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Canon Canola L812

INSTRUCTIONS

Canon

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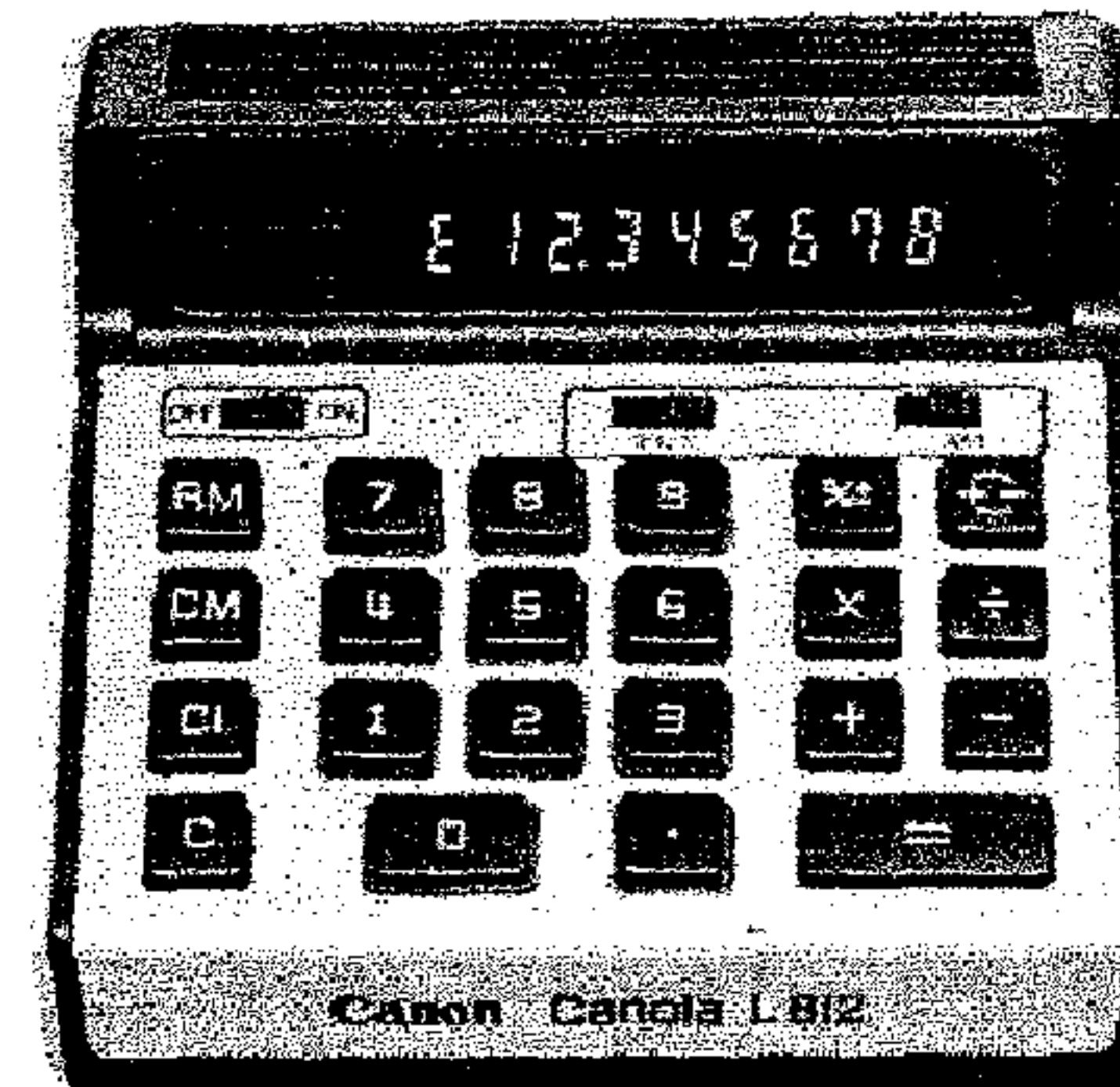
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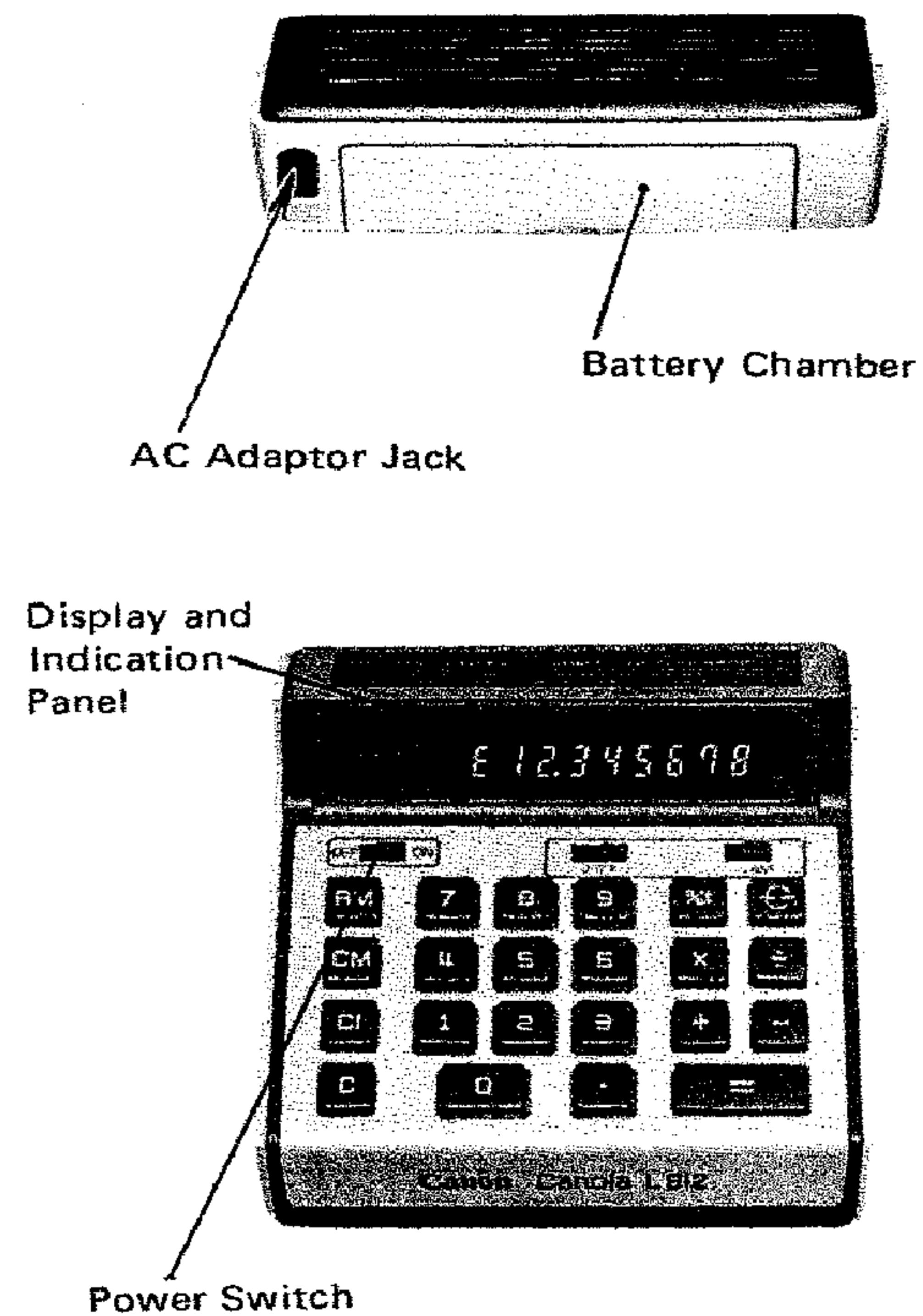
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Description of Canola L812



Operational Keys and Switches

C **Clear Key:** Used for clearing all entries and calculations except memory.

CI **Clear Indicator Key:** Used for correcting entries.

+ - × ÷ = **Function Keys:** Depress them according to the calculation expression.

0 ~ 9 **Numerical Keys:** Used for entering numerals.

. **Decimal Point Key:** Depress it at the position of the decimal point of the numerals to be entered. In the case of fractional numerals only, it is not necessary to depress the **.** key before the decimal point.

%± **Percent Plus-Minus Key:** Used for performing percentage calculations and add-on & discount calculations.

AM **Accumulation Switch:** Used for obtaining sums and differences of products and quotients. When this switch is set to AM, results are accumulated in the memory by depressing **=** key.

RM **Recall Memory Key:** Used for recalling the contents of the memory.

CM **Clear Memory Key:** Used for clearing the contents of the memory.

2 0 F **Decimal Point Switch:** Used for designating the decimal point position of the result and can be preselected at 0, 2 and F (floating).

± **Sign Change Key:** Used for converting signs of the indicated value.

Before Operation

1. How to remove the battery cover:
Slide off the battery cover located on the back side of the calculator.
2. How to load the batteries:
Load the battery chamber of the Canola with four new penlight dry batteries (size AA). When loading the batteries, put the batteries from the (-) side according to the diagram inside. The Canola will not operate if the batteries are placed upside down. If the display becomes dim, it means there is not sufficient voltage, in this case you should change all of the four batteries at the same time.

Note: The Canola L812 can be operated by normal AC current with the Canon AC Adaptor AD-1 (option). Refer to page 11 for AC Adaptor AD-1.

Be sure to take out the batteries when not using the calculator for more than one month.

How to Operate

1. Set the power switch at ON, and depress the **C** key.

2. The keys are operated according to the calculation expression.
3. Depress the **CE** key when incorrect entries are made. You may then make new entries, and continue the operation. When function keys (**+ - $\frac{\square}{\square}$ x**) are depressed incorrectly, operation can be proceeded by depressing the right key.
4. After completing a calculation and proceed to next, it is not necessary to depress the **C** key since the previous calculation is cleared automatically. But in calculations starting with a negative number, depress the **C** key before starting the calculations.
5. Set the decimal point switch at 0, 2 or F according to the content of the calculation. When the decimal point is set at 0 or 2, the result is automatically rounded off to the corresponding number of decimal digits, and when set at F (floating) position, the result is rounded down.
6. Please turn on the power switch gently. If the switch is turned on and off repeatedly, the display may temporarily function improperly by not lighting or by lighting at random. If this should occur, turn off the switch at once, and then turn it on again after waiting 2 or 3 seconds.

Note: Please keep in mind that accurate results depend on correct key operation.

Calculation Examples

Examples	Key Operation
1. Addition and Subtraction	
1) $8 + 3 + 5.5 = 16.5$	8 + 3 + 5.5 = (16.50)
2) $4 - 7 - 3 = -6$	4 - 7 - 3 = (-6.00)
2. Multiplication and Division	
1) $3.6 \times 1.7 = 6.12$	3.6 x 1.7 = (6.12)
2) $-369 \div 12.3 = -30$	369 ÷ 12.3 = (-30.00)

- The minus sign at the leftside of the display panel lights up when an entry or result is a negative number.
- When the entered numerals exceed 8 digits, only 8 left-most digits are keyed in and excess digits are ignored.

Ex. $\underbrace{12345678.9}_{9 \text{ digits}} \div 987$

Operation: 12345678 **÷** 987 **=**
(12508.285)

- When the integers of the calculation results exceed 8 digits, the overflow sign (\overline{E}) lights up and further operation is locked, and only the 8 leftmost significant digits are displayed.

Ex. 12345 **x** 5678 **x** 200 **=** 14018982000
12345 **x** 5678 **x** 200 **=**
(\overline{E} 140.18982)

Assume 3 digits have been dropped by reading the position of decimal point.

The overflow sign is also indicated at the following instances:

- When divisor is 0 in division.

Depress the key to release the keyboard interlock, and start the further operation.

3. Multiplication and Division by a Constant	
1) $2 \times 3 = 6$	2 x 3 = (6.)
$2 \times 4 = 8$	4 = (8.)
$2 \times 5 = 10$	5 = (10.)
2) $6 \div 3 = 2$	6 ÷ 3 = (2.)
$9 \div 3 = 3$	9 = (3.)
$12 \div 3 = 4$	12 = (4.)

The first operation in constant calculation is performed according to the calculation expression. From the second operation, each calculation result is obtained by just entering the numeral and depressing the **=** key.

4. Raising to Powers	
1) $3^2 = 9$	3 x = (9.)
2) $3^4 = 81$	3 x = = = (81.)

Raising to the n -th power can be obtained automatically by depressing the **=** key ($n-1$) times.

5. Percentage Calculation	
1) Percentage calculation 200 x 15% = 30	$200 \times 15 \% = (30.)$
2) Add-on Calculation 20% add-on of 200 (200 + 40 = 240)	$200 \times 20 \% + = (240.)$

Add-on calculation is to add the percentage amount to the original amount with the sequential operation of the $\% + =$ keys.

3) Discount Calculation 20% discount of 200 (200 - 40 = 160)	$200 \times 20 \% - = (160.)$
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Discount calculation is to discount the percentage amount from the original amount with the sequential operation of the $\% - =$ keys.

6 Reciprocal Calculation $\frac{1}{2 \times 3 + 4} = 0.1$	$2 \times 3 + 4 \div = = (0.1)$
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Reciprocal can be obtained by depressing the $\div = =$ keys continuously.

7. Calculation Using Memory	
20 x 30 = 600	$20 \times 30 = (// 600.)$
40 x 50 = 2000	$40 \times 50 = (// 2000.)$
-(15 x 20) = -300	$15 \times 20 = (// -300.)$
Sub Total 2300	$RM (// 2300.)$
75 x 18 = 1350	$75 \times 18 = (// 1350.)$
Total 3650	$RM (// 3650.)$

1. When the Accumulation Switch is set to AM, the results obtained by the $=$ key are automatically accumulated in the memory.
2. When data are put in the memory, memory sign (M) on the display panel indicates the memory is in use.
3. When integers of memory content exceed 8 digits, overflow sign (H) lights up and further operation is locked, but overflowed memory contents can be recalled by depressing the C and RM keys.

ex. $(33333333 \times 3) + (234 \times 45) = 100010520$
(9 digits)


$AM 33333333 \times 3 = (// 99999999.)$
 $234 \times 45 = (H 10530.)$
 $C (// 0.)$
 $RM (// 1.0001052)$

4. The memory content is protected against calculation result overflowed.

ex. $(20 \times 3) + (40 \times 5) + (50 \times 6) = 560$

$20 \times 3 = (// 60.)$
 $40 \times 5 = (// 200.)$
 $123456 \times 6789 = (E 8,3814278)*$
 $C (// 0.)$
 $50 \times 6 = (// 300.)$
 $RM (// 560.)$

* Overflowed calculation result cannot be accumulated in memory.

8. Mixed Calculation	
1) $9 \div 5 \times 3.2 + 7 =$ 12.76	9 \div 5 \times 3.2 $+$ 7 $=$ (12.76)
2) $(2 + 4) \div (-3) \times$ 8.1 = -16.2	2 $+$ 4 \div 3 \ominus \times 8.1 $=$ (-16.2)

Specifications

Type: Mini desk-top electronic calculator

Keyboard: 10 key system

Display: 8-digit fluorescent tube display

Registers: 3 calculating registers and 1 memory register

Calculation capacity: 8 digits in all calculations

Decimal point system: Leftmost digit priority with floating decimal point system.

Entries: Floating.


Intermediate results of chain multiplication and division: Floating.

Results: The following settings exist on the decimal point selector 0, 2 and F (floating).

Negative numbers: True value with a minus sign

Types of calculation: Addition, subtraction, multiplication and division. Multiplication and division by a constant. Chain multiplication and division. Sum and difference of products and quotients. Raising to powers. Percentage calculation. Add-on and discount calculation. Various mixed calculations.

Indication functions: Zero suppressed indication panel. Minus sign. Overflow sign. Memory overflow sign.

Automatic calculation functions:  Switch for accumulation of calculation results. Constant multiplication and division. Raising to powers.

Safety devices: Overflow keyboard interlock

Elements: MOS LSI

Power source:

- 4 penlight dry batteries (size AA) DC 6V 0.6W
Alkaline batteries make possible about 15 hours of continuous use. Manganese batteries make possible about 6 hours of continuous use.

2. AC with the Canon AC Adaptor AD-1.

Usable temperature: 0°C to + 40°C (32°F to 104°F)

Size: 131mm wide x 153mm long x 44mm high
(5-3/16" x 6-1/16" x 1-3/4")

Weight: Approx. 350g (12.3 oz.) including dry batteries

Subject to alterations.

AC Adaptor (option)

The Canon AC Adaptor AD-1 is designed to allow the Canola to be plugged in and operated by normal AC current.

There is no power consumption of the batteries as long as using the AC power.

How to use

- Insert the out-put cord of the AC Adaptor AD-1 to the socket of the Canola.
 - Plug in AC Adaptor AD-1 to the AC outlet.
 - Turn on the power switch of the Canola for immediate operation.
- * Use only the Canon AC Adaptor AD-1 for the Canola.
 - * Do not leave the AC Adaptor AD-1 connected to outlet when not actually in use.

When connecting/disconnecting the AC Adaptor into/from the socket of the calculator, switch off the power.