INTRODUCTION

Your MX75 is light enough and small enough to be used in one hand, but it provides a standard keyboard and a light emitting diode (LED) display that is easily read at home or in the office.

The eight digit display and the full floating decimal allow the calculation of any problem without sacrificing accuracy.

Whether you want to solve engineering or budget problems, your calculator has the ability with features such as clear entry, percent mark up and discount, and an omni-constant that will perform integer powers, reciprocals and fractions as well as chain and mixed calculations.

This machine's greatest attribute is its Memory. Combine the memory add and subtract operations with the other features of this calculator and any calculation that confronts you is made simple.

The battery will recharge in seven hours and operate the calculator for five, but with the charger/power supply no useful time will be lost since it operates the calculator while charging it.

We suggest that this Instruction Manual be read with the calculator in hand. Performing the operations as you read will increase your familiarity with them. For a quick reference, an outline of operations is on the back of the calculator.

OPERATION

AC Operation:
Set 115/230 switch on Charger in appropriate position. Connect the Charger unit to any standard 115/230 Volt electrical outlet and plug the connector into the Calculator. After the above connections, the power switch may be turned on and operation started. (While connected to AC the internal batteries are automatically charged whether the power switch is "ON" or "OFF").

Battery Operation:
Disconnect the Charger cord and turn the power switch "ON". With normal use a full battery charge can be expected to supply about 5 hours of working time.

NOTE: When the low battery indicator (L) on the display is lighted, do not continue battery operation. This indicates need for a battery charge.

Battery Charging:
Simply follow the same procedure as in AC operation. The Calculator may be used during the charge period if desired. In order to fully charge a battery which has been completely discharged, 7 hours is required. In most cases, an overnight charge should be adequate if the batteries have not been fully discharged.

NOTE: Although no damage will result from prolonged periods with the Charger connected, it is advisable to remove the Charger cord when the Calculator is not in use after a full recharge cycle.

CAUTION: To avoid possible damage, use only the charger provided with the calculator.
CONTROLS & INDICATORS

1. "ON" Switch
   Turns Calculator "ON" & "OFF".

2. Switch "left"
   Automatically accumulates results into the memory whenever the = or % keys are touched.

3. MA Key
   Recalls and displays content of memory.

4. C/CE Key
   Clear Calculator and the display of all numbers. (Does not clear memory.)

5. MC Key
   Clears content of memory.

6. = Key
   Changes the sign of a multiply or divide answer. Subtracts the entered number.

7. ÷ Key
   Enters a "divide" command.

8. + Key
   Add the entered number.

9. X Key
   Enters a "multiply" command.

10. ÷ Key
    Completes multiply or divide operation.

11. Key
    Enters a decimal point.

12. 0 - 9 Keys
    Enter digits of a number (limit 8 digits).

13. % Key
    Completes a percent operation and conditions a discount or markup operation.

ACCESSORIES

14. Charger/Power Supply
<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overflow Indicator</td>
<td>Indicates a calculation result that contains more than eight digits. appearances as</td>
</tr>
<tr>
<td>Low Battery Indicator</td>
<td>Warns of need for battery charge during battery operation. Appear as</td>
</tr>
<tr>
<td>Minus Sign Indicator</td>
<td>Activated by the $-$ key for operations with negative numbers. Appear as</td>
</tr>
<tr>
<td>Decimal Point Indicator</td>
<td>Automatically appears to the right of any number entered, unless inserted in another sequence by use of the Decimal key. With fractional numbers, it will be preceded by a zero.</td>
</tr>
<tr>
<td>Memory in Use Indicator</td>
<td>Indicates use of memory function after $\Sigma$ switch is turned left and $=$ key is touched.</td>
</tr>
</tbody>
</table>

**BATTERY NOTES**

1. With normal use at room temperature, a full battery charge can be expected to supply about 5 hours of accumulated working time.
2. The Calculator may be used while its battery is charging.
3. Batteries that have been neither used nor charged for as long as 2 or 3 months will suffer substantial loss of operating time through a tendency to self-discharge. As a general rule, batteries lose about 1% charge per day due to self-discharge, at normal temperatures.
4. For optimum performance and long life:
   a. Alternate frequently between Battery and AC power.
   b. Operate at or near normal room temperatures.
   c. Charge as soon as possible upon appearance of the Low-Battery indicator.
5. Recharge time is 7 hours for a fully discharged battery, with the calculator off.
6. The Low-Battery indicator is designed to appear as soon as battery voltage drops to the lowest value that will support optimum performance of the Calculator. Should further discharge occur, through continued operations or self-discharge, the Low-Battery indicator may fail to appear. Do not continue to operate on batteries when this condition is noted, or a damaged battery may result.
7. As a general rule, if improper operation occurs, first try the Calculator with its charger connected. If operation is then normal, this indicates the batteries are low.
8. Do not store the unit in high temperature areas such as the top of radiators or the rear deck of automobiles exposed to the sun. The Calculator will operate satisfactorily over an ambient temperature range of 0 to 50°C (32 to 122°F) and relative humidity to 95%. 
INSTRUCTIONS

1. To clear (erase)
   A. Touch the C/CE key twice
   B. Cleared display will be: 0.

2. To enter (write a number)
   Example: enter 123.45
   A. First, clear by touching C/CE twice
   B. Then touch number and decimal keys for 123.45 one at a time. Always start with the left hand digit and progress from left to right.
   Display will then be: 123.45

3. To clear an incorrect entry
   Example: 48 + 12 is your calculation
   A. You have already entered 48
      Display is: 48.
   B. You now touch the + key
      Display will be: 48.
   C. Then you enter 13 by mistake
      The display is: 48.
      A mistake!

4. To clear (erase) memory
   A. Touch the MC key
   B. Content of the memory will be: 0.

5a. To enter (write) into memory
   Example: 123.45
   A. Touch C/CE twice
   B. Clear memory by touching MC once
   C. Push  on (left)
   D. Enter number 123.45 into display
   E. Touch = . Number in display enters memory.

5b. To recall (display and make available) memory
   A. Clear display by touching C/CE twice
   B. Touch MR once
      Display will be: 123.45

Note: Use C/CE during, or immediately after entry of a number to clear entry. Use of C/CE key when a result is displayed without overflow clears the result.
## CALCULATIONS

### 1. ADDITION

**Example #1:** To calculate $16.39 + 9.83 = $

Do these steps, display will be:

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
<th>Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Touch C/CE twice</td>
<td>0.000</td>
</tr>
<tr>
<td>b.</td>
<td>Enter 16.39</td>
<td>16.39</td>
</tr>
<tr>
<td>c.</td>
<td>Touch +</td>
<td>16.39</td>
</tr>
<tr>
<td>d.</td>
<td>Enter 9.83</td>
<td>26.22</td>
</tr>
<tr>
<td>e.</td>
<td>Touch + Answer</td>
<td>26.22</td>
</tr>
</tbody>
</table>

**Example #2:** To calculate $16 + 9 + 8.3 + 4.1 = $

Do these steps, display will be:

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
<th>Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Touch C/CE twice</td>
<td>0.000</td>
</tr>
<tr>
<td>b.</td>
<td>Enter 16</td>
<td>16.00</td>
</tr>
<tr>
<td>c.</td>
<td>Touch +</td>
<td>25.00</td>
</tr>
<tr>
<td>d.</td>
<td>Enter 9</td>
<td>34.00</td>
</tr>
<tr>
<td>e.</td>
<td>Touch +</td>
<td>41.00</td>
</tr>
<tr>
<td>f.</td>
<td>Enter 8.3</td>
<td>49.30</td>
</tr>
<tr>
<td>g.</td>
<td>Touch +</td>
<td>57.60</td>
</tr>
<tr>
<td>h.</td>
<td>Enter 4.1</td>
<td>61.70</td>
</tr>
<tr>
<td>i.</td>
<td>Touch + Answer</td>
<td>61.70</td>
</tr>
</tbody>
</table>

### 2. SUBTRACTION

**Example #1:** To calculate $12.81 - 3.6 = $

Do these steps, display will be:

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
<th>Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Touch C/CE twice</td>
<td>0.000</td>
</tr>
<tr>
<td>b.</td>
<td>Enter 12.81</td>
<td>12.81</td>
</tr>
<tr>
<td>c.</td>
<td>Touch +</td>
<td>12.81</td>
</tr>
<tr>
<td>d.</td>
<td>Enter 3.6</td>
<td>9.21</td>
</tr>
<tr>
<td>e.</td>
<td>Touch − Answer</td>
<td>9.21</td>
</tr>
</tbody>
</table>

**Example #2:** To calculate $23 - 6 + 2.1 - 5 = $

Do these steps, display will be:

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
<th>Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Touch C/CE twice</td>
<td>0.000</td>
</tr>
<tr>
<td>b.</td>
<td>Enter 23</td>
<td>23.00</td>
</tr>
<tr>
<td>c.</td>
<td>Touch −</td>
<td>23.00</td>
</tr>
<tr>
<td>d.</td>
<td>Enter 6</td>
<td>17.00</td>
</tr>
<tr>
<td>e.</td>
<td>Touch −</td>
<td>17.00</td>
</tr>
<tr>
<td>f.</td>
<td>Enter 2.1</td>
<td>19.10</td>
</tr>
<tr>
<td>g.</td>
<td>Touch +</td>
<td>19.10</td>
</tr>
<tr>
<td>h.</td>
<td>Enter 5</td>
<td>14.10</td>
</tr>
<tr>
<td>i.</td>
<td>Touch − Answer</td>
<td>14.10</td>
</tr>
</tbody>
</table>
Example #3: To calculate $62 - 82 + 10 - 40 = 0$.

Do these steps and display will be:

1. Touch C/CE twice
2. Enter 62
3. Touch +
4. Enter 82
5. Touch -
6. Enter 10
7. Touch +
8. Enter 40
9. Touch = Answer

Example #2: To calculate $3 \times 21 \times 6.1 = 384.3$.

Do these steps and display will be:

1. Touch C/CE twice
2. Enter 3
3. Touch ×
4. Enter 21
5. Touch ×
6. Enter 6.1
7. Touch = Answer
8. Touch Answer 384.3

Example #3: To calculate $31 \times 6 = 186$.

Use of Omni-Constant $31 \times 8.2 = 31 \times 7.6 = 248$.

Do these steps and display will be:

1. Touch C/CE twice
2. Enter 31
3. Touch ×
4. Enter 6
5. Touch = 1st Answer
6. Enter 8.2
4. DIVISION

Example #1: To calculate $376 \div 53 = 7.094396$

Do these steps
- a. Touch \(\text{C/CE}\) twice
- b. Enter 376
- c. Touch \(+\)
- d. Enter 53
- e. Touch \(=\) Answer

Example #2: To calculate $81 \div 3 \div 9 = 3$

Do these steps
- a. Touch \(\text{C/CE}\) twice
- b. Enter 81
- c. Touch \(+\)
- d. Enter 3
- e. Touch \(=\)

Example #3: To calculate $181 \div 15 = 11.733333$

Use of Omni-Constant

Do these steps
- a. Touch \(\text{C/CE}\) twice
- b. Enter 181
- c. Touch \(+\)
- d. Enter 15
- e. Touch \(=\) 1st Answer
- f. Enter 96
- g. Touch \(=\) 2nd Answer
- h. Enter 117
- i. Touch \(=\) 3rd Answer
5. MIXED ARITHMETIC

Example #1: To calculate $23 \times (-4) \div (-6) =$

Do these steps display will be

a. Touch C/CE twice
b. Enter 23
c. Touch $\times$
d. Enter 4
e. Touch $=$
f. Touch $-$
g. Touch $+$
h. Enter 6
i. Touch $=$
j. Touch $-$ Answer

Example #2: To calculate \( \frac{(9 + 6 - 5) \times 8}{20} - 8 = \)

Do these steps display will be

a. Touch C/CE twice
b. Enter 9
c. Touch $+$
d. Enter 6

6. EXPONENTS

Example #1: To calculate \((3)^5 = \)

Do these steps display will be

a. Touch C/CE twice
b. Enter 3
c. Touch $\times$
d. Touch $=$
e. Touch $+$
f. Enter 5
g. Touch $-$
h. Touch $\times$
i. Enter 8
j. Touch $+$
k. Enter 20
l. Touch $=$
m. Touch $+$
n. Enter 8

Answer

\( \frac{15.33333333}{15} \)

Answer

\( 15 \)
1. Touch II

2. Touch II

3. Touch II

4. Touch II

5. Touch II

6. Touch II

7. TOUCH

8. TOUCH

9. TOUCH

10. TOUCH

11. TOUCH

12. TOUCH

13. TOUCH

14. TOUCH

15. TOUCH

16. TOUCH

17. TOUCH

8. REPEATED ADDITION

Example #1:
To calculate $6 + 3 + 3 + 3 = 15$

Do these steps display will be

a. Touch C/CE twice

b. Enter 6

c. Touch +

d. Enter 3

e. Touch +

f. Touch +
g. Touch + Answer

9. USE OF MEMORY

Add into memory

Example #1:
To calculate $(2 \times 6) + (13 \times 2) + (3 \times 4) =$

Do these steps display will be

a. Touch C/CE twice

b. Touch MC once

c. Push $\Sigma$ on (left)
d. Enter 2
Subtract from memory

Example #2:
To calculate \((16 \times 31) - (18 \div 3) + 10 = \)
Do these steps, display will be

\(\begin{array}{ll}
\text{a. Touch } & \text{C/CE twice} \\
\text{b. Touch } & \text{MC once} \\
\text{c. Push } & \text{on (left)} \\
\text{d. Enter } & 16 \\
\text{e. Touch } & 18 \\
\text{f. Enter } & 31 \\
\text{g. Touch } & = \\
\text{h. Enter } & 18 \\
\text{i. Touch } & = \\
\text{j. Touch } & = \\
\text{k. Enter } & 3 \\
\text{l. Touch } & = \\
\text{m. Touch } & = \\
\text{n. Enter } & 4 \\
\text{o. Touch } & = \\
\text{p. Touch } & \text{MR} \\
\end{array}\)

(6 has now been subtracted from 496.0 = 490.0)
10. When adding and subtracting figures with a fixed decimal place this calculator will hold that decimal place.

Example #1
The articles just bought cost $3.95, 2.05, 3.00, 2.50 and there is a return credit of $1.00. How much will the bill be?
Do these steps display will be

a. Touch **C/CE** twice [0]
b. Enter 3.95 [3.95]
c. Touch + [3.95]
d. Enter 2.05 [2.05]
e. Touch + [6.00]
f. Enter 3 [3.00]
g. Touch + [9.00]
h. Enter 2.5 [2.5]
i. Touch + [11.50]
j. Enter 1 [1.00]
k. Touch = Answer [10.50]

11. PERCENTAGE
Example #1: To calculate 5% of 125
Do these steps display will be

a. Touch **C/CE** twice [0]
b. Enter 125 [125.]
c. Touch **X** [125.]
d. Enter 5 [5.]
e. Touch % Answer [6.25]

Example #2:
Add 5% tax to $17.20
Do these steps display will be

a. Touch **C/CE** twice [0]
b. Enter 17.20 [17.20]
c. Touch **X** [17.20]
d. Enter 5 [5.]
e. Touch % [0.86]
f. Touch + Answer [18.06]
Example #3
Take 7% discount from $14.00
Do these steps  

<table>
<thead>
<tr>
<th>Step</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Touch <strong>CE</strong> twice</td>
</tr>
<tr>
<td>b.</td>
<td>Enter 14.00</td>
</tr>
<tr>
<td>c.</td>
<td>Touch <strong>X</strong></td>
</tr>
<tr>
<td>d.</td>
<td>Enter 7</td>
</tr>
<tr>
<td>e.</td>
<td>Touch <strong>%</strong></td>
</tr>
</tbody>
</table>

display will be

SPECIFICATIONS

Decimal Point: Full floating decimal point.
Capacity: Addition, subtraction, multiplication, division, percentage, omni-constant and **Memory**: 8 digits in / 8 digits out.
Functions: General add, subtract, multiply, divide and percent. Chain multiplication and division. Mixed arithmetic. Constant multiplication and division. Exponents, fractions, reciprocals, and **Memory** accumulations.
Power: A.C. operation — 115/230V, 50-60 Hz.
Battery operation — NiCd

Batteries (3)
5 hour operation
7 hour charge.

Main Elements: Large scale integrated circuit.
Supplementary Elements: ICs, Transistors, Diodes.
Dimensions: Height 1¼", Width 3", Depth 5".
Weight: 9 oz.
Peripherals: Switchable Charger/Power Supply, Vinyl Pouch, Instruction Book.
NOTES

WARRANTY

Bowmar/ALI, Inc. warrants to the purchaser of this new Bowmar Calculator that if the machine or any part thereof in the judgment of Bowmar is proven to be defective in material or workmanship within one year from date of original purchase, such defects will be repaired or replaced (at the Company's option) free of charge for parts and labor.

This warranty does not apply to any product which has been damaged by accident or which has been misused, abused, altered, or repaired by anyone other than Bowmar.

This warranty is in lieu of all other warranties expressed or implied, and no person is authorized to assume for Bowmar any other liability in connection with the sale of this product.

To obtain repairs, the Calculator should be delivered, prepaid, to Bowmar/ALI, Inc. at address shown below. In-warranty units will be returned postage prepaid.

BOWMAR/ALI, INC.
531 MAIN STREET
ACTON, MASS. 01720

Printed in U.S.A.