

# Bohn Omnitrix SR



DIVISION OF YLH CORP  
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## CONGRATULATIONS!

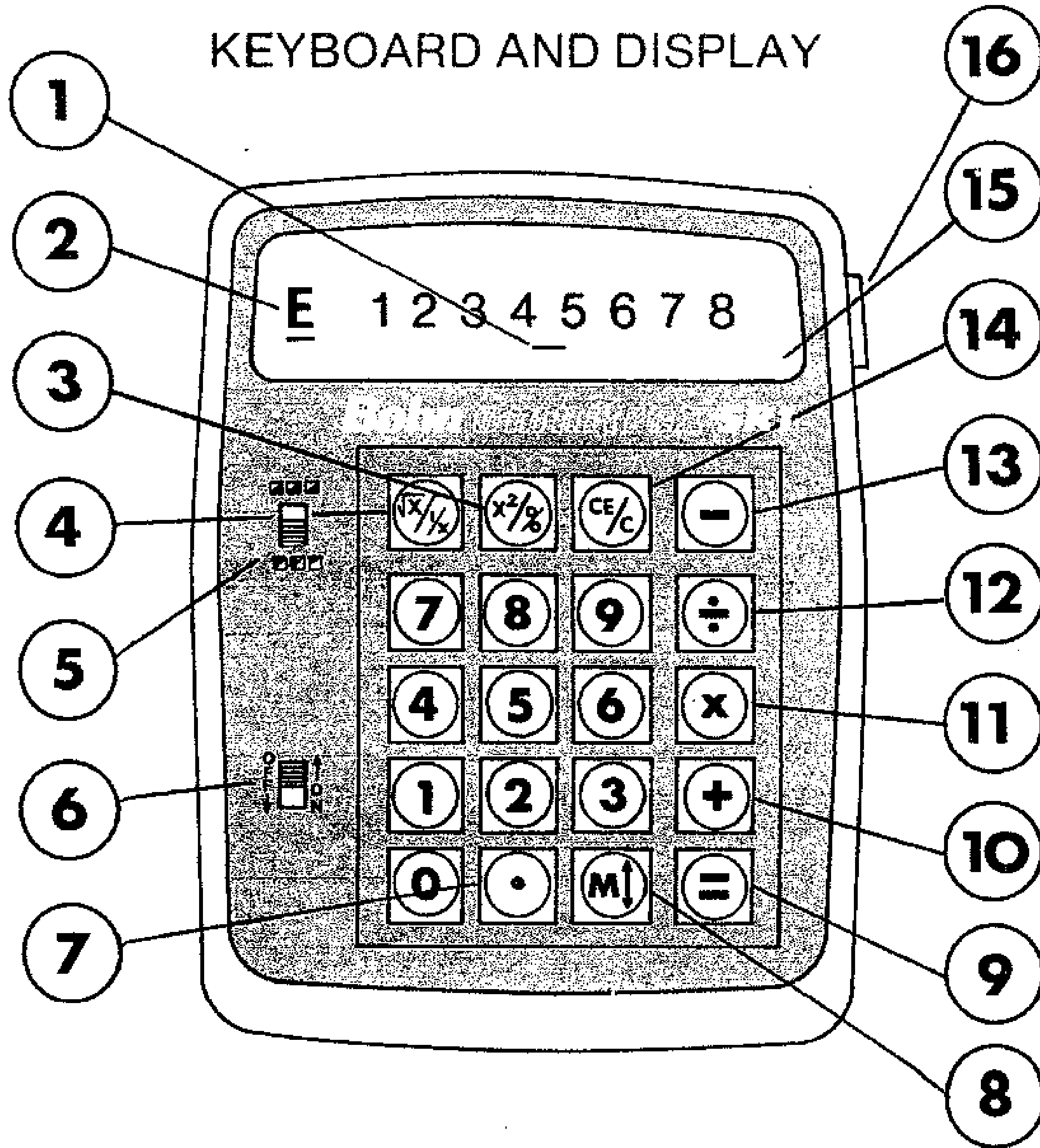
You are now the proud owner of one of the most advanced Electronic Slide Rules available today — the Bohn Omnitrex SR-1. This versatile electronic instrument not only silently performs the four basic arithmetic functions — addition, subtraction, multiplication, and division, but also performs more advanced calculations such as extracting square roots, squares, reciprocals, and percentages, all with true credit balance. The Bohn SR-1 also has a full function storage memory plus floating or fixed decimal.

The SR-1 comes complete with built in rechargeable batteries for a lifetime service and a combination AC adapter/charger.

The Bohn SR-1 is constructed of the most advanced space-age micro circuits combined with one of the largest, easiest to read displays available in a hand held calculator.

With proper care your Bohn SR-1 will provide dependable service for many years to come.

# KEYBOARD AND DISPLAY



1. Display Blanking Indicator
2. Negative Overflow, Low Battery and Entry Error Indicator
3. Square/Percent Key
4. Square Root/Reciprocal Key
5. Selector Switch for Proper Mode
6. On-Off Switch
7. Numeric Entry Keyboard with Decimal Point
8. Memory and Constant Key
9. Equal Key
10. Addition Key
11. Multiplication Key
12. Division Key
13. Subtraction Key
14. Clear/Clear Entry Key
15. Display Panel  
(8 digits maximum with decimal point)
16. Power Cord Socket

# SPECIFICATIONS

<b>Functions</b>	<ul style="list-style-type: none"> <li>• Addition</li> <li>• Subtraction</li> <li>• Multiplication</li> <li>• Division</li> <li>• Raising to a power</li> <li>• Memory</li> <li>• Percentage Calculations</li> <li>• Constant in all functions</li> <li>• 5/4 Round-off (Fixed Decimal Mode)</li> <li>• Clear Entry/Total Clear</li> <li>• Mixed Calculations</li> <li>• True Credit Balance</li> </ul>	<ul style="list-style-type: none"> <li>• Chain Multiplication and Addition</li> <li>• Chain Division and Subtraction</li> <li>• <math>\sqrt{\quad}</math> (Square Root)</li> <li>• <math>X^2</math> (Square)</li> <li>• <math>1/X</math> (Reciprocal)</li> <li>• Display Blanking for Power Conservation</li> <li>• Low Battery Indicator</li> <li>• Entry Error Signal</li> <li>• Zero Suppression</li> <li>• Overflow Indicator</li> <li>• Full Underflow and Overflow System</li> </ul>
<b>Capacity</b>	<p>Addition and Subtraction Results — 8 digits</p> <p>Product — 8 digits</p> <p>Quotient — 8 digits</p>	<p>Storage Register (Constant) — 8 digits</p> <p>Memory — 8 digits</p>
<b>Decimal</b>	Automatic floating logic or fixed position mode from 0-7.	
<b>Overflow System</b>	Display indicates E Symbol if entry exceeds 8 whole numbers. Result overflow will appear as □ symbol when result produces more than 8 significant digits.	
<b>Underflow System</b>	Display indicates the 8 most significant digits for answers greater than 8 digits.	
<b>Negative Number</b>	Display indicates negative number by (-) sign at far left.	
<b>Display</b>	Flourescent Display Tubes	
<b>Components</b>	Mos/LSI and silicon solid state	
<b>Dimensions</b>	1½" high, 6½" long, 4¼" wide	
<b>Weight</b>	10 ozs. net (without rechargeable batteries)	

## PRIOR TO USING

The rechargeable nickel cadmium batteries supplied with your Bohn Omnitrex SR-1 were completely charged at the factory, but may require additional charging before commencing battery operation due to discharging during shipping.

You may use the Omnitrex SR-1 while it is being charged. Just plug the charger/adaptor into an electrical outlet and the charger/adaptor cord into the power cord socket on the machine. A full charge should take about 12 hours.

## HOW TO USE "AC" POWER

Turn ON/OFF switch to "OFF"

Plug the AC charger/adaptor into 110 volt, AC power source. Insert the socket at the other end of the cord into the receptacle located on the calculator.

Turn the ON-OFF switch to "ON" position. Your calculator now is being operated thru "AC" power source, and is being charged at the same time.

## HOW TO USE "BATTERY" POWER

If your unit was previously being operated by AC power source, then to use unit on "battery" power, move the ON-OFF switch to "OFF". Disconnect socket from calculator, then turn the ON-OFF switch to "ON" again. Your calculator is now ready to be operated on "Battery" power source.

## LOW BATTERY INDICATION

When battery power supply values are reduced to a sufficiently low level to produce erroneous calculations, a special symbol (L) is displayed on the left most digit of the display. Batteries should then be fully recharged. Under normal usage your Bohn S/R will operate efficiently for approximately 4 hours on fully recharged batteries.

## GENERAL INFORMATION

All numbers are entered in sign/magnitude format. A true algebraic system is provided so that key sequences reflect precisely the manner in which a problem is written or stated.

### EXAMPLE

$$\frac{(-2+3-5) \times -(6)}{-8} = -3$$

Key sequence  $-2+3-5 \times -6 \div -8 = -3$

## DECIMAL OPERATIONS

When the unit is first turned on, it is automatically set in floating decimal mode.

Entry into the fixed decimal mode is accomplished using a specific key sequence:

$\bullet = N$  where N may be any numeral key from 0-7. Example: for 4 places depress  $\bullet = 4$ . You may change the decimal testing by redoing the sequence with another N. However, when returning to the floating decimal, machine must be turned "OFF" and then "ON"

# ADDITION AND SUBTRACTION

EXAMPLE:

$$12 + 14 = 26$$

$$\begin{array}{r} 12 \\ + 14 \\ \hline 26 \end{array}$$

ENTER  
NUMBERS

1 2  
1 4

TOUCH  
FUNCTION KEY

C  
+  
=

DISPLAY NOW  
READS

0.  
12.  
26.

EXAMPLE:

$$3.86 + 515.00 - 65.00 = 453.86$$

$$\begin{array}{r} 3.86 \\ + 515.00 \\ - 65.00 \\ \hline 453.86 \end{array}$$

3 . 8 6  
5 1 5 \*  
6 5

C  
+  
-  
=

0.  
3.86  
518.86  
453.86

EXAMPLE:

$$610 - 845 = -235$$

610  
Error

6 1 0  
8 4 4

C  
-

0.  
610.  
844.

Move selector switch  
to upper position

- 845  
- 235

8 4 5

CE  
=

0.  
845.  
- 235.

\*Note: Two zeroes are always automatically added by the unit so it is unnecessary in this example to depress the zero key twice, or to depress the decimal key.

\*\*Note: In this example (-) symbol would appear at far left indicating that the number is a (minus) -235. This is a true credit balance total.

# MULTIPLICATION AND DIVISION

EXAMPLE:

$$12 \times 14 = 168$$

$$\begin{array}{r} 12 \\ \times 14 \\ \hline 168 \end{array}$$

ENTER  
NUMBERS

TOUCH  
FUNCTION KEY

DISPLAY NOW  
READS

EXAMPLE:

$$2.67 \times 15.2 = 40.584$$

$$\begin{array}{r} 2.67 \\ 15.2 \\ \hline 40.584 \end{array}$$

EXAMPLE:

$$-4 \times 3 = -12$$

$$\begin{array}{r} -4 \\ \times 3 \\ \hline -12 \end{array}$$

EXAMPLE:

$$126 \div 6 = 21$$

$$\begin{array}{r} 21 \\ 6 \overline{) 126} \end{array}$$

EXAMPLE:

$$14.36 \div 8.2 = 1.75121951210$$

$$\begin{array}{r} 1.75121951210 \\ 8.2 \overline{) 14.3600000000} \end{array}$$

Note: In this example the unit has utilized automatic underflow system.



# CHAIN CALCULATIONS

## EXAMPLE:

$$123.85 \times 346 \times 346.767 \div 3 \times 14.1 = 69840561.555290$$

$$\begin{array}{r} 123.85 \\ \times \quad 346 \\ \hline 42852.10 \\ \times \quad 346.767 \\ \hline 14859694.16070 \\ 4953231.38690 \\ \hline 3) 1485969416070 \\ 4953231.38690 \\ \hline \quad \times \quad 14.1 \\ \hline 69840561.555290 \end{array}$$

ENTER NUMBERS	TOUCH FUNCTION KEY	DISPLAY NOW READS
	<b>C</b>	0.
<b>1</b> <b>2</b> <b>3</b> <b>.</b> <b>8</b> <b>5</b>	<b>×</b>	123.85
<b>3</b> <b>4</b> <b>6</b>	<b>×</b>	42852.1
<b>3</b> <b>4</b> <b>6</b> <b>.</b> <b>7</b> <b>6</b> <b>7</b>	<b>÷</b>	14859694.
	<b>×</b>	4953231.3
	<b>=</b>	69840561.

# MIXED CALCULATIONS

## EXAMPLE:

$$55 \times 12 \div 22 + 85 - 14 = 101$$

ENTER NUMBERS	TOUCH FUNCTION KEY	DISPLAY NOW READS
	<b>C</b>	0.
<b>5</b> <b>5</b>	<b>×</b>	55.
<b>1</b> <b>2</b>	<b>÷</b>	660.
<b>2</b> <b>2</b>	<b>+</b>	30.
<b>8</b> <b>5</b>	<b>-</b>	115.
<b>1</b> <b>4</b>	<b>=</b>	101.

# PERCENT CALCULATIONS

## EXAMPLE:

First move selector switch to bottom position

$$6\% \text{ of } 220 = 13.2$$

ENTER  
NUMBERS

		6
2	2	0

TOUCH  
FUNCTION KEY

C
---

%
---

=
---

DISPLAY NOW  
READS

0.
----

6.
----

13.2
------

## ROUND OFF

When operating in the fixed point mode, results have a 5/4 rounded off.

## DISPLAY BLANKING

To conserve on battery life, machine will blank out after 20 seconds. A (-) indicator in the middle of display will appear. To recall the previous display, depress = key.

## OVERFLOW

If more than 8 digits are entered an (E) indicator will appear.

If result of problem is more than 8 digits, the machine will show a (□) on far left.

To get correct decimal position, move decimal eight places to right.

## UNDERFLOW

Answers will be decimally correct at all times.

# RAISING TO A POWER

## EXAMPLE:

Move selector switch to upper position

$$3^4 = 81$$

$$3 \times 3 \times 3 \times 3$$

ENTER  
NUMBERS

TOUCH  
FUNCTION KEY

DISPLAY NOW  
READS

C

0.

3

$\times^2$

9.

$\times^2$

81.

## EXAMPLE:

Move selector switch to upper position

$$2^5 \times 3 = 96$$

$$2 \times 2 \times 2 \times 2 \times 2 \times 3 = 96$$

C

0.

2

$\times^2$

4.

$\times^2$

16.

$\times$

16.

2

$\times$

32.

3

=

96.

## EXAMPLE:

$$1365 \div 2.2^3 = 128.19308$$

$$\begin{array}{r} 128.19308 \\ 10.648 \overline{) .36500000} \end{array}$$

1

3

6

5

C

0.

$\div$

1365.

2

.

2

$\div$

620.45454

2

.

2

$\div$

282.02479

2

.

2

$\div$

128.19308

## CONSTANT MULTIPLIER OPERATION

(Following problems all have .75 as a constant)

EXAMPLE:

$$.75 \times 386 = 289.50$$

$$\begin{array}{r} 386 \\ \times .75 \\ \hline 289.50 \end{array}$$

EXAMPLE:

$$.75 \times 486 = 364.5$$

$$\begin{array}{r} 486 \\ \times .75 \\ \hline 364.50 \end{array}$$

EXAMPLE:

$$.75 \times 1397 = 1047.5$$

$$\begin{array}{r} 1397 \\ \times .75 \\ \hline 1047.75 \end{array}$$

ENTER  
NUMBERS

TOUCH  
FUNCTION KEY

DISPLAY NOW  
READS

			C	0.
.	7	5	= M	0.75
3	8	6	x M =	289.5
			C	0.
4	8	6	x M =	364.5
			C	0.
1	3	9	7 x M =	1047.75

## CONSTANT DIVISOR OPERATION

(Following problems all have 8 as a constant)

EXAMPLE:

$$25 \div 8 = 3.125$$

$$\begin{array}{r} 3.125 \\ 8 \overline{) 25.000} \end{array}$$

EXAMPLE:

$$546 \div 8 = 68.25$$

$$\begin{array}{r} 68.25 \\ 8 \overline{) 546.00} \end{array}$$

EXAMPLE:

$$1734 \div 8 = 216.75$$

$$\begin{array}{r} 216.75 \\ 8 \overline{) 1734.00} \end{array}$$

ENTER  
NUMBERS

TOUCH  
FUNCTION KEY

DISPLAY NOW  
READS

			C	0.
	8		= M	8.
2	5		÷ M =	3.125
			C	0.
5	4	6	÷ M =	68.25
			C	0.
1	7	3	4 ÷ M =	216.75

# CALCULATION WITH MEMORY

EXAMPLE:

$$M = 4$$

$$M + 6 = 10$$

$$M - 3 = 1$$

$$M \times 6 = 24$$

$$M \div 2 = 2$$

Move selector switch to upper position

$$M^2 = 16$$

ENTER  
NUMBERS

TOUCH  
FUNCTION KEY

DISPLAY NOW  
READS

C

0.

4

= M

4.

C M +

4.

6

=

10.

C M -

4.

3

=

1.

C M ×

4.

6

=

24.

C M ÷

4.

2

=

2.

C M x<sup>2</sup>

16.

## SQUARE ROOT

First move selector switch to upper position

EXAMPLE:

$$\sqrt{169} = 13$$

EXAMPLE:

$$\sqrt{170} = 13.038404$$

ENTER  
NUMBERS

TOUCH  
FUNCTION KEY

DISPLAY NOW  
READS

			C	0.
1	6	9	√	13.
			C	0.
1	7	0	√	13.038404

## MEMORY

ACCUMULATION  
OF PRODUCTS TO  
A GRAND TOTAL

EXAMPLE:

$$25 \times 23 = 575$$

$$13 \times 15 = 195$$

$$14.2 \times 16 = \frac{227.2}{997.2}$$

## RECIPROCAL

First move selector switch to bottom position

EXAMPLE:

$$1/4 = 0.25$$

EXAMPLE:

$$1/7 = 0.1428571$$

			C	0.
		4	1/x	0.25
			C	0.
		7	1/x	0.1428571

## SQUARE

First move selector switch to upper position

EXAMPLE:

$$15^2 = 225$$

EXAMPLE:

$$32^2 = 1024$$

			C	0.
1	5		x <sup>2</sup>	225.
			C	0.
3	2		x <sup>2</sup>	1024.

ENTER NUMBERS	TOUCH FUNCTION KEY	DISPLAY NOW READS
---------------	--------------------	-------------------

	C	0.
--	---	----

2	5	x	25.
---	---	---	-----

2	3	=	M	575.
---	---	---	---	------

1	3	x	13.
---	---	---	-----

1	5	=	195.
---	---	---	------

+	M	=	M	770.
---	---	---	---	------

1	4	.	2	x	14.2
---	---	---	---	---	------

1	6	=	227.2
---	---	---	-------

+	M	=	997.2
---	---	---	-------

## VARIED CALCULATIONS

ENTER NUMBERS	TOUCH FUNCTION KEY	DISPLAY NOW READS
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### EXAMPLE:

4	x <sup>2</sup>	16.
---	----------------	-----

C	0.
---	----

x <sup>2</sup>	16.
----------------	-----

√	4.
---	----

1/x	0.25*
-----	-------

\*To perform this function, move selector switch from top to bottom position.

### CHAIN

### EXAMPLE:

$$\frac{1}{\left(\frac{\sqrt{19+17}}{2}\right)^2 - 5} = 0.25$$

1	9
---	---

1	7
---	---

C	0.
---	----

+	19.
---	-----

√	6.
---	----

+	6.
---	----

2
---

x <sup>2</sup>	9.
----------------	----

-	9.
---	----

as above

5
---

1/x	0.25
-----	------

## MAINTENANCE INSTRUCTIONS

This calculator is made up of precise parts such as large scale integrated circuits. Hence radical changes in temperature or humidity are never permitted. The following points must be carefully noted.

1. Do not drop or give a strong shock or vibration to the machine.
2. Power switch must be always "OFF" when power cord is pulled out or to switch power sources between "AC" and "BAT"
3. Direct rays of the sun or a stove, etc. which gives direct heat for long hours must be avoided.
4. When removing dust from the machine, use either neutral cleaner or plastic cleaner. Do not use volatile matter, such as paint thinner or wet cloth.
5. Please put it in the carrying case when traveling.

Printed in Taiwan

***Bohn omnitrex SR1***