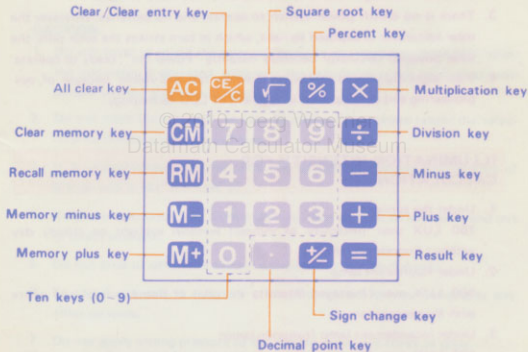


OPERATING KEYS

"M" Memory sign

"-" Minus sign

"E" Overflow sign



DISTINCTIVE DESIGNED SOLAR POWERED FEATURES

1. This tiny revolutionary seven (7) mm super thin calculator is the world's first pure solar powered calculator.
This unusual calculator operates with specially treated solar cells which converts light energy directly into electrical energy. These pure solar cells can collect energy directly from different types of light, such as ambient light, daylight, window light, fluorescent and tungsten lamp light, and even direct sunlight; both at home and office.
2. This calculator is optimized and designed to operate for high efficiency at "LLL" (low light levels) to any characteristic wave of light.
3. There is no on/off power switch to operate and no batteries. Wherever the solar calculator is exposed to light, which in turn strikes the solar cells; the solar powered calculator becomes instantly "Power On"; ready to operate.
4. Your eight-digit liquid crystal is extremely fast and visible because of our pioneering and development in the field of LCD technology.

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Datamath Calculator Museum

ILLUMINATION INTENSITY FOR CALCULATION

1. Under the sunlight
100 LUX over (Intensity of indirect window sunlight on cloudy day without fluorescent lamp)
2. Under fluorescent lamp
500 LUX over (Averaged intensity in room of home, school and office with fluorescent lamp)
3. Under incandescent lamp (tungsten lamp)
100 LUX over (Averaged intensity in room of home, school and office with tungsten lamp)

When light is weak in intensity, the display becomes dim. Use the calculator at brighter place.

BEFORE OPERATING

1. Before operating the calculator, depress the **AC** key one after the other to distinguish the figure or sign (M, -, E) which appears on the display at random when the light disappears temporarily. this is not a defect in the machine (this is due to the nature of the solar cells)

Whenever the irregular displays appear, depress the **AC** key one after the other and they are completely put out.

2. To avoid errors, depress each key firmly.
3. An incorrectly depressed key of any number (**0**, **1**, **2** ...) can be cleared by once depressing the **CE/C** key, and then continuing.
4. To depress the **CE/C** key just after depressing a function key, or to depress the **CE/C** key twice clears all the set-in values except memory register.
5. Memory register can be recalled by **RM** key and cleared by **CM** key.
6. If an incorrect function key (**+**, **-**, **x**, **÷**) or the sign change key **+/-** is depressed by mistake, simply depress the correct function key, and the pending calculation can be continued. In this case, there is no need to clear the mis-depressed function key.
7. Overflow

When a calculation result exceeds eight figures, the overflow sign "E" will appear. In this case, only the eight actual figures are correct and the decimal point should be moved eight places to right for an approximate answer.

Example: $E 734.12345 = 734123450000.$

CALCULATION EXAMPLES

1. Addition and subtraction

	Operation	Display
$123 + 456 - 789$	$\boxed{\text{CE/C}} \ 123 \boxed{+} \ 456 \boxed{-} \ 789 \boxed{=}$	-
$= -210$		210

2. Multiplication and division

$456 \times (-789) \div 123$	$\boxed{\text{CE/C}} \ 456 \boxed{\times} \ 789 \boxed{+/-} \boxed{\div}$	
$= -2925.0731$	$123 \boxed{=}$	-2925.0731

3. Mixed calculation

$(5 \times 6 - 34) \div 2 +$	$\boxed{\text{CE/C}} \ 5 \boxed{\times} \ 6 \boxed{-} \ 34 \boxed{\div}$	
$8.27 = 6.27$	$2 \boxed{+} \ 8 \boxed{-} \ 27 \boxed{=}$	6.27

4. Percent calculation

$246 \times 5\%$	$\boxed{\text{CE/C}} \ 246 \boxed{\times} \ 5 \boxed{\%}$	12.3
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5. Add-on/Discount calculation

246 plus 5%	$\boxed{\text{CE/C}} \ 246 \boxed{+} \ 5 \boxed{\%}$	258.3
246 less 5%	$\boxed{\text{CE/C}} \ 246 \boxed{-} \ 5 \boxed{\%}$	233.7

6. Constant calculation

$5 \times 6 = 30$	$\boxed{\text{CE/C}} \ 5 \boxed{\times} \ 6 \boxed{=}$	30.
$5 \times 7 = 35$	$7 \boxed{=}$	35.
$24 \div 12 = 2$	$\boxed{\text{CE/C}} \ 24 \boxed{\div} \ 12 \boxed{=}$	2.
$54 \div 12 = 4.5$	$54 \boxed{=}$	4.5

7. Power calculation

$1.1^4 = 1.4641$	$\boxed{\text{CE/C}} \ 1 \boxed{\cdot} \ 1 \boxed{\times} \boxed{=}\boxed{=}\boxed{=}$	1.4641
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8. Memory calculation

120 x 24 = 2880	CE/C 120 x 24 M+	M 2280.
-) 21 x 40 = 840	21 x 40 M-	M 840.
+) 5 x 25 = 125	5 x 25 M+	M 125.
<u>2165</u>	RM	M 2165.
	CM	2165.

9. Square root calculation

$\sqrt{3} + \sqrt{5} = 3.9681187$	CE/C 3 √ + 5 √ =	3.9681187
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CAUTION:

1. Do not cover or shield the solar cell array or intercept the direct light when the calculator is operated; otherwise the calculation is not performed completely and the display will disappear.
2. Do not open bottom case. In case of malfunction, please return the calculator to the store where purchased.
3. It is recommended that the calculator be used in ambient temperature of 5°C to +40°C (41°F – 104°F).
4. Keep the calculator free from moisture, dust or high temperature and out of direct sunlight.
5. Do not drop or otherwise subject calculator to any hard shocks.
6. To clean, use only a soft, dry cloth. Do not use thinner benzine or any other solvents.
7. Do not apply strong pressure to the display, since it is made of glass.

SPECIFICATIONS

MODEL: PHOTON/SOLAR II

8 digits thin pocket type LCD calculator with solar cells (no batteries, no on-off switch)

DISPLAY: 8 digits and sign digit, multi-digit liquid crystal display. Leading zero suppression.

CALCULATION SYSTEM:

Algebraic

CAPACITY:

8 digits + 8 digits \leq 8 digits

8 digits \div 8 digits \leq 8 digits

Memory \leq 8 digits

DECIMAL POINT:

Full floating

OVERFLOW SIGN: "E"

MINUS SIGN: "-"

MEMORY SIGN: "M"

CALCULATION:

Addition, subtraction, multiplication, division, mixed calculation, constant calculation, power calculation, add-on/discount calculation, percentage calculation, square root calculation, 4-key memory calculation.

LOGIC ELEMENT:

MOS LSI

OPERATING TEMPERATURE:

5°C – 40°C (41°F – 104°F)

STORAGE TEMPERATURE:

-20°F – 60°C (-4°F – 140°F)

POWER SUPPLY:

Solar cells/Light energy

DIMENSION:

68 x 126 x 7.5 mm (2.67 x 5.00 x 0.295 inch)

WEIGHT: Approximately 70 g (2 1/2 oz.)

LIMITED WARRANTY

TEAL PHOTON SOLAR POWERED CALCULATOR


The Quality built Solar Cell/Electronic Calculator you have purchased is guaranteed for a period of one year from the date of purchase against defect in materials or workmanship. Teal Industries, Inc., agrees at its option to repair such a defect, or to furnish a new or equal unit in exchange, if delivered prepaid to an authorized factory service center.

This warranty is extended to the original purchaser only and covers all parts and labor for a period of one year from the date of original purchase, provided the electronic calculator is delivered prepaid to an authorized Teal factory service center along with satisfactory proof of date of purchase.

This warranty is void if the electronic calculator is serviced by an unauthorized service center.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

Please refer to service directory for instructions concerning product repairs and correspondence regarding product service.

 **TEAL INDUSTRIES, INC.**

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