elka 101 ®

Instructions for use

mini electronic calculator

INTRODUCTION

Your ELKA 101 8-digit pocket calculator is light and compact. You can take it anywhere with you. But with its universal applications, high speed and high reliability, it is comparable with machines that are much larger and more expensive.

Simple to operate, its features include:

— calculations in 8 digits
— display sign in case of overflow
— floating decimal point
— automatic constant for division and multiplication functions
— zero suppression
— percentage key
— chain calculations through memory

The ELKA 101 has a light emitting diode (LED) display. To make reading of the display easier, unnecessary zeros are not shown. All digits are clearly and sharply displayed.

There are individual display signs for "minus", "overflow" and "memory busy".

The calculator operates on four 1.5 volt batteries and when the battery voltage drops below 4 volts, all the decimal points are displayed.

Taking care of your calculator

Your new electronic calculator is a durable, precision-made instrument. To keep it functioning well, note the following:

— Do not use your calculator in temperatures lower than freezing point and higher than 40° C (104° F).
— When low battery voltage is indicated, change batteries.
— Keep out of bright sunshine and away from heaters. Do not use in areas of high humidity.
— To clean your calculator use a soft duster, as harsh detergents may damage both the surface and the interior.

KEYBOARD INDICATORS

ON-OFF switch	— turns calculator on and off
MEMORY ON-OFF switch	— in ON position allows accumulation in memory
0-9 keys	— input digit keys
. key	— enters a decimal point
+ key	— adds the entered number
— key	— substracts the entered number

× key — enters the multiplication instruction for a previously entered number

÷ key — enters the division instruction for a previously entered number

% key — completes multiplication or division; as on depression of ×-key the result is devided by 100, and on depression of —-key the result is multiplied by 100

Note

If the mode key is in ON position accumulation in memory is carried out.

C key — on entering a number clears the display register and on overflow — removes overflow sign

Note

In all other cases it clears all registers except memory.

CM key — clears memory

RM key — transfers the contents of memory to the display register

= key — completes multiplication and division calculations

Overflow indicator — indicates that the result of a calculation contains more than 8 digits

Memory busy indicator — indicates that a number is stored in memory

Minus sign indicator — on being entered indicates a negative number or indicates the negative result of a calculation

Low battery indicator — when illuminated battery voltage has fallen below 4 volts

OPERATING INSTRUCTIONS

1. To switch on

On switching the power switch "ON" — there is immediate power from the batteries. A zero next to a decimal point at the right hand of the display register indicates "ready" state. With Power on — all registers are cleared and you may use the calculator immediately.

2. To clear

For a new calculation clear the calculator by pressing key

C. If you wish to accumulate the result in the memory —
clear the memory by pressing CM.

3. To enter

Enter numbers individually — starting with the highest
value number. To enter a decimal point press key . at the
appropriate point.

4. Correction of wrongly entered numbers

To clear an incorrect entry press key C, clearing the dis-
play register. Re-enter the right number.

5. Overflow

Overflow occurs when more than 8 digits are entered.
The 9th entry is blocked and the first 8 digits are retained.

Overflow also occurs when a calculation results in more
than 8 digits. When this occurs, all keys except C are
automatically blocked, the numbers of lowest value are
eliminated and the "overflow" sign is illuminated.

To continue the calculation press the C-key once. The
"overflow" sign then disappears and the key-block is
removed. You may now continue your calculation.

GUIDE TO BASIC CALCULATIONS

Example:

Addition: 16.39 + 9.83

Operation	**Display**
Switch ON	
a) Press key C	0.
b) Enter 16.39	16.39
c) Press key +	16.39
d) Enter 9.83	9.83
e) Press key +	26.22

Example:

Subtraction: 12.81 − 3.6

Operation	**Display**
Switch ON	
a) Press key C	0.
b) Enter 12.81	12.81
c) Press key +	12.81
d) Enter 3.6	3.6
e) Press key −	9.21

Example:
62 − 82 + 10 − 40

Operation	**Display**
Switch ON	
a) Press key C	0.

b) Enter 62	62.
c) Press key +	62.
d) Enter 82	82.
e) Press key −	− 20.
f) Enter 10	10.
g) Press key +	− 10.
h) Enter 40	40.
i) Press key −	− 50.

Example:

Multiplication: 29.32×56.5

Operation	**Display**
Switch ON	
a) Press key C	0.
b) Enter 29.32	29.32
c) Press key ×	29.32
d) Enter 56.5	56.5
e) Press key =	1656.58

Example:
$3 \times 21 \times 6.1$

Operation	**Display**
Switch ON	
a) Press key C	0.
b) Enter 3	3.
c) Press key ×	3.
d) Enter 21	21.
e) Press key ×	63.

f) Enter 6.1	6.1
g) Press key =	384.3

Example:
Multiplication by constant and Accumulation
$31 \times 6.1 + 31 \times 8.2 + 31 \times 7.6$

Operation	**Display**
Switch MEMORY ON	
a) Press key C	0.
b) Press key CM	0.
c) Enter 31	31.
d) Press key ×	31.
e) Enter 6.1	6.1
f) Press key =	. 189.1
g) Enter 8.2	. 8.2
h) Press key =	.254.2
i) Enter 7.6	. 7.6
j) Press key =	.235.6
k) Press key RM	.678.9

Example:
Exponents: 2.5^4

Operation	**Display**
Switch ON	
a) Press key C	0.
b) Enter 2.5	2.5
c) Press key ×	2.5
d) Press key =	6.25
e) Press key =	15.625
f) Press key =	39.0625

Example:

Division: $625 \div 25 \div 5$

Operation	**Display**
Switch ON	
a) Press key C	0.
b) Enter 625	625.
c) Press key $\div$	625.
d) Enter 25	25.
e) Press key $\div$	25.
f) Enter 5	5.
g) Press key $=$	5.

Example:

Division by constant and Accumulation
$4 \div 9 + 3 \div 9 + 2 \div 9$

Operation	**Display**
Switch MEMORY ON	
a) Press key C	0.
b) Press key CM	0.
c) Enter 4	4.
d) Press key $\div$	4.
e) Enter 9	9.
f) Press key $=$	.0.4444444.
g) Enter 3	3.
h) Press key $=$	.0.3333333.
i) Enter 2	2.
j) Press key $=$	.0.2222222.
k) Press key RM	.0.9999999.

Example:

Percentage: 5% of 125

Operation	**Display**
Switch ON	
a) Press key C	0.
b) Enter 125	125.
c) Press key $\times$	125.
d) Enter 5	5.
e) Press key %	6.25

Example:
$13.20 + 5\%$ of 13.20

Operation	**Display**
Switch ON	
a) Press key C	0.
b) Enter 13.20	13.20
c) Press key $\times$	13.20
d) Enter 5	5.
e) Press key %	0.66
f) Press key $+$	13.86

Example:

Accumulation of Percentages Through Memory
9% of $123456.79 + 18\%$ of 123456.79

Operation	**Display**
Switch MEMORY ON	
a) Press key C	0.
b) Press key CM	0.

c)	Enter 123456.79	123456.79
d)	Press key ×	123456.79
e)	Enter 9	9.
f)	Press key %	.11111.111
g)	Enter 18	. 18
h)	Press key %	.22222.222
i)	Press key RM	.33333.333

Example:

Mixed Calculation

$$\frac{(9.1 + 6 - 5.3) \times 4}{20} - 12.5$$

Operation		**Display**
Switch ON		
a)	Press key C	0.
b)	Enter 9.1	9.1
c)	Press key +	9.1
d)	Enter 6	6.
e)	Press key +	15.1
f)	Enter 5.3	5.3
g)	Press key −	9.8
h)	Press key ×	9.8
i)	Enter 4	4.
j)	Press key =	39.2
k)	Press key ÷	39.2
l)	Enter 20	20.
m)	Press key =	1.96
n)	Press key +	1.96

o)	Enter 12.5	12.5
p)	Press key −	− 10.54

Example:

Overflow Correction
12345678 × 345678

Operation		**Display**
Switch ON		
a)	Press key C	0.
b)	Enter 12345678	12345678.
c)	Press key ×	12345678.
d)	Enter 345678	345678.
e)	Press key =	⌈42676292.
f)	Press key C	42676292.
g)	Press key C	0.

Example:

Accumulation by Memory
14.22 − 7.32 + 234.51

Operation		**Display**
Switch MEMORY ON		
a)	Press key C	0.
b)	Press key CM	0.
c)	Enter 14.22	14.22
d)	Press key +	14.22
e)	Enter 7.32	7.32
f)	Press key −	6.90

g)	Press key =	6.90
h)	Enter 234.51	234.51
i)	Press key =	234.51
j)	Press key RM	241.41

SPECIFICATION

Functions

Addition, subtraction, multiplication, division, multiplication by constant multiplier, division by constant divider, exponents, automatic accumulation in memory, mixed and chain calculations.

Capacity

Display — 8 digits
Addition, subtraction 8 digits + 8 digits = 8 digits
Multiplication 8 digits × 8 digits = 8 digits
Division 8 digits ÷ 8 digits = 8 digits

Arithmetic Registers

Three

Free Memory

One

Decimal Point

Floating

Indicators

Overflow on calculations
Minus sign
Memory busy
Low battery power

Clearance

Automatic clearing of all registers on power on
Clearance of the display register on entry of the first digit
Clearance of all registers except memory by C-key
Clearance of memory by CM-key

Operational Speeds

Addition, subtraction	=	80 msec
Multiplication	=	150 msec
Division	=	200 msec

Power Supply

Autonomous, 6 volts/four 1.5 V batteries

Dimensions

$(136 \times 70 \times 30)$ mm
$(5\frac{2}{5} \times 2\frac{4}{5} \times 1\frac{1}{5})$ inches

Weight

200 g
7.1 oz.

Power Consumption

Less than 1 VA

Operational Temperatures

0° C to 40° C
32° F to 104° F