

Dear Customer,
thank you very much for purchasing our electronic calculator. There is no special training required to fully utilize its features but we suggest to study the operation manual for becoming familiar with the abilities.
Do not touch the inside of the unit and avoid hard knocks and strong pressing of the keys to ensure its durability.
Extreme cold (below 32F or 0°C), heat (above 104F or 40°C) and humidity may also affect the functionality of the calculator. Never use volatile fluid such as lacquer thinner, benzine, etc. while cleaning the unit! Please contact you retailer or nearby dealer for servicing.
Before using the calculator be sure to press the ON/C button and confirm that “0” is shown on the display.
Please take special care of not damaging the unit by bending or dropping!

THE KEYBOARD

1 OFF

2 ON/C

3 2ndF

4 DRG

5 DRG

6 sin-1

7 TAB

8 CE

9 DEG

10 In

11 log

12 a

13 b

14

15 A

16 B

17 C

18 X²

19 (

20)

21 0 ~ 9

22 ÷

23 X

24 HEX

25 DEC

26 X²

27 RM

28 M+

29 +/-

30 RND

31 =

OPERATING CONTROLS

1 OFF

2 ON/C

3 2ndF

4 DRG

Power Off Key: When this key is depressed, the calculator turns off. Furthermore, this calculator will turn off approx. 8 minutes after the last key operation to save the battery.

Power On Key: When this key is depressed, the calculator turns on. Pushing while operationg will clear the progress.

2nd Function Designation Key
ON/C: Push this key to turn on the calculator. The device is ready for operation. When pushing while operating it clears the display expect of the memory
2ndF + STAT: Statistical program will be activated
When the calculator is set to this mode all commands except for memory contents are cleared

Degree / Radian / Grad Selector / Angular Unit Conversion Key
Used for calculation of trigonomic, inverse trigonomic and coordinate

→ DEG → RAD → GRAD →

Press: DRG

Example: DEG → GRAD: Depress the key DRG twice
Mode “DEG” entries and answers are given in decimal degrees
Mode “RAD” entries and answers are given in radians
Mode “GRAD” entries and answers are given in grads

2ndF DRG

5 hyp

6 sin-1

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Contains the function of converting the displayed number into a number of the specified angular mode

Hyperbolic / Are Hyper Bolic Key

Trigonometric function key for inverting trigonomic devices

Display Format Exchange / Tabulation Key
F - E: When a calculation result is displayed in the floating decimal point system, press this button to change to the scientific notation system. Pushing the key one more time will lead to the point system again
2ndF + TAB: used to specify the number of decimal digits in the calculation result

Clear Entry / Factorial Key
CE: Used to clear an incorretly entered number

Degree / Minute / Second ↔ Decimal Degrees
D: Hexadecimal Number

Natural Logarithm / Antilogarithm and Hexadecimal Number Key
In: used to obtain the natural logarithm e (e = 2,718281828)
2ndF + e^x: calculation of the antilogarithm based on ln

Common Logarithm / Antilogarithm and Hexadecimal Number Key
log: used to obtain the logarithm with the base 10
2ndF + 10: calculation of the antilogarithm based on log

Use this key when typing in coordinate conversions with the X coordinate of the rectangular coordinates (x y) and use it for calling the calculated values of x
a: used when typing in real parts of numbers and when calling the real parts of calculation results
2ndF + → re: converting rectangular coordinates into polar coordinates

Use this key when typing in coordinate conversions with the Y coordinate of the rectangular coordinates (x y) and use the it for calling the calculated values of y
b: used when typing in imaginary parts of complex numbers and when calling the imaginary parts of calculation results
2ndF + → xy: converting polar coordinates into rectangular coordinates

Right Shift / Complex Number Mode Key
2ndF + CPLX: used to set the complex number mode

Enter Exponent / Pi and Hexadecimal Number Key
EXP: used to enter number in scientific notation
2ndF π used to enter Pi = 3,141592654
A: HEXX mode for hexadecimal number (A Key)

y^x / x√y and Hexadecimal Number Key
Y^x: Raises the number multiplied with X
2ndF x√Y: calculating the Xth root of Y
B: HEXX mode for hexadecimal number (B Key)

Square Root (Cube Root) and Hexadecimal Number Key
3√: calculating the the square root (cube root) of the number displayed
2ndF + √: calculating the the square root (cube root) of the number displayed
C: HEXX mode for hexadecimal number (C Key)

1/x

18 X²

19 (

20)

21 0 ~ 9

22 ÷

23 X

24 HEX

25 DEC

26 X²

27 RM

28 M+

29 +/-

30 RND

31 =

Square / Reciprocal Key
x²: calculating a square to the number shown on the display
2ndF + 1/x: calculating reciprocal of the number displayed

Open Parenthesis / Exchange Key
(: used to open parenthesis
2ndF + ↑: used to exchange the number being displayed with the number stored in the working register (x↔y)

Close Paranthesis / Statistical Calculation Key
) : used to close parenthesis
n: displays the number of samples entered (n)
2ndF + Σ x used to obatin the sum of datas

Division / Binary Number Mode Key
Used to calculate a division
2ndF + BIN: used to set up the octal system mode
Converts the number displayed into a number in base 2

Multiplication / Octal Number Mode Key
Used to calculate a multiplication
2ndF + OCT: used to set up the hexadecimal system mode
Converts the number displayed into a number in base 8

Minus / Hexadecimal Number Mode Key
Used to calculate a subtraction
2ndF + HEX: used to set up the hexadecimal system mode
Converts the number displayed into a number in base 16

Plus / Decimal Number Mode Key
Used to calculation an addition
2ndF + DEC: used to set up the decimal system mode
Converts the number displayed into a number in base 10

Memory-In / Statistical Calculation Key
Used to clear the numbers in memory and then stores them
To clear the memory press the ON/C button followed by the X-M button

RM: displays the contents of the memory (the contains of the memory remain unchanged after this key operation)
S: used to obtain the standard deviation of the population of data

Memory Plus / DATA CD Mode Key
M+ Used to add the number being displayed of the calculated result to the memory contents
DATA: used to enter datas (numbers)
2ndF + CD: used to correct the faulty insertion (delete function)

Change Sign Key
Used to changes the sign of the number displayed from positive to negative and vice versa
Example: 5 +/- -5

Decimal Point / Random Number Key
2ndF + RND: used to generate uniform random numbers from 0,000 to 0,999; random number generation is not possible while operating in binary, octal and hexadecimal system mode

Used for completing arithmetic calculations
2ndF + %: used to generate calculate percentages

2ndF DEG
M
E

-1234567890.

2ndF DEG
DATA
M

-1.2345678-99.

Número

Exponente

(floating decimal system, normal displ.)

(scientific notation system)

SYMBOLS

– : minus symbol: indicates that the number in the display following the “-“ is a negative number

M: memory symbol: appears when a number is stored in the memory

E: error symbol: appears when an overflow or an error is detected

2ndF: 2nd function designation symbol

HYP: hyperbolic function designation symbol: appears when hyperbolic function is designated

DEG: degree mode symbol: appears when the degree mode is designated or shows that the angular mode of the converted result is in degree

RAD: radian mode: appears when the radian mmode is designated or shows that the angular mode of the converted result is in radian

GRAD: grad mode symbol: appears when the grad mode is designated or shows that the angular mode of the converted result is in grad

() : parenthesis symbol: appears when a calculation with parenthesis is performed by depressing the “(“ Key

BIN: appears when the binary system mode is set and the displayed number is a binary number

OCT: appears when the octal system mode is set and the displayed number is a octal number

HEX: appears when the hexadecimal mode is set and the displayed number is a hexadecimal number

CPLX: appears when the complex number mode is set

STAT: appears when the statistical number mode is set

DISPLAY SYSTEM

This machine displays a calculation result (x) if it accords to the range of 0, 00000001 ≤x I ≤9999999999 and otherwise this machine displays (x) in the scientific notation system. However, a calculation result in a range above is also captable of being displayed by pressing the F - E key.

Example: 2ndF TAB 9 5 + 9 = → 0.055555556
F-E → 5.5555555 - 02

2ndF TAB

F-E

→ 0.055555556

→ 5.555555556

BATTERY REPLACEMENT

If the display turns dark or dims out replace the battery with a new one according to the following procedure.
Battery: LR1130 X1 or G10 X1 (1.5V)
Tension: 1,5 V cc
Do only change the battery under supervision of an adult or expert

- Turn off the calculator
- Remove the battery cover
- Replace the battery (“+” side has to be upside)
- Push in the battery cover
- After the replacement, press the ON/C key