



**Bowmar**

**MX55  
Electronic  
Calculator**

**Instructions**

## 1. INTRODUCTION:

Your Bowmar Brain is light and small enough to be used in one hand but it provides a standard keyboard and easily readable LED display. The floating decimal point provides accurate solution to any calculation.

Your Bowmar Brain has the ability to solve problems with features such as clear entry, automatic squaring and an omni-constant that will perform integer powers, reciprocals and fractions as well as chain and mixed calculations.

We suggest that this Instruction Manual be read with the calculator in hand. Performing the operations as you read them will increase your familiarity with them.

## 2. CONTROLS AND INDICATORS: (See diagram on back page foldout)

1. Charger cord socket.
2. "ON" switch turns calculator "ON" and "OFF".
3.  Key. Enters a "subtract" command and performs any possible preceding operation.
4.  Key. Enters a "divide" command and performs any possible preceding operation.
5.  Key. Enters a "multiply" command and performs any possible preceding operation.
6.  Key. Enters an "add" command and performs any possible preceding operation.

7.  Key. Enters a decimal point.
8.  Keys. Enters digits of a number.
9.  Key. Completes a percent operation and conditions a discount or mark up operation.
10.  Key. Completes previous operation.
11.  Key. Clears the calculator and the display of all numbers or the previous keyboard entry only.
12. Charger/Power supply.

**Overflow Indicator:** Indicates a calculation result with more than eight digits.

Appears as 

**Minus Sign Indicator:** Indicates a negative number and immediately precedes a number.

Appears as 

**Low Battery Indicator:** Warns of need for battery recharging during battery operation:

Appears as 

**Decimal Point Indicator:** 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.

---

### **3. OPERATIONS:**

**For AC Operations:** Connect the charger to an appropriate electrical outlet as referenced on your Bowmar Charger. Plug the connector into the calculator and turn the power switch on.

**For Battery Operation:** Disconnect the charger cord and turn the power switch on. When Low Battery Indicator "L" appears on display, batteries need charging.

**Battery Charging:** Simply follow the same procedure as in AC operation. When connected to AC, the internal batteries are automatically charged whether the power switch is "ON" or "OFF". The calculator may be used during the charge period. 7 hours are required to fully charge completely discharged batteries with calculator off.

*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.

#### **3-1 BATTERY NOTES:**

1. With normal use, at room temperature, a full battery charge will provide 5 hrs. of accumulated working time.

2. Rechargeable batteries will self discharge when not charged for 2 or 3 months.
3. For optimum performance and long life:
  - a. Alternate frequently between Battery and AC power.
  - b. Operate at or near normal room temperatures.
  - c. Do not continue to operate on batteries when Low-Battery Indicator appears or a damaged battery may result.
  - d. Charge as soon as possible upon appearance of the Low-Battery Indicator.
4. If improper operation occurs, try the Calculator with its charger connected. If operation is normal, the batteries need charging.
5. Do not store the Calculator in high temperature areas such as the top of radiators or the rear deck of automobiles. The Calculator will operate satisfactorily over an ambient temperature range of 0° to 50°C (32° to 122°F) and relative humidity to 95%.

### 3-2 INSTRUCTION:

1. To clear (erase) touch  Key twice. Display will read  0.
2. To enter (write a number), Example: Enter 123.45  
Touch the number and decimal key for 123.45 one at a time (always start with the left hand digit and progress from left to right). Display will read

 123.45

3. To clear an incorrect entry: Example:  $48 + 12 =$

- |                             |      |            |
|-----------------------------|------|------------|
| 1. Enter 48                 | Read | <b>48.</b> |
| 2. Touch <b>+</b>           | Read | <b>48.</b> |
| 3. Enter 13 (Mistake)       | Read | <b>13.</b> |
| 4. Touch <b>CE</b> Key once | Read | <b>48.</b> |
| 5. Enter 12                 | Read | <b>12.</b> |
| 6. Touch <b>=</b> Answer    | Read | <b>60.</b> |

### 3-3 OVERFLOW INTERPRETATION:

The Overflow Indicator "**□**" will appear whenever an answer of more than eight digits occurs.

Example:  $12,345,678 \times 345,678 = 4,267,629,279,684$ . Will appear as

**□ 42676.292**

For the actual answer, move decimal point eight places to the right of its displayed position. So answer is 4,267,629,200,000.  
└ 8 places ┘

Use **CE** Key once to clear overflow condition.

## THE BOWMAR BRAIN'S UNILANGUAGE INSTRUCTIONS:

The Calculation Section uses symbols rather than words to show how to calculate. The Symbols are as follows:

-  Touch the keys in the sequence as they appear to the right of this symbol.
-  The Calculator's display should appear as shown to the right of this symbol.
- x** Multiplication Symbol
- $\div$  Divide Symbol
- +** Addition Symbol
- Subtraction Symbol
- .** Used for decimal point
- ,** Symbol used to separate thousands's places
-  **K** Omni-Constant Symbol
- %** Percentage

1. "+"

$$10 + 5 + 3 + 2 = 20$$

- |    |                                     |                       |                       |                          |            |
|----|-------------------------------------|-----------------------|-----------------------|--------------------------|------------|
| 1. | <input checked="" type="checkbox"/> | <b>C</b><br><b>CE</b> | <b>C</b><br><b>CE</b> | <input type="checkbox"/> | <b>0.</b>  |
| 2. | <input checked="" type="checkbox"/> | <b>1</b>              | <b>0</b>              | <input type="checkbox"/> | <b>10.</b> |
| 3. | <input checked="" type="checkbox"/> | <b>+</b>              |                       | <input type="checkbox"/> | <b>10.</b> |
| 4. | <input checked="" type="checkbox"/> | <b>5</b>              |                       | <input type="checkbox"/> | <b>5.</b>  |
| 5. | <input checked="" type="checkbox"/> | <b>+</b>              |                       | <input type="checkbox"/> | <b>15.</b> |
| 6. | <input checked="" type="checkbox"/> | <b>3</b>              |                       | <input type="checkbox"/> | <b>3.</b>  |
| 7. | <input checked="" type="checkbox"/> | <b>+</b>              |                       | <input type="checkbox"/> | <b>18.</b> |
| 8. | <input checked="" type="checkbox"/> | <b>2</b>              |                       | <input type="checkbox"/> | <b>2.</b>  |
| 9. | <input checked="" type="checkbox"/> | <b>=</b>              |                       | <input type="checkbox"/> | <b>20.</b> |



5.  **x**

6.  **6**

7.  **=**

4. "÷"

$$81 \div 3 \div 9 = 3$$

1.  **C  
CE**

**C  
CE**

2.  **8**

**1**

3.  **÷**

4.  **3**

5.  **÷**

6.  **9**

7.  **=**

**6.**

**6.**

**36.**

**0.**

**81.**

**81.**

**3.**

**27.**

**9.**

**3.**

5. "+ - x ÷"  

$$\frac{(9 + 6 - 5) \times 8}{20} - 8 = -4$$

- 1.  **C**  **CE**
- 2.  **9**
- 3.  **+**
- 4.  **6**
- 5.  **-**
- 6.  **5**
- 7.  **x**
- 8.  **8**
- 9.  **÷**
- 10.  **2**  **0**
- 11.  **-**
- 12.  **8**

- 0.**
- 9.**
- 9.**
- 6.**
- 15.**
- 5.**
- 10.**
- 8.**
- 80.**
- 20.**
- 4.**
- 8.**

13.  $\frac{1}{2}$  **=** **-4.**

6. " **K**"

$$2.00 + 4 + 4 + 4 + 6 = 20$$

1.  $\frac{1}{2}$  **C** **CE** **C** **CE** **0.**

2.  $\frac{1}{2}$  **2** **.** **0** **0** **2.00**

3.  $\frac{1}{2}$  **+** **2.00**

4.  $\frac{1}{2}$  **4** **4.**

5.  $\frac{1}{2}$  **=** **6.00**

6.  $\frac{1}{2}$  **=** **10.00**

7.  $\frac{1}{2}$  **=** **14.00**

8.  $\frac{1}{2}$  **+** **14.00**

9.  $\frac{1}{2}$  **6** **6.**

10.  $\frac{1}{2}$  **=** **20.00**

"K"  $\chi^p$

$$2^3 = 2 \times 2 \times 2 = 8$$

1.  **C**  
**CE**

**C**  
**CE**

) **0.**

2.  **2**

) **2.**

3.  **x**

) **2.**

4.  **=**

) **4.**

5.  **=**

) **8.**

"K"  $1/\chi$

$$1/8 = .125$$

1.  **C**  
**CE**

**C**  
**CE**

) **0.**

2.  **8**

) **8.**

3.  **÷**

) **8.**

4.  **=**

) **1.**

5.  **=**

) **0.125**

"**CE** K" +

$2 + 3 = 5$

$6 + 3 = 9$

$8 + 3 = 11$

1.  **CE**

**CE**

2.  **2**

3.  **+**

4.  **3**

5.  **=**

6.  **6**

7.  **=**

8.  **8**

9.  **=**

**0.**

**2.**

**2.**

**3.**

**5.**

**6.**

**9.**

**8.**

**11.**

"**CE** K" -

$$\begin{aligned} 5 - 3 &= 2 \\ 8 - 3 &= 5 \\ 10 - 3 &= 7 \end{aligned}$$

1.	<b>CE</b>	<b>CE</b>	<b>0.</b>
2.	<b>5</b>		<b>5.</b>
3.	<b>-</b>		<b>5.</b>
4.	<b>3</b>		<b>3.</b>
5.	<b>=</b>		<b>2.</b>
6.	<b>8</b>		<b>8.</b>
7.	<b>=</b>		<b>5.</b>
8.	<b>1</b>	<b>0</b>	<b>10.</b>
9.	<b>=</b>		<b>7.</b>

"  K" x

$3 \times 6 = 18$

$3 \times 5 = 15$

$3 \times 8 = 24$

1.   
2.  
3.  
4.  
5.  
6.  
7.  
8.  
9.  

-   0.
-   3.
-   3.
-   6.
-   18.
-   5.
-   15.
-   8.
-   24.

"**6** K" =

$$6 \div 3 = 2$$

$$15 \div 3 = 5$$

$$21 \div 3 = 7$$

1.  $\frac{6}{3} =$  **2**

**2**

2.  $6 \div 3 =$  **2**

3.  $15 \div 3 =$  **5**

4.  $21 \div 3 =$  **7**

5.  $6 \div 3 =$  **2**

6.  $15 \div 3 =$  **5**

**5**

7.  $21 \div 3 =$  **7**

8.  $6 \div 3 =$  **2**

**2**

9.  $15 \div 3 =$  **5**

**0.**

**6.**

**6.**

**3.**

**2.**

**15.**

**5.**

**21.**

**7.**

**CE** %

$125 \times 5\% = 6.25$

$150 \times 5\% = 7.50$

$75 \times 5\% = 3.75$

1.	<b>CE</b>	<b>CE</b>	<b>0.</b>
2.	<b>5</b>		<b>5.</b>
3.	<b>%</b>		<b>0.05</b>
4.	<b>x</b>		<b>0.05</b>
5.	<b>1</b>	<b>2</b>	<b>125.</b>
6.	<b>=</b>		<b>6.25</b>
7.	<b>1</b>	<b>5</b>	<b>150.</b>
8.	<b>=</b>		<b>7.5</b>
9.	<b>7</b>	<b>5</b>	<b>75.</b>
10.	<b>=</b>		<b>3.75</b>

7. "%" x

$$125 \times 5\% = 6.25$$

1.  **C**  **C**  **0.**
2.  **1**  **2**  **5**  **125.**
3.  **x**  **125.**
4.  **5**  **5.**
5.  **%**  **6.25**

"%" +

$$17.20 + 5\% = 18.06$$

1.  **C**  **C**  **0.**
2.  **1**  **7**  **.**  **2**  **17.2**
3.  **+**  **17.2**
4.  **5**  **5.**

5.  $\frac{1}{4}$  % 0.86

6.  $\frac{1}{4}$  = 18.06

“%” –  
14.00 – 7% = 13.02

1.  $\frac{1}{4}$   $\frac{C}{CE}$   $\frac{C}{CE}$  0.

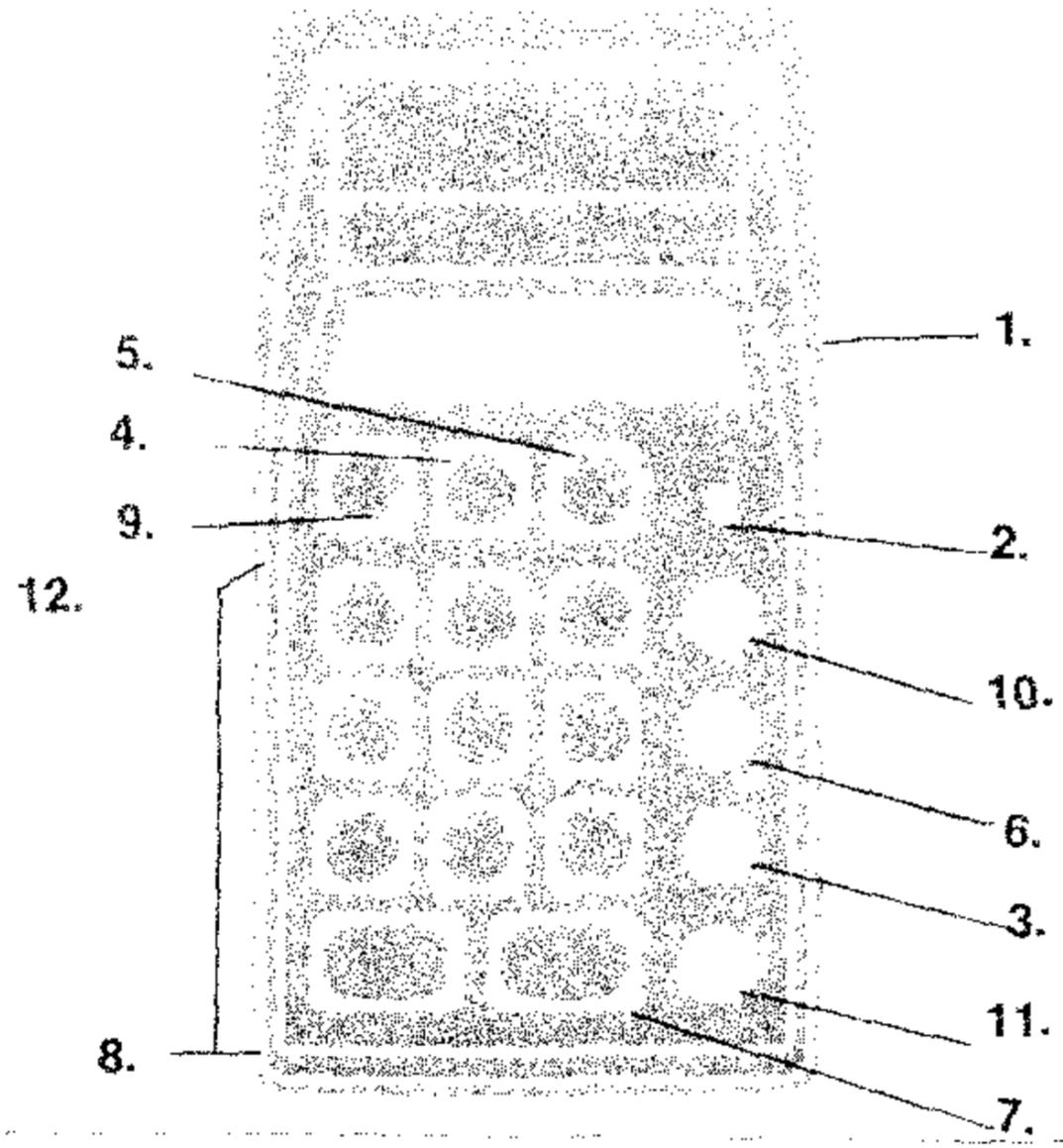
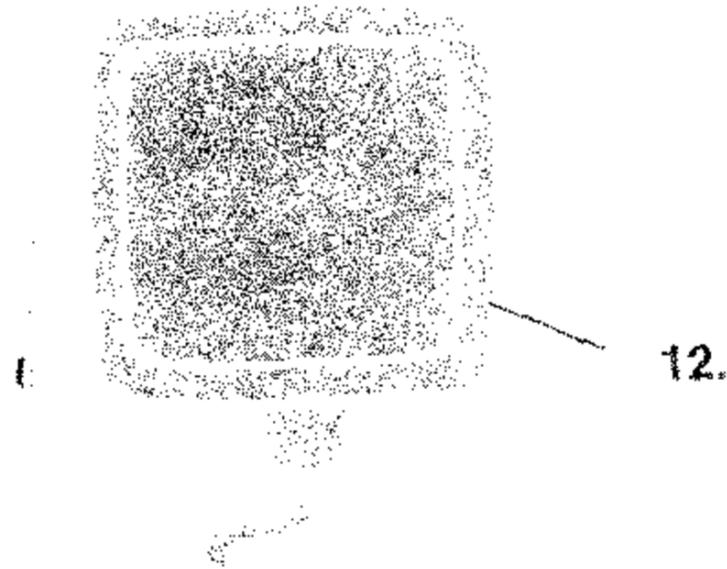
2.  $\frac{1}{4}$  1 4 14.

3.  $\frac{1}{4}$  – 14.

4.  $\frac{1}{4}$  7 7.

5.  $\frac{1}{4}$  % 0.98

6.  $\frac{1}{4}$  = 13.02



2