

TO THE CONSUMER

FULL SIX MONTH WARRANTY

For six month from date of purchase, APF will repair defects in material or workmanship, free of charge, which appear in the operation of this electronic calculator unless caused by damage resulting from corrosive leakage of batteries or from the unreasonable use of this product.

To obtain service under this warranty, return this calculator to your Dealer with evidence of date of purchase, or return it directly to APF Service, prepaid, with proof of purchase date.

OUT OF WARRANTY SERVICE. State the nature of your difficulty. As with any fine equipment, pack carefully and forward via insured, prepaid parcel post to:

APF SERVICE CENTER
43-17 Queens St.
Long Island City, N.Y. 11101

APF ELECTRONICS, INCORPORATED
NEW YORK, N.Y. 10022

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mark 40
electronic calculator
with percentage key

operating instructions

INTRODUCTION

Modern electronic technology has provided a new tool for use in home, office or school.

Your APF Mark 40 calculator was designed to be compact and portable, yet powerful enough for you to ease through all daily calculations.

You may work from an internal battery source or, by means of an (optional) A.C. adaptor, from any convenient 110-120 volts A.C. outlet.

To simplify operation, your calculator is programmed for "THINK AND TOUCH"—"THINK" the mathematical sequence and "TOUCH" the appropriate keys as you think—the correct answer instantly appears on the bright, clear eight-digit display. The decimal point automatically moves to the correct position.

Please review the instructions in this booklet. Work through the examples illustrated and within a very short time you will become proficient in using your new calculator.

SUGGESTED USES

Home

- Budgets • Stock & Bond Investments
- Check Book Balancing
- Clothing Invoices • Grocery Bills
- Income Tax Returns • Credit Card Bills
- Loans • Sports Averaging

Store and Away from Home

- Unit Pricing • Grocery Bills • Figure Best Bargains
- Gas Mileage • Mark Down (Discount)
- Car Costs • Restaurant Checks

Business or School

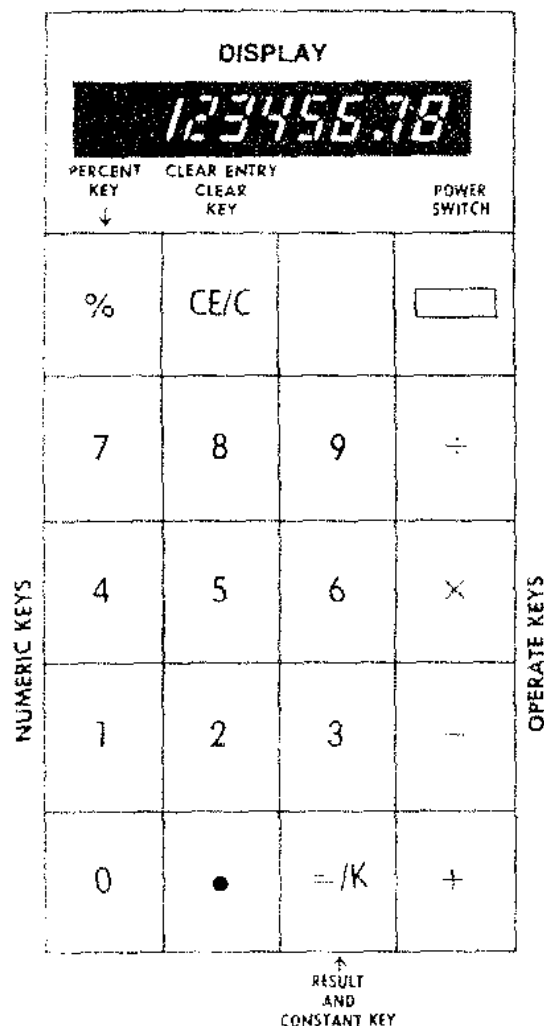
- Expense Report • Percentage Profit • Cost Analysis
- Compound Interest • Payroll • Taxes • Invoicing
- Markups/Markdowns • Inventory
- Metric/English Conversions
- Slide Rule Calculations

Convenient, rapid, accurate. You'll find many uses for your Electronic Calculator.

PORTABLE BATTERY OR A.C. OPERATION

- Your calculator is operated by using a 9 volt battery. Under normal operating conditions, a new 9 volt carbon zinc battery will provide about 14 to 20 hours of calculating time. A new 9 volt alkaline battery will provide about 40 hours of calculating time.
- To replace a battery, slide the battery cover off the battery compartment, and CAREFULLY remove the battery. The battery cover is located on the underside of the calculator. Hold the battery in one hand and GENTLY unsnap the battery connector. Snap a new battery into the connector, replace in the battery compartment and slide the cover back in place.
- When the battery is almost discharged, the display will become dim. To prevent improper calculations the battery must be replaced as soon as possible.
- Note: To prevent damage to your calculator, remove a bad battery. Do not store your calculator for extended periods of time with a battery in the battery compartment.
- To conserve battery life turn the calculator off when not in use.
- For A.C. operation, it will be necessary to use the optional A.C. adaptor model 710 or 7515, designed specifically for this calculator. Turn the power switch off, connect the adaptor to any convenient source of 110-120 volts A.C., and push the jack into the socket of the right side of the case. When the jack is inserted, the battery is automatically disconnected.

NOTE: Use of any A.C. adaptor other than the type specifically designed for this calculator, may cause damage to the electronic circuits within the unit. See your Dealer for purchase of the proper A.C. adaptor.



KEYS AND SWITCHES

POWER SWITCH—Turns the calculator "ON" or "OFF". To turn the calculator on, slide the power switch to the left. A red dot will be visible when the switch is in the "on" position.

NUMERIC KEYS—Standard 1 to 9 keyboard is provided as well as [0] and [.] .

[CE/C] CLEAR ENTRY/CLEAR KEY—This is a multi-function key which will clear the display of the last entry or result on the first push, and clear the calculator of all previous calculations on the second push.

NOTE: ALWAYS touch CE/C twice before beginning a new calculation.

[+] [-] [×] [÷] OPERATE KEYS—These keys will perform any previous operation as well as instruct the calculator as to the next operation to be performed.

[=]/K] RESULT KEY—At the conclusion of calculation touching this key will immediately place the answer on the display. Also, this key operates the **AUTOMATIC CONSTANT [K]** (see pages 9 and 10).

[%] . PERCENT KEY—This is a special purpose key used to simplify calculations involving Percentage (mark-up, discount). See example page 8.

DISPLAY INDICATORS

[-] MINUS SIGN—The minus sign will appear to the left of the most significant digit and will shift in position with additional numbers.

OVERFLOW INDICATION. When the result of a calculation exceeds 8 digits (99999999.), or when more than 8 digits are entered, the capacity of the calculator has been exceeded. This will be indicated by the flashing on and off of the display. To obtain the correct position of the decimal point, move it right 8 places. See example, page 11. **NOTE:** To start a new calculation, first touch [CE/C] twice.

BASIC OPERATING INSTRUCTIONS

Number Entry

TO ENTER A NUMBER, "TOUCH" THE NUMERIC KEYS IN SEQUENCE.

Example: To enter 12.3

KEY SEQUENCE	DISPLAY
Touch [CE/C] Twice	0
Touch 1	1
Touch 2	12
Touch [.]	12.
Touch 3	Answer 12.3

TO CLEAR AN INCORRECT ENTRY, USE THE [CE/C] KEY.

Example: To calculate $12 \div 7 = ?$

KEY SEQUENCE	DISPLAY
Touch [CE/C] Twice	0
Enter 12	12
Touch [÷]	12
In error you enter 6	8
"MISTAKE"	"MISTAKE"
Touch [CE/C]	0
Enter 7	7
Touch [=/K]	Answer 84.

DECIMAL POINT The decimal point in the answer is always floating with a maximum of 9 places.

Example: $12.34 \div 6.78 = ?$

KEY SEQUENCE	DISPLAY
Touch [CE/C] Twice	0
Enter 12.34	12.34
Touch [÷]	12.34
Enter 6.78	6.78
Touch [=/K]	Answer 83.6652

NOTE: The decimal point automatically floated to 4 places.

ADDITION AND SUBTRACTION

Example 1: To calculate $13.35 + 4.56 = ?$

ENTER	TOUCH	DISPLAY
	[CE/C] Twice	0
13.35	[+]	13.35
4.56	[+]	Answer 17.91

Example 2: To calculate $436.10 - 103.90 = ?$

ENTER	TOUCH	DISPLAY
	[CE/C] Twice	0
436.1	[+]	436.1
103.9	[= /K]	Answer 332.2

Example 3: Your check book has a starting balance of \$86.39. You write checks for \$21.00, \$32.45 and \$14.26, then deposit \$162.26. What is your balance?

ENTER	TOUCH	DISPLAY
	[CE/C] Twice	0
86.39	[+]	86.39
21.00	[+]	65.39
32.45	[+]	32.94
14.26	[+]	18.68
162.26	[= /K]	Answer 180.94

MULTIPLICATION AND DIVISION

Example 1: To calculate $31.62 \times 58.6 = ?$

ENTER	TOUCH	DISPLAY
	[CE/C] Twice	0
31.62	[×]	31.62
58.6	[= /K]	Answer 1852.932

Example 2: To calculate $196 \div 7 = ?$

ENTER	TOUCH	DISPLAY
	[CE/C] Twice	0
196	[÷]	196
7	[= /K]	Answer 28.

Example 3: You drive in your automobile 186 miles and use 12.0 gallons of gas. How many miles, to the gallon, did you average? Use $186 \div 12$ miles per gallon.

ENTER	TOUCH	DISPLAY
	[CE/C] Twice	0
186	[÷]	186
12	[= /K]	Answer 15.5

CHAIN CALCULATIONS

Example: To calculate $6.5 \times 32 \div 4 + 19 = ?$

ENTER	TOUCH	DISPLAY
	[CE/C] Twice	0
6.5	[$\times$]	6.5
32	[$\times$]	208
4	[$\div$]	52
19	[$+/K$]	Answer 71

PERCENTAGE CALCULATION %—The percent key is useful for dividing numbers by 100, and in markon — markdown problems, it reduces the number of steps required.

Example 1: To calculate $110 \times 12\% = ?$

ENTER	TOUCH	DISPLAY
	[CE/C] Twice	0
110	[$\times$]	110
12	[%] [=/K]	Answer 13.2

Example 2:

Your cost is \$323.00 and you wish to mark on 16%.

ENTER	TOUCH	DISPLAY
	[CE/C] Twice	0
323	[+]	323
16	[%]	51.68
	[$+/K$]	Answer 374.68

Example 3: Discount (Markdown)

The normal selling price is \$323.00. You wish to discount this item by 16%.

ENTER	TOUCH	DISPLAY
	[CE/C] Twice	0
323	[$-$]	323
16	[%]	51.68
	[$-/K$]	Answer 271.32

CALCULATIONS USING A CONSTANT

CONSTANT MULTIPLICATION

For multiplication the SECOND number entered is the Constant

EXAMPLE	OPERATION	DISPLAY
3.72 is a constant		
15 $\times$ 3.72	15 [$\times$] 3.72 [=/k]	55.8
30 $\times$ 3.72	30 [=/k]	111.6
215 $\times$ 3.72	215 [=/k]	799.8

CONSTANT DIVISION

For division the SECOND number entered is the Constant

EXAMPLE	OPERATION	DISPLAY
12 is a constant		
48 $\div$ 12	48 [$\div$] 12 [=/k]	4
180 $\div$ 12	180 [=/k]	15
756 $\div$ 12	756 [=/k]	63

CONSTANT ADDITION

For addition the SECOND number entered is the Constant

EXAMPLE	OPERATION	DISPLAY
17 is a constant		
15 + 17	15 [+] 17 [=/k]	32
27.5 + 17	27.5 [=/k]	44.5
92.8 + 17	92.8 [=/k]	109.8

CONSTANT SUBTRACTION

For subtraction the SECOND number entered is the Constant

EXAMPLE	OPERATION	DISPLAY
25.5 is a constant		
57 - 25.5	57 [$-$] 25.5 [=/k]	31.5
32 - 25.5	32 [=/k]	6.5
12 - 25.5	12 [=/k]	-13.5

NOTE: Since the constant operation is automatic do not push the [=/k] key more than once for any operation.

REPEAT ADDITION OR SUBTRACTION

If during a calculation, you require adding or subtracting a number repeatedly, simply press the [= /K] key the desired number of times after entering the number.

Example: $2 + 4 + 4 + 4 = ?$

ENTER	TOUCH	DISPLAY
	[CE/C] Twice	0
2	[+]	2
4	[+]	4
NOTE: you wish to add the number 4 three times		
	[+ /K]	6
	[+ /K]	10
	[+ /K]	Answer 14

REPEAT MULTIPLICATION (POWER CALCULATION)

Example: $9^4 = ?$

ENTER	TOUCH	DISPLAY
	[CE/C] Twice	0
9	[x]	9
	[x /K] 3 Times	Answer 6561

RECIPROCAL

To find the reciprocal of a number or calculated answer use the automatic constant. When the number you want to take the reciprocal of is being displayed, simply press [=], then [= /K] twice.

Example: To calculate the reciprocal of 2.

ENTER	TOUCH	DISPLAY
	[CE/C] Twice	0
2	[=]	2
	[= /K] Twice	Answer 0.5

EXAMPLE OF OVERFLOW

$4266 \times 53125 \times 1862 = ?$

	Display
Touch [CE/C] twice	0
Enter 4266	4266
Touch [x]	4266
Enter 53125	53125
Touch [x]	Flashing 2.2663125

NOTE: The display is flashing indicating overflow has occurred. The decimal point has been shifted 8 places to the left. The correct answer is 226631250.

to continue:

Touch [CE/C] twice	0
Enter 2.2663125	2.2663125
Touch [x]	2.2663125
Enter 1862	1862
Touch [= /K]	4219.8738

correct answer is $4219.8738 \times 10^8 = 421987380000$.