calculation, which is the biggest advantage compared with other calculators on the market. When designing and defining this calculator, we set corresponding keys for all parameters related to statistics, and do not need to obtain them through key combinations, so it can provide great convenience for statistical calculation.

To select this type of statistical calculation: (Regression formula shown in parentheses)	Perform this key operation:
Single-variable (X)	MODE 1 (STAT)
Paired-variable (X, Y), linear regression ( y = ax+b)	MODE 2 (REG) 1 (Lin)
Paired-variable (X, Y), quadratic regression (y=ax²+bx+c)	MODE 2 (REG) 2 (Quad)
Paired-variable (X, Y), inverse regression $(y=\frac{a}{x}+b)$	MODE 2 (REG) 3 (Inv)

Paired-variable (X, Y), power regression (y=ax <sup>b</sup> +c)	MODE 2 (REG) 4 (Pwr)
Paired-variable (X, Y), e exponential regression (y=ae <sup>bx</sup> +c)	MODE 2 (REG) 5 (Exp)
Paired-variable (X, Y), logarithmic regression (y=alogx+b)	MODE 2 (REG) 6 (Log)

#### Data Input Precautions

- 1. Always start data input with 2nd FCA to clear statistical memory.
  - 2. Input data using the key sequence shown below.

STAT Mode: < x -data> DATA or < x -data>, frequency DATA

REG Mode: < x -data> , < y -data> DATA or < x -data> , < y -data>, frequency

- 3. All parameters related to statistics can be obtained by pressing the ALPHA , including Sample quantity (n), Sample mean  $(\bar{x})$ , Sum to sample  $(\sum x, \sum x^2, \sum xy)$ , Standard deviation  $(s_x)$ , Variance  $(s_x)^2$ , Coefficient of regression equation(a,b,c),Correlation coefficient (r), Estimated value  $(\bar{x}, \hat{y})$ .
- 4. DATA DATA inputs the same data twice.
- 5. While inputting data or after inputting data is complete, you can use the ⓐ and ♥ keys to scroll through data you have input.

  6. Input the new value and then press the = key to
- that the new value and then press the \_\_ key to replace the old value with the new one. This also means that if you want to perform some other operation, you should always press the ON/C key first to exit data display.
- 7. Pressing the DATA key instead of = after changing a value on the display registers the value you input as a new data item, and leaves the old value as it is.
- 8. After inputting statistical data in the STAT Mode or REG Mode, press the 2nd F DATA (CD) key to clear one or a group of data input, then enter the correct data. Meanwhile, you will be unable to display or edit individual data items any longer after perform either the following operations: changing to another mode; changing the regression type.

- 9. Entering the REG Mode and selecting a regression type (Lin, Log, Exp, Pwr, Inv, Quad) clear variables A through F. X. and Y.
- 10. Do not use variables A through F, X, or Y to store data when performing statistical calculations.
- Data input, output and storage
- 1) 2nd F RCL (STO):Store the data in the corresponding data memory, Each data memory can store only one data.See 11.
- 2) RCL: Recall and display the data stored in the data memory or the results of statistical calculations.
- 3) M+ (M,M-): Independent Memory (M),You can add calculation results to or subtract results from independent memory. The "M" appears on the display when there is any value other than zero stored in independent memory. See 2.
- 4) 2nd F = (ANS): Answer Memory, The last calculation result obtained is stored in Ans (answer) memory. Ans memory contents are updated whenever a new calculation result is displayed. See 3.
- 5) 2nd F 0 (MDF): Change the last operation result stored in the calculator (reserved 2 digits more than the displayed result) to a value consistent with the displayed operation result. See 4.
- 6) ALPHA: Variable input, You can enter formulas or equations containing variables to perform related calculations.
- 7) COMP: Assign a value to a variable and find the calculation result stored in the formula.
- 8) 2nd F COMP (LRN): The displayed formula can be stored in the calculator, and the stored formula will disappear after the computer is turned off, See \$\int\$5.
  - $\bigcirc$  1 To assign the result of 5 + 5 to variable A

     5+5 2nd F RCL (STO) LOG (A)

     5+5 → A

     0

     (Continuing) ALPHA LOG (A) × 10 = A×10= 100

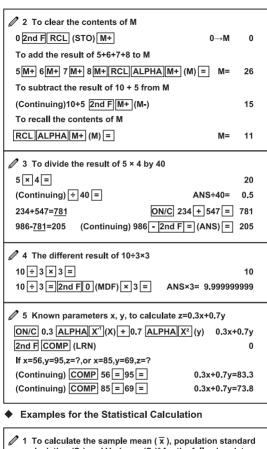
     (Continuing) RCL LOG (A)

     A= 10

     0 2nd F RCL (SOT) LOG (A)

     0 → A

     0 → A



	deviation (Sx) and Variance (Sx)2 for the following data:							ta:			
	Fraction	40	45	50	60	65	70	80	90	100	
Ì	number of people	1	1	2	5	7	12	9	6	2	
	ON/C MOOD 1 2nd F CA										
	40 DATA 45 DAT								65,7	DATA	١
	70,12 DATA 80,9	DA	A 90	0,6[	ATA	100	,2 D	ATA		n=45	
											_

<del>x</del> =72
Sx=13.26649916
(S <sub>x</sub> )2=176

2 To calculate population standard deviation (Sx, Sy), linear regression equation y=ax+b and Correlation coefficient (r) for the following data:

х	4	7	10	15	18	
У	6	10	15	24	29	
frequency	1	2	2	3	1	

	d F  CA 4,6  DATA  7,10  DATA
DATA 10,15,2 DATA 15,24,3	DATA 18,29 DATA n=9
RCL 8 (Sx)	Sx=4.466611387
RCL 5 (S <sub>y</sub> )	Sy=7.573508084
RCL × (a)	a=1.693688119
RCL ÷ (b)	b=1.693688119
RCL - (r)	r=0.998882757

If x=12 , to calculate the value of  $\hat{y}$  12 RCL )  $\hat{y}$ 

 $12y^{\prime} = 18.76175743$  If y=26 , to calculate the value of  $\widehat{x}$  26  $\boxed{RCL\ )}(\widehat{x})$ 

26x'=16.27365729

3 To calculate coefficient of the quadratic regression (a, b, c) for the following paired-variable data: (x, y) = (-1, 10), (1, 4), (2, 7), Specify Fix 3 (three decimal places) for

nd F CA F/S 3 (-) 1,10 DATA n=3	ON/C MOOD 2,2(Quad 1,4 DATA 2,7 DATA
a=2.000	RCL × (a)
b=-3.000	RCL ÷ (b)
c=5.000	RCL + (c)

# 19. Calculation Ranges, Number of Digits, and Precision

Calculation Range and Precision

results.

Calculation Range: ±1× 10–99 to 9.999999999 × 1099 or 0 Number of Digits for Internal Calculation: 12 digits Precision: In general, ±1 at the 10th digit for a single calculation.

Precision for exponential display is  $\pm 1$  at the least significant digit.

Errors are cumulative in the case of consecutive calculations.

Functions					
sinx	DEG	0≤ x ≤4.499999999×10¹º			
	RAD	0≤ x ≤785398163.3			
cosx	DEG	0≤ x ≤4.500000008×10¹º			
	RAD	0≤ x ≤785398164.9			
tanx	DEG Same as sinx, except when  x  = (2n-1) ×90				
	RAD	Same as sinx, except when  x  = (2n-1)×π/2			
sin <sup>-1</sup> x	0≤ x ≤	<b>1</b>			
cos <sup>-1</sup> x					
tan <sup>-1</sup> x	0≤ x	≤9.999999999×10 <sup>99</sup>			
Loga <sup>x</sup> ,lgx,lr	1x 0	< x ≤9.999999999×10 <sup>99</sup>			
10 <sup>x</sup>	0< x	≤9.999999999×10 <sup>99</sup>			
e <sup>x</sup>	-9.99	99999999× 10 <sup>99</sup> ≤x≤99.99999999			
√x	0≤x<	<1×10¹⁰⁰			
X <sup>2</sup>	x <1×10 <sup>50</sup>				
1/x	x <1×10 <sup>100</sup> , x≠0				
X!	0≤x≤69 , (x is an integer)				
<sup>3</sup> √x	x <	1×10 <sup>100</sup>			
C <sub>n</sub> <sup>m</sup>	0≤n≤1×10¹⁰, 0≤m≤n (n,m are integers),				
An <sup>m</sup>	1≤{n!	/(n–r)!}≤1×10¹ºº			
Pol(x,y)	x , y ≤9.999999999×10 <sup>49</sup>				
	(x²+y²)≤9.999999999×10 <sup>99</sup>				
Rec(r,θ)	0≤r≤9.99999999×10 <sup>99</sup> θ: Same as sinx				
↔DEG	a ,b,c<1×10 <sup>100</sup> 0≤b,c,The display seconds value is subject to an error of ±1 at the second decimal place.				
D↔R	x <1×10 <sup>100</sup> Decimal ↔ Sexagesimal Conversions 0°0′0″≤ x ≤999999°59′				

^(x <sup>y</sup> )	$x > 0:-1 \times 10^{100} \text{ ylog} x < 100$ x = 0: y > 0 x = 0: y = = 0: y = 0: y = 0 x = 0: y = 0: y = 0: y = 0 x = 0: y = 0: y = 0: y = 0: y = 0 x = 0: y =
× √y	y > 0: x $\neq$ 0, $-1 \times 10^{100}$ <1/x logy < 100 y = 0: x> 0 y <0: x = 2n+1, $\frac{1}{n}$ (n $\neq$ 0; n is an integer) However: -1×10 <sup>100</sup> <1/x log  y  <100
a <sup>b</sup> /c	Total of integer, numerator, and denominator must be 10 digits or less (including division marks).

Precision is basically the same as that described under "Calculation Range and Precision", above.

Calculations that use any of the functions or settings shown below require consecutive internal calculations to be performed, which can cause accumulation of error that occurs with each calculation.  $x^{y}$ ,  $\sqrt[x]{y}$ ,  $\sqrt[3]{...}$ , x!, nPr, nCr;  $^{\circ}$ ,  $^{\circ}$ ,  $^{\circ}$  (angle unit: radians);  $s(x)^{2}$ , s(x), regression coefficient.

Error is cumulative and tends to be large in the vicinity of a function's singular point and inflection point. Accumulation of errors tends to occur during statistical calculations involving data in which there is a large number of decimal places and there is little difference between data items. Input of statistical data is limited to six decimal places.

## 20. Error Messages

The calculator will display an error message whenever an error occurs

for any reason during a calculation.

Press (a) or (b) to return to the calculation screen. The cursor will be positioned at the location where the error occurred, ready for input. Make the necessary corrections to the calculation and execute it again.

Press ON/C to return to the calculation screen. Note that this also clears the calculation that contained the error.

#### Math ERROR

Cause: The intermediate or final result of the calculation you are performing exceeds the allowable calculation range.

Your input exceeds the allowable input range.

The calculation you are performing contains an illegal mathematical operation (such as division by zero).

Action: Check the input values and reduce the number of digits.

When using independent memory or a variable as the argument of a function, make sure that the memory or variable value is within the

allowable range for the function.

Syntax ERROR

Cause: There is a problem with the format of the

calculation you are performing.

Action: Make necessary corrections.

Ara ERROR

Cause: Improper use of an argument. Action: Make necessary corrections.

# 21. Before Assuming Malfunction of the Calculator

Perform the following steps whenever an error occurs during a calculation or when calculation results are not what you expected.

Note that you should make separate copies of important data before performing these steps.

- 1. Check the calculation expression to make sure that it does not contain any errors.
- 2. Make sure that you are using the correct mode for the type of calculation you are trying to perform.
- 3. If the above steps do not correct your problem, press the ON/C key.
- 4. Initialize all modes and settings: MOOD 0

## 22. Replacing the Battery

Important: Removing the battery will cause all of the calculator's memory contents to be deleted.

1. Press 2nd FONC (OFF) to turn off the calculator. To ensure that you do not accidentally turn on power while replacing the battery

2. Unscrew the screw, push the buckle in the direction of the screw, and pull out the battery tray as shown in the illustration







- 3. Replace the battery, taking care that its plus (+) and minus (-) ends are facing correctly.
- 4 Push the battery tray in, tighten the screws.
- 5.Initialize all modes and settings: MOOD 0

## 23. Specifications

Product Size:	162*81*17.5mm/6.4*3.2*0.7 inch
Writing Board Life:	100000 times above
Product Net Weight:	152.5g
Working Temperature:	0-40℃
Writing Force:	150-300g
Battery Type:	Coin Battery
Battery Model:	CR2032
Material:	ABS
Service Life	1 year
Screen size	6.3 inch

## 24. After-sale policy

#### 15-Day Satisfaction Guarantee on All Products

All new products you purchase from us are satisfaction guaranteed. If any product fails to meet your reasonable expectations, it may be returned for replacement or refund less shipping.

The product must be returned in the original packaging within the 15-day period. Your return label will require you to return the item at your own expense.

If you return a defective, damaged or incorrect item, you won't be refunded. It can take up to 30 days for an item to reach us once you return it.

Once the item is received at our warehouse, it takes 3-5 business days for the refund amount to show up in your account.

#### 1-Year Limited Warranty

Along with the guarantee, our warrants all products & accessoriesagainst manufacturing defects in materials and workmanship under normal consumer use for a period of 1-Year from the date of original purchase. During this warranty period, if a defect arises in the product, and you follow the proper instructions for returning the product, we will repair or replace your product. Replacements will be the same model as originally purchased; every attempt to replace the same color will be made.

This limited 1 year warranty applies to any repair, replacement part or replacement product for the remainder of the original warranty period.

