

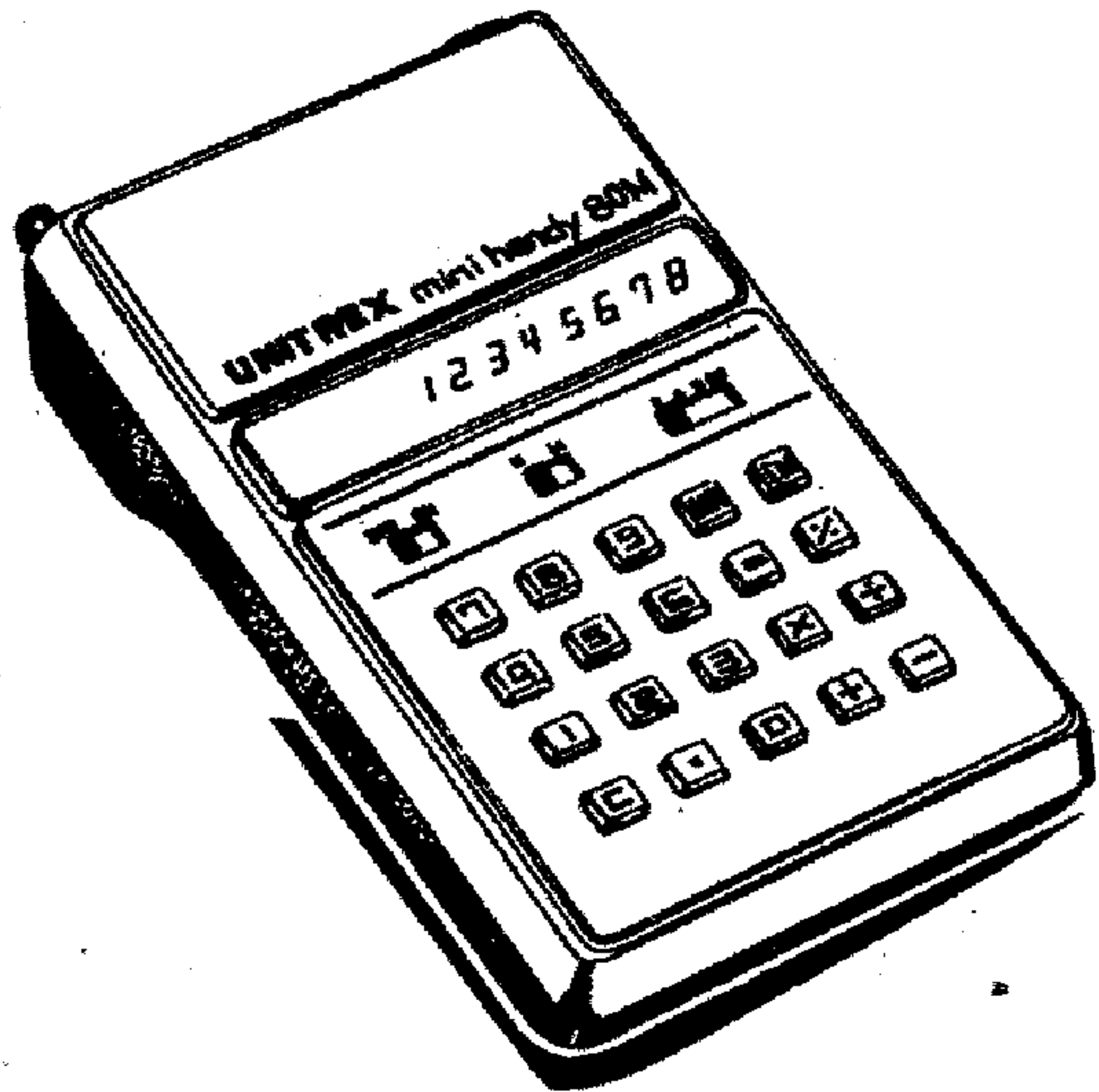
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UA UNITREX OF AMERICA INC.
EMPIRE STATE BUILDING.
350 FIFTH AVE. N.Y., N.Y. 10001

Printed in Japan

UNITREX

mini handy 80M

INSTRUCTION BOOKLET



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Your UNITREX 80M has ten numerical entry keys to set digits from 0 through 9 plus a decimal entry key which allows the operator to set the decimal point where needed.

Before starting an operation, clear the calculator by depressing the \square Clear Key. A zero (0.) will appear in the display window.

When the operator is aware of having entered an incorrect number the keyboard entry can be cleared of that number by depressing the \square Key without disturbing the previous entries or results.

The \square Key is for calculating percentages.

BASIC OPERATIONS

1. Addition Example: $123 + 45 = 168$

Depress the \square \square \square Keys. As the numbers are depressed they will appear in the display window. Next, depress the \oplus Key. Now depress the \square \square Keys and the \oplus Key again. The correct total (168) will appear in the display window.

Note: Be sure to clear (\square Key) the calculator before performing the next calculation.

2. Subtraction Example: $678 - 90 = 588$

Depress the \square \square \square Keys. Depress the \oplus Key to enter the numbers into the calculator. Depress the \square \square Keys and depress the \ominus Key to subtract the numbers from the previous entry. The result (588) will appear in the display window.

3. Multiplication

Example: $456 \times 2 = 912$

Depress the \square \square \square Keys and those numbers will appear in the display window. Depress the \square Key. Depress the \square Key. Depress the \ominus Key and the answer (912) will appear in the display window.

4. Division

Example: $789 \div 3 = 263$

Depress the \square \square \square Keys. Depress the \square Key. Depress the \square Key and the \ominus Key. The answer (263) will appear in the display window.

5. Decimals

Example: $65.38 \times 1.44 = 94.1472$

Set Decimal Switch to left position. Depress the \square \square \square \square Keys. Depress the \square Key. Depress the \square \square \square \square Keys. To receive the correct answer depress the \ominus Key. The answer (94.1472) will appear in the display window. The UNITREX 80M will automatically float the decimal to its fullest position when the Decimal Switch is in the left position.

Now perform the same calculation as above but **MOVE THE DECIMAL SWITCH TO THE RIGHT POSITION.** You will receive the answer (94.15) in the display window. You will notice this answer is nearly the same as the above answer except that the calculator has reduced the answer to 2 decimal places and rounded the answer off to the nearest cent. This is known as round-off, and is a very valuable feature when calculating in dollars and cents.

● BATTERY CHECK FUNCTION

The dry cell (006P 9V) should be replaced when a round lamp at left of the display is lit up.

ADVANCED CALCULATIONS

For the remaining problems follow the calculations in the sequence as outlined under the KEY column. Depress the function keys or numerical entry keys as shown. The results will be shown in the display as listed in the DISPLAY SHOWS column.

1. Negative Calculations

Example: $(-26) + (-15) = -41$

(Decimal Switch at F Position)

DEPRESS KEY	DISPLAY SHOWS
\square	0.
\square \square	26.
\square	-26.
\square \square	15.
\square	-41. Answer

Example: $(-4) \times 8 = -32$

(Decimal Switch at F Position)

DEPRESS KEY	DISPLAY SHOWS
\square	0.
\square	4.
\square	-4.
\square	-4.
\square	8.
\square	-32. Answer

Example: $32 \div (-4) = -8$

(Decimal Switch at F Position)

DEPRESS KEY

\square
 \square \square
 \square
 \square
 \square
 \square

DISPLAY SHOWS

0.
 32.
 32.
 4.
 8.
 -8. Answer

2. Chain Functions

Example: $(95 + 78 + 82) \div 3 = 85$

(Decimal Switch at F Position)

DEPRESS KEY	DISPLAY SHOWS
\square	0.
\square \square	95.
\square	95.
\square	78.
\square	1 73.
\square \square	82.
\square	2 55.
\square	2 55.
\square	3.
\square	85. Answer

Example: $56 \times 63 \times 89 \div 56 = 5607$

(Decimal Switch at F Position)

DEPRESS KEY	DISPLAY SHOWS
\square	0.
\square \square	56.
\square	56.
\square \square	63.
\square	3528.
	(Intermediate result)
\square \square	89.
\square	313992.
	(Intermediate result)
\square \square	56.
\square	5607. Answer

Example: $(56 + 56 - 89) \times 23 \div 9 = 58.777777$
 (Decimal Switch at F Position)

DEPRESS KEY	DISPLAY SHOWS
C	0.
$\text{5} \text{6}$	56.
$+$	56.
$\text{5} \text{6}$	56.
$+$	112.
$\text{8} \text{9}$	89.
$-$	23.
\times	23.
$\text{2} \text{3}$	23.
\div	529.
	(Intermediate result)
9	9.
$=$	58.777777. Answer

Example: $\frac{(2+5-3) \times 8}{4} - 7 = 1$

(Decimal Switch at F Position)

DEPRESS KEY	DISPLAY SHOWS
C	0.
2	2.
$+$	2.
5	5.
$+$	7.
3	3.
$-$	4.
\times	4.
8	8.
\div	32.
	(Intermediate result)
4	4.
$=$	8.
	(Intermediate result)
$+$	8.
7	7.
$-$	1. Answer

3. Constant Multiplication and Division

Your UNITREX 80M calculator is equipped with an automatic constant memory feature that enables you to MULTIPLY over and over using the same number without re-entering.

Example: $12 \times 10 = 120$ (A) $12 \times 36 = 432$ (B)
 $12 \times 52 = 624$ (C)
 (Decimal Switch at F Position)

DEPRESS KEY	DISPLAY SHOWS
C	0.
$\text{1} \text{2}$	12.
\times	12.
$\text{1} \text{0}$	10.
$=$	120. Answer to A
$\text{3} \text{6}$	36.
$=$	432. Answer to B
$\text{5} \text{2}$	52.
$=$	624. Answer to C

Your UNITREX 80M calculator is equipped with an automatic constant memory feature that enables you to DIVIDE over and over using the same number without re-entering.

Example: $16 \div 8 = 2$ (A) $96 \div 8 = 12$ (B)
 $108 \div 8 = 13.5$ (C)

DEPRESS KEY	DISPLAY SHOWS
C	0.
$\text{1} \text{6}$	16.
\div	16.
8	8.
$=$	2. Answer to A
$\text{9} \text{6}$	96.
$=$	12. Answer to B
$\text{1} \text{0} \text{8}$	108.
$=$	13.5 Answer to C

4. Squaring and Raising to Power

Example: $12^2 = 144$ (Decimal Switch at F Position)

DEPRESS KEY	DISPLAY SHOWS
C	0.
12	12.
\times	12.
$=$	144. Answer

Example: $12^3 = 1728$ (Decimal Switch at F Position)

DEPRESS KEY	DISPLAY SHOWS
C	0.
12	12.
\times	12. (1st Power)
$=$	144. (2nd Power)
$=$	1728. (3rd Power) Answer

Example: $12^4 = 20736$ (Decimal Switch at F Position)

DEPRESS KEY	DISPLAY SHOWS
C	0.
12	12.
\times	12. (1st Power)
$=$	144. (2nd Power)
$=$	1728. (3rd Power)
$=$	20736. (4th Power) Answer

5. ADD-MODE CALCULATION

(Decimal Switch at AM Position)

When the decimal point switch is set to $\$. (AM)$ each displayed entry is divided by 100.

(Example) $5365 \text{ [F]} \dots\dots\dots 53.65$

Nameiv, any number is automatically displayed, as a number divided by 100, and the decimal point key need not be depressed. Such a feature is very useful in the following cases:

1. Calculations regarding dollars and cents
2. Calculations regarding yen and sen
3. Other calculations with a decimal point always fixed to the second digit.

Example: $12.55 + 3 + 5.15 - 8.32 = 12.38$

DEPRESS	DISPLAY SHOWS
C	0
12.55	12.55
$+$	12.55
3.	3.00
$+$	15.55
5.15	5.15
$+$	20.70
8.32	8.32
$=$	12.38

6. MEMORY CALCULATION

(Memory Switch at M Position)

(Decimal Switch at F Position)

The memory is very useful when temporarily storing an entry in the middle of complicated calculations such as vertical and horizontal calculations in slips. Set the memory switch to the ACC(M) side. [M] key and [M] key are used to put an entry in the memory. When a number is stored in the memory, the 9th figure shows a red marking (•).

COMMERCIAL APPLICATIONS

1. Simple Discounting

(Decimal Switch at 2 Position)

An item sells for \$ 53.50 with a discount of 25%.

What is the discount?

What is the NET selling price?

Enter 53.5

Depress \times

Enter 25

Depress $\%$ (Read \$ 13.38 discount)

Depress $=$ (Read \$ 40.12 NET price)

From the above problem you can see how your UNITREX 80M unique keyboard memory system works for computing discounts and then subtracting those discounts from the previously entered figure without re-entry. Now see in the example below how this keyboard memory system works for tax calculations and add-ons.

2. Chain Discounts and Tax Add-ons

(Decimal Switch at 2 Position)

An item sells for \$ 93.50 with a discount of 25% and sales tax of 5% on the reduced sum. What is the discount? What is the sales tax? What is the total selling price?

Enter 93.5

Depress (Read \$ 23.38 discount)

Enter 25

Depress (Read \$ 70.12 Sales Price)

Depress (Read \$ 73.63 Total Selling Price)

Depress

Enter 5

Depress (Read \$ 3.51 Sales Tax)

Depress (Read \$ 73.63 Total Selling Price)

3. Percentage Figure as a Constant

(Decimal Switch at 2 Position)

How much is 17 1/4% of \$ 120 and \$ 279.11 and \$ 56.90?

Decimal Switch Right

Enter 17.25 (17 1/4)

Depress

Enter 120

Depress (Read \$ 20.70)

Enter 279.11

Depress (Read \$ 48.15)

Enter 56.9

Depress (Read \$ 9.82)

4. Repeated Addition/Subtraction

Example: $18 + 5 + 5 + 5 = 33$

DEPRESS KEY	DISPLAY SHOWS
<input type="checkbox"/>	0.
18	18.
+	18.
5	5.
+	23.
+	28. (5 repeated)
+	33. Answer

Example: $55 + 7 + 7 + 7 - 6 - 6 = 64$

DEPRESS KEY	DISPLAY SHOWS
<input type="checkbox"/>	0.
55	55.
+	55.
7	7.
+	62. (7 repeated)
+	69. (7 repeated)
+	76. (7 repeated)
6	6.
-	70.
-	64. (6 repeated as minus) Answer

5. Payroll (Hourly Wages) Using Constant Memory. (Decimal Switch at 2 Position)

Employee A @ \$ 2.25/hour for 40 hours = \$ 90.00
 Employee B @ \$ 2.25/hour for 30 hours = \$ 67.50
 Employee C @ \$ 2.25/hour for 25.9 hours = \$ 58.28
 Employee D @ \$ 2.25/hour for 33.3 hours = \$ 74.93

DEPRESS KEY	DISPLAY SHOWS
\square	0.2
\square \square \square \square	2.25
\times	2.25
\square \square	40.
$=$	90. Answer to A
\square \square	30.
$=$	67.5 Answer to B
\square \square \square \square	25.9
$=$	58.28 Answer to C
\square \square \square \square	33.3
$=$	74.93 Answer to D

6. Interest Calculations

(Decimal Switch at 2 Position)

You have a loan of \$5,000 for 90 days at 8% interest. How much interest will you pay?

$$\frac{5000 \times 8 \times 90}{360} = \$ 100$$

DEPRESS KEY	DISPLAY SHOWS
\square /	0.
\square \square \square \square	5000.
\times	5000.
\square	8.
$\%$	400. (interest for 1 year)
\times	400.
\square \square	90.
\div	36000.
\square \square \square	360.
$=$	100. Answer

Example: Find interest charged on a loan for \$1,250 for one year at 8% interest. What is the total amount to be paid back? What are the monthly payments for 12 months? $1250 \times 8 = ? + 1250 \div 12 = \$ 112.50$

Enter	\square \square \square \square \square
Depress	\times
Enter	\square
Depress	$\%$ (Read \$ 100 interest)
Depress	\div (Read \$ 1,350 principle and interest)
Depress	\div
Enter	\square \square
Depress	$=$ (Read \$ 112.50 Monthly Payments)

SPECIAL INDICATORS

Your UNITREX 80M is equipped with indicators for overflow and for negative answers.

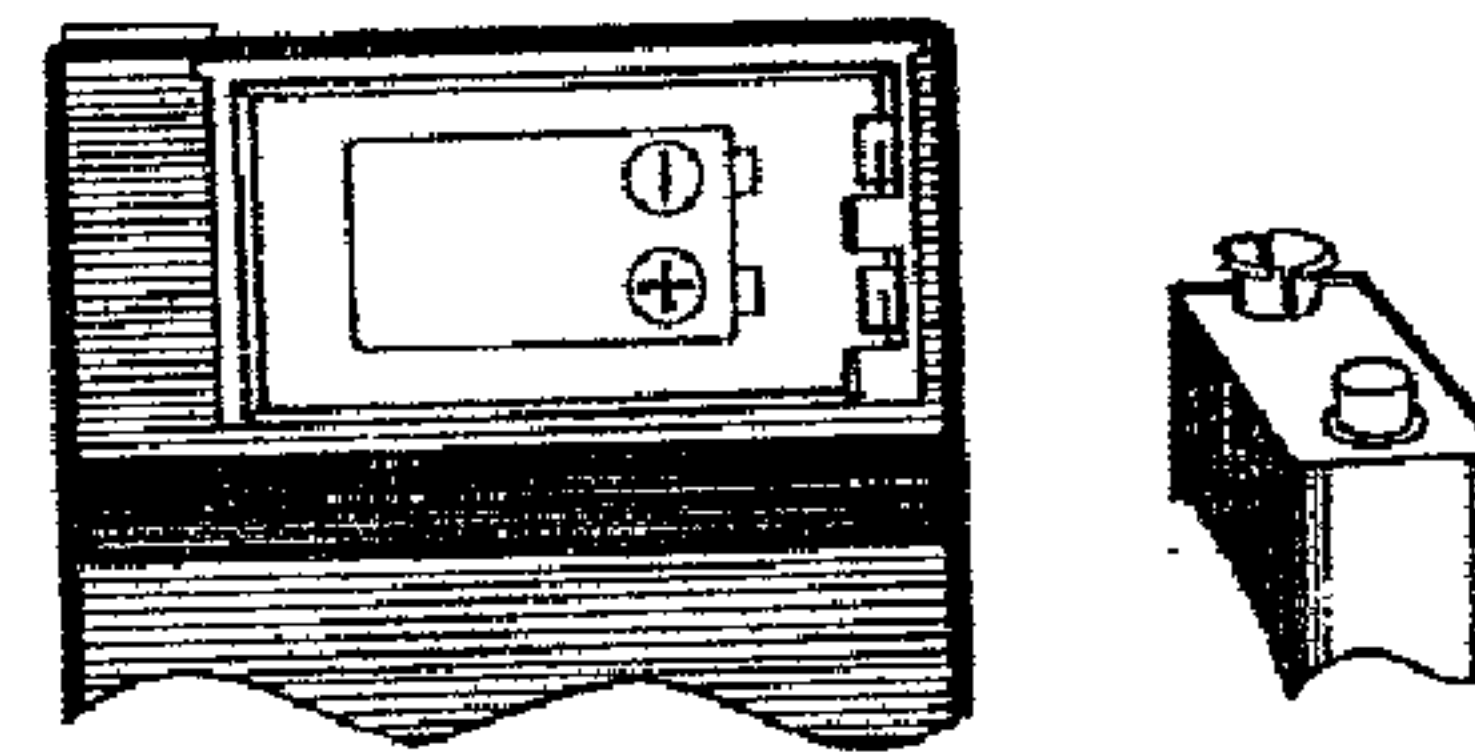
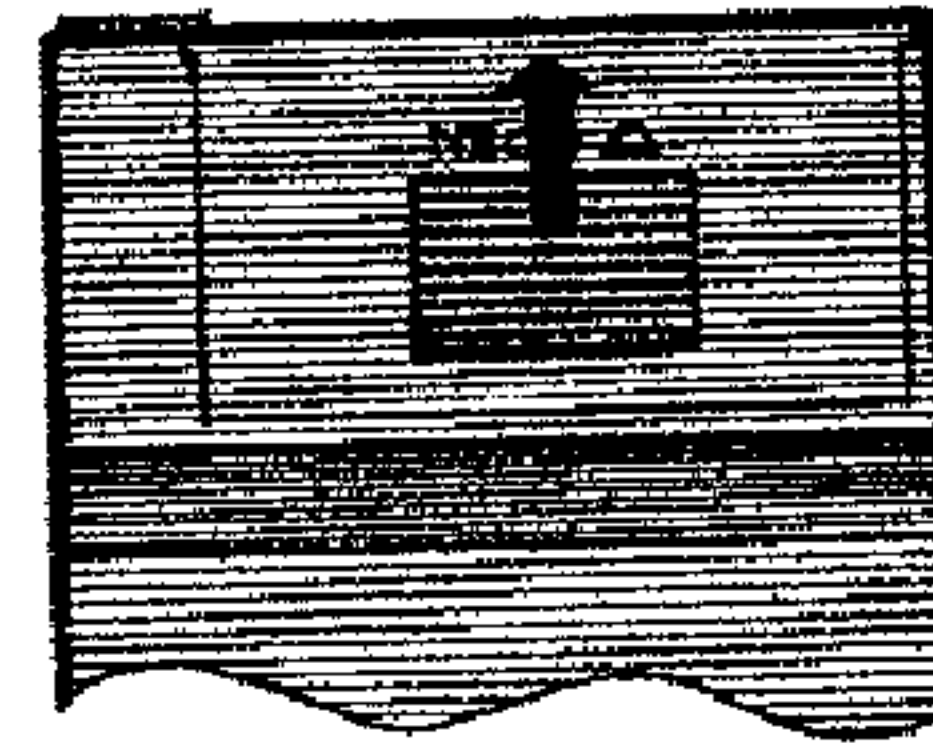
1. Overflow

When multiplying large numbers where the answer will exceed 8 digits, the calculator will alert you by giving you the first 8 digits of the answer and displaying "C or E" to the extreme left of the display window.

2. Negative Results

When a result is negative the calculator will alert you by displaying a "-" (minus) sign to the extreme left of the display window.

BATTERY



Preparation for use.

Battery power.

Open the cover of the battery compartment on the bottom of the unit and insert a battery to match the polarity as per drawing. Close the cover and slide the power switch "ON"

Note: Plug out when using battery.

AC power.

UNITREX 80M can be operated from the home power by using AC adapter. In case of using AC adapter, please take care to slide the power switch to the "OFF" position.

MAINTENANCE INSTRUCTION

This calculator is made up of precision parts such as LSI. Radical changes in temperature or humidity can be harmful. The following points must be carefully noted.

1. Do not drop or jar the machine.
2. Always be certain machine is switched "OFF" when not in operation. This will prevent unnecessary drain on the batteries.
3. Long hours of direct heat rays from the sun or an appliance must be avoided.
4. When cleaning the machine, use a neutral cleaner. Do not use a wet cloth or liquid such as paint thinner.