

Unisonic 1548

OPERATING INSTRUCTIONS

1. SPECIAL FEATURES

1.01

Compact and Stylish — This calculator has been designed for compactness and modern styling.

1.02

Nine Functions — In addition to the normal $+$ $-$ \times \div calculations this calculator can make percentage % calculations including mark-up and mark-down, square, square root, inverse and parenthesis calculations.

1.03

One Accumulating Memory — Register can be transferred to memory by depressing the appropriate memory keys.

1.04

Automatic Constant — Constant calculation in multiplication and division can be performed simply and automatically.

1.05

Repeat Addition and Subtraction — The result is calculated automatically by repeatedly pressing the $+$ or $-$ key in addition or subtraction instead of repeatedly pressing the same numeral key.

1.06

Change sign $+/-$ $X-M$ and $X-Y$ exchange. The $+/-$ key can change the sign and the $X-Y$ key can exchange the display and register, and the $X-M$ key can exchange the memory and display.

1.07

Suppressed Zeros — For clear and accurate reading, non-significant zeros preceding whole numbers are not displayed.

1.08

Floating Decimal Point — Makes calculations easy and clear.

1.09

True Credit Balance — Negative numbers are shown with the minus $(-)$ sign.

1.10

Mixed and Chain Calculations — This calculator is capable of doing many kinds of mixed and chain calculation.

1.11

Parenthesis Operations — This calculator is capable of calculations to be performed within the parenthesis without disturbing calculations already made or to be performed.

1.12

Algebraic Mode — The calculator operates algebraically. This is, its operation is identical to conventional arithmetic so that calculations can be performed as they would normally be written down.

2. CONTROLS & INDICATORS

"ON" Switch:

Turns Calculator "on" and "off"

C/CE Key:

Press once, clears only previous entry. Press twice, clears all.

0 to 9 Key:

Press for number entry.

$.$ Key:

Press for entering decimal.

$\%$ Key:

Press for percentage calculations.

$+$ Key:

Press for additions.

$M-$ Key:

Press to subtract display from memory.

RM Key:

Press to recall memory.

CM Key:

Press to cancel memory.

$($ Key:

Press to begin parenthesis.

$)$ Key:

Press to end parenthesis.

$1/x$ Key:

Press to get inverse of what is in the display.

10
12
0
10
20

\ominus Key:
Press for subtraction.

\times Key:
Press for multiplication.

\div Key:
Press for division.

$=$ Key:
Press to perform the preceding operation and terminates it.

$M+$ Key:
Press to enter display into memory.

\sqrt{x} Key:
Press to obtain square root of number entered.

x^2 Key:
Press to obtain square of number entered.

$+/-$ Key:
Press to change sign.

$X \leftrightarrow Y$ Key:
Press to exchange register and display.

$X \leftrightarrow M$ Key:
Press to exchange register and memory.

3. DISPLAY PANEL

$0.0.0.0.0.0.0.0.$ Overflow Indicator: All zeros and decimal points lighted indicate a calculation result that contains more than 8 digits.

\cdot "Memory-On" and Parenthesis Indicator: Indicates memory is activated or parenthesis has begun.

4. POWER SUPPLY

4.01
DC Operation - 2 pieces "UM3" or "AA" size penlight dry batteries are used. Use Alkaline batteries for longer battery life.

4.02
AC Operation - If an AC adaptor is used. Make sure that the input voltage of the AC adaptor is same as AC line voltage in your country (such as 110V, 220V or 240V) and the output voltage is 3V, also make certain that the AC adaptor plug fits well into the external DC jack of the calculator. The centre pin of the AC adaptor plug should be negative in polarity.

With AC adaptor plugged in, switch to "Ch", (charge). The batteries are now being charged. Be sure that batteries under charge are NICAD rechargeable batteries! Don't charge Alkaline or ordinary chemical batteries! Explosion may occur!

Switching to "ON" the AC adaptor will charge and operate the calculator at the same time. Attention! Remove Alkaline or ordinary chemical batteries when AC adaptor is used!

5. BATTERY NOTES

5.01
With normal use at room temperature, fresh batteries can be expected to supply many hours of accumulated working time.

5.02
For optimum performance and long life, alternate between battery and AC mains current.

5.03
Replace old batteries with fresh ones when the display is dim.

5.04
Do not leave batteries inside the calculator if it is not to be used for a long time. Otherwise, the batteries may corrode, possibly damaging the calculator.

5.05
Turn off power switch when calculator is not in use.

5.06
WARNING
EXHAUSTED BATTERIES WILL CAUSE WRONG ENTRIES AND CALCULATIONS REPLACE IMMEDIATELY WITH FRESH BATTERIES. CALCULATORS DAMAGED BY CORRODED BATTERIES DO NOT COME UNDER THE WARRANTY OF THE MANUFACTURER.

6. CALCULATION EXAMPLE

In following examples when $\boxed{C/CE}^2$ is stated, it means press $\boxed{C/CE}$ buttons twice to clear all. When $\boxed{C/CE}$ is stated, it means press once to clear entry only.

CALCULATION	KEYBOARD ENTRY	DISPLAY RESULT
Clear Entry $2 \times 3 \times 4$	$\boxed{C/CE}^2$ 2 $\boxed{\times}$ 6 (Wrong!) $\boxed{C/CE}$ 3 $\boxed{\times}$ 4 $\boxed{=}$	24
Addition $12 + 3 + 4.56$	$\boxed{C/CE}^2$ 12 $\boxed{+}$ 3 $\boxed{+}$ 4.56 $\boxed{=}$	19.56
Subtraction $12 - 2.5 - 1.47$	$\boxed{C/CE}^2$ 12 $\boxed{-}$ 2.5 $\boxed{-}$ 1.47 $\boxed{=}$	8.03
Addition and Subtraction $12.5 - 55 - 17.1 + 3.55$	$\boxed{C/CE}^2$ 12.5 $\boxed{-}$ 55 $\boxed{-}$ 17.1 $\boxed{+}$ 3.55 $\boxed{=}$	-56.05
Multiplication 12.3×45.67 -2×3	$\boxed{C/CE}^2$ 12.3 $\boxed{\times}$ 45.67 $\boxed{=}$ $\boxed{C/CE}^2$ 2 $\boxed{+/-}$ $\boxed{\times}$ 3 $\boxed{=}$	561.741 -6
Division $100 \div 5.5$ $100 \div (-5.5)$	$\boxed{C/CE}^2$ 100 $\boxed{\div}$ 5.5 $\boxed{=}$ $\boxed{C/CE}^2$ 100 $\boxed{\div}$ 5.5 $\boxed{+/-}$ $\boxed{=}$	18.181818 -18.181818
Multiplication and Division $8 \times 2 \div 4 \times 2 \div 5$	$\boxed{C/CE}^2$ 8 $\boxed{\times}$ 2 $\boxed{\div}$ 4 $\boxed{\times}$ 2 $\boxed{\div}$ 5 $\boxed{=}$	1.6
Mixed Calculation $(3 + 2 - 1) \times 4 \div 8$	$\boxed{C/CE}^2$ 3 $\boxed{+}$ 2 $\boxed{-}$ 1 $\boxed{\times}$ 4 $\boxed{\div}$ 8 $\boxed{=}$	2
Constant Multiplication 12.3×45.6 98.7×45.6	$\boxed{C/CE}^2$ 12.3 $\boxed{\times}$ 45.6 $\boxed{=}$ 98.7 $\boxed{=}$	560.88 4500.72
Constant Division $12.3 \div 45.6$ $98.7 \div 45.6$	$\boxed{C/CE}^2$ 12.3 $\boxed{\div}$ 45.6 $\boxed{=}$ 98.7 $\boxed{=}$	0.2697368 2.1644736
Repeat Addition and Subtraction $1.23 + 98.7 + 98.7$ $987 - 12.3 - 12.3$	$\boxed{C/CE}^2$ 1.23 $\boxed{+}$ 98.7 $\boxed{+}$ $\boxed{=}$ $\boxed{C/CE}^2$ 987 $\boxed{-}$ 12.3 $\boxed{-}$ $\boxed{=}$	198.53 962.4
Exponent Calculation 3.21^2 2^4	$\boxed{C/CE}^2$ 3.21 $\boxed{\times}$ $\boxed{=}$ $\boxed{C/CE}^2$ 2 $\boxed{\times}$ $\boxed{=}$ $\boxed{=}$ $\boxed{=}$	10.3041 16
Reciprocal Calculations $\frac{1}{4}$ $\frac{1}{2^4}$ $\frac{1}{(4 + 3) \times 2}$	$\boxed{C/CE}^2$ 4 $\boxed{1/x}$ $\boxed{C/CE}^2$ 2 $\boxed{x^2}$ $\boxed{x^2}$ $\boxed{1/x}$ $\boxed{C/CE}^2$ 4 $\boxed{+}$ 3 $\boxed{\times}$ 2 $\boxed{=}$ $\boxed{1/x}$	0.25 0.0625 0.0714285
Percentage Calculations $200 \times 5\%$ $200 \div 5\%$ $200 + (200 \times 5\%)$ $200 - (200 \times 5\%)$	$\boxed{C/CE}^2$ 200 $\boxed{\times}$ 5 $\boxed{\%}$ $\boxed{C/CE}^2$ 200 $\boxed{\div}$ 5 $\boxed{\%}$ $\boxed{C/CE}^2$ 200 $\boxed{+}$ 5 $\boxed{\%}$ $\boxed{=}$ $\boxed{C/CE}^2$ 200 $\boxed{-}$ 5 $\boxed{\%}$ $\boxed{=}$	10 4000 210 190
Constant Percentage Calculations		

100 x 95%	$\boxed{C/CE} \boxed{100} \boxed{x} \boxed{95} \boxed{\%}$	95
200 x 95%	$\boxed{200} \boxed{\%}$	190
300 x 95%	$\boxed{300} \boxed{\%}$	285
Automatic Accumulating Memory (2 x 4) + (3 x 5) - (6 ÷ 2) (1 + 2 + 3) ÷ (3 + 4 + 5)	$\boxed{CM} \boxed{C/CE} \boxed{2} \boxed{2} \boxed{x} \boxed{4} \boxed{=} \boxed{M+}$ $\boxed{3} \boxed{x} \boxed{5} \boxed{=} \boxed{M+}$ $\boxed{6} \boxed{\div} \boxed{2} \boxed{=} \boxed{M-} \boxed{RM}$ $\boxed{CM} \boxed{C/CE} \boxed{2} \boxed{3} \boxed{+} \boxed{4} \boxed{+} \boxed{5} \boxed{=} \boxed{M+}$ $\boxed{1} \boxed{+} \boxed{2} \boxed{+} \boxed{3} \boxed{\div} \boxed{RM} \boxed{=}$	20 0.5
Mixed and Chain Calculation $\frac{(2+3) \times 4 - 5}{3} - 2$ $\frac{(2.3 - 13)^2 \times 78}{3.29 \times 36} - 4.24$	$\boxed{CM} \boxed{C/CE} \boxed{2} \boxed{2} \boxed{+} \boxed{3} \boxed{x} \boxed{4} \boxed{-} \boxed{5} \boxed{\div}$ $\boxed{3} \boxed{-} \boxed{2} \boxed{=}$ $\boxed{CM} \boxed{C/CE} \boxed{2} \boxed{2.3} \boxed{-} \boxed{13} \boxed{=} \boxed{x^2} \boxed{x}$ $\boxed{78} \boxed{\div} \boxed{3.29} \boxed{\div} \boxed{36} \boxed{-}$ $\boxed{4.24} \boxed{=}$	3 71.15868
Square & Square Root Calculation $\sqrt{3^2 + 9^2}$	$\boxed{CM} \boxed{C/CE} \boxed{2} \boxed{3} \boxed{x^2} \boxed{M+} \boxed{9} \boxed{x^2}$ $\boxed{M+} \boxed{RM} \boxed{\sqrt{x}}$	9.4868329

7. PARENTHESIS OPERATIONS

It is important to note that once the parenthesis button is depressed, any previous register in the memory will automatically be cancelled. This is so because once the parenthesis operation is performed, the display is automatically put into the memory and any previous entry into the memory must therefore be cancelled otherwise results will be wrong. However memory keys can be used with parenthesis keys to obtain quick solutions as shown below.

CALCULATION	KEYBOARD ENTRY	DISPLAY RESULT
Parenthesis Operations $\frac{2}{3} + \frac{3}{4} + \frac{5}{6}$ $\frac{4}{\sqrt{1-4^2}}$	*1 $\boxed{C/CE} \boxed{2} \boxed{2} \boxed{\div} \boxed{3} \boxed{+} \boxed{(} \boxed{3} \boxed{\div} \boxed{4} \boxed{)} \boxed{+}$ $\boxed{(} \boxed{5} \boxed{-} \boxed{6} \boxed{)} \boxed{=}$ $\boxed{C/CE} \boxed{2} \boxed{4} \boxed{\div} \boxed{(} \boxed{1} \boxed{-} \boxed{RM} \boxed{x^2} \boxed{=} \boxed{\sqrt{x}}$ $\boxed{)} \boxed{=}$	2.2499999 -1.0327955
(2 + 3) x (3 + 4)	$\boxed{C/CE} \boxed{2} \boxed{2} \boxed{+} \boxed{3} \boxed{x} \boxed{(} \boxed{3} \boxed{+} \boxed{4} \boxed{)} \boxed{=}$	35

*NOTE 1: Note that the first fraction does not require parenthesis. But the second fraction added require parenthesis otherwise the calculator will see the entry as

$$\frac{2}{3} + 3 + 5 \quad \text{if enter as } \boxed{2} \boxed{\div} \boxed{3} \boxed{+} \boxed{3} \boxed{\div} \boxed{4} \boxed{+} \boxed{5} \boxed{\div} \boxed{6} \boxed{=}$$

$$\frac{4}{6}$$

CALCULATION	KEYBOARD ENTRY	DISPLAY RESULT
Exchange Operations $\frac{5}{4+3}$	$\boxed{C/CE} \boxed{2} \boxed{4} \boxed{+} \boxed{3} \boxed{\div} \boxed{5} \boxed{X-Y} \boxed{=}$	0.7142857
Memory Exchange $\frac{5-2}{5+2}$	$\boxed{C/CE} \boxed{2} \boxed{5} \boxed{M+} \boxed{-} \boxed{2} \boxed{M+} \boxed{\div} \boxed{X-M} \boxed{=}$	0.4285714