

Operating Manual

Electronic
Printing
Calculators



Model 306
Model 305

VICTOR

Welcome to the world of Victor calculator owners

Congratulations on your choice of a Victor electronic calculator. Careful design, coupled with the use of quality materials, painstaking workmanship and advanced research and production facilities, have given you an instrument which, with proper care, will provide years of trouble-free service.

To insure future optimum performance, ask your Victor representative about low cost protection offered by a Victor Full Coverage Maintenance Agreement.

VICTOR COMPTOMETER CORPORATION

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MODEL 305



MODEL 306

WITH AUTOMATIC GRAND TOTAL




OPERATING CONTROLS

The SERIES 300 12 column electronic printing calculators are capable of performing applications requiring the functions of *addition, subtraction, multiplication, division, percent, and grand total*.


DATA ENTRY KEYS


   **Ten Key Pad.**
Provides numeral entry.


 **Decimal Point.**
Provides entry of decimal digits.


ARITHMETIC OPERATION KEYS


 **Plus.**
Performs addition and repeat addition.


 **Minus.**
Performs subtraction, repeat subtraction, and credit balance.


 **Times.**
Performs multiplication, automatic constant multiplication, and intermediate sequential operations.

 **Divide.**
Performs division, automatic constant division, and intermediate sequential operations.


 **Equals.**
Completes and terminates multiplication/division calculations.


 **Percent.**
Performs percentage, ratio, add-on, and discount calculations.


 **Equals Plus.**
(Model 306 Only) Completes multiplication/division calculations, and adds the results to the accumulator for Automatic Grand Total Multiplication/Division.


 **Equals Minus.**
(Model 306 Only) Completes multiplication/division calculations and subtracts the results from the accumulator for Automatic Grand Total Multiplication/Division.


COMMAND FUNCTION KEYS

 **Subtotal.**
Prints but does not clear the contents of the accumulator.


 **Total.**
Prints and clears the contents of the accumulator.


 **Non-add/Date.**
1. Prints entries for reference on the left side of the tape without affecting calculations. 2. Prints and spaces the month, day, and year if entered in the order of month, decimal point (.), day, year.


 **Clear Entry/Clear.**
1. After number entry or result, clears Ten Key Pad. 2. Otherwise clears all registers.


 **Paper Feed.**
Selectable single step or continuous tape advance.

MODE SWITCHES


 **Power.**
Turns power on and clears all registers.


 **Decimal Format Selector.**
1. Provides floating decimal input and fixed decimal output at (0,1,2,3,4,6) settings. 2. Provides floating input and output at (F) setting. 3. Provides automatic monetary decimal entry at (+) setting.


 **Decimal Rounding Selector.**
(Model 306 Only) 1. Provides automatic round-off at (5/4) setting. 2. Provides automatic truncate at (↓) setting. Note: Model 305 provides automatic (5/4) round-off at all times.

 **Perpetual Subtotal.**
(Model 306 Only) Causes last entry to print followed by automatic subtotal in (◇) position. Off in (■) position.

INDICATIONS

 **Power On.**
Unit is on and ready for operation when lit.

 **Minus Sign.**
Identifies negative entries and results in red.

 **Overflow/Error.**
Caused by excess capacity and division by 0.

CALCULATION EXAMPLES

The following sequence of calculations highlights the logic and function capability of the SERIES 300. Consult the Mode Selector Legend above each example for correct settings, prior to beginning all calculations.

PROBLEM	EXAMPLE	ENTER	TOUCH	TAPE
Addition & Subtraction W/Credit Balance	\$1.23	5/4 ↓	+ 0 1 2 3 4 6 F	0.00*I
	-4.56	123	+	1.23+
	\$-3.33 Subtotal	456	-	4.56-
	7.89	789	◇	-...3.33◇I Credit Balance
	\$ 4.56 Total		+	7.89+
			*	4.56*I Total

PROBLEM	EXAMPLE	ENTER	TOUCH	TAPE
Repeat Addition & Subtraction W/Date Reference	7/4/76 Date	5/4 ↓	+ 0 1 2 3 4 6 F	0.00*I
	\$ 6.54	7.476	# DATE	7 4 76.....#
	6.54	654	+	6.54+
	-7.89		+	6.54+
	-7.89		+	6.54+
	\$ 3.84 Total	789	-	7.89-
			-	7.89-
			*	3.84*I Total

PROBLEM	EXAMPLE	ENTER	TOUCH	TAPE
Perpetual Subtotal	\$327.75 Old Balance	5/4 ↓	+ 0 1 2 3 4 6 F	0.00 *
	11.25 Check	32775	+	327.75+ Old Balance
	316.50 New Balance	1125	-	327.75◇I
	15.50 Check	1550	-	11.25- Check
	301.00 New Balance	18510	+	316.50◇I New Balance
	185.10 Deposit	2525	-	15.50- Check
	486.10 New Balance		+	301.00◇I New Balance
	25.25 Check		-	185.10+ Deposit
	460.85 New Balance		-	486.10◇I New Balance
			*	25.25- Check
				460.85◇I New Balance
				460.85*I

► Multiplication

EXAMPLE

UNITS	PRICE	EXTENSION
123	\$4.56	\$560.88

ENTER TOUCH TAPE

5/4 0 1 2 3 4 6 F

CE/C C

123 × 123.00 ×

456 = 4.56 =

560.88* Extension

PROBLEM

► Constant Multiplication

EXAMPLE

$$\begin{aligned} .12 \times \$11.25 &= \$1.35 \\ .12 \times 12.36 &= 1.48 \\ .12 \times 13.47 &= 1.62 \end{aligned}$$

ENTER	TOUCH	TAPE
5/4	+ 0 1 2 3 4 6 F	
.12	CE/C	C
11.25	×	0.12 × Constant
	=	11.25 =
		1.35* Product
12.36	=	12.36 =
		1.48* Product
13.47	=	13.47 =
		1.62* Product

PROBLEM

► **Constant Multiplication
W/Accumulation**

EXAMPLE

DEPARTMENT	FLOOR SPACE	EXPENSE
ACCOUNTING	123'	\$ 449.56
MANUFACTURING	456'	1,666.67
MARKETING	789'	2,883.77
TOTALS	<u>1,368'</u>	<u>\$5,000.00</u>

	CE/C	C	
5000	÷	5000.00 ÷	Total Expense
123	+	123.00 +	
456	+	456.00 +	
789	+	789.00 +	
	*	1368.00 *	Total Space
	×	1368.00 ×	
123	=	123.00 =	
		449.56 *	Accounting Expense
	+	449.56 +	
456	=	456.00 =	
		1666.67 *	Manufacturing Expense
	+	1666.67 +	
789	=	789.00 =	
		2883.77 *	Marketing Expense
	+	2883.77 +	
	*	5000.00 *	Proof

PROBLEM	EXAMPLE	ENTER	TOUCH	TAPE
Division	$78.9 \div 1.23$ $= 64.1463414634$	5/4 78.9 1.23	+ 0 1 2 3 4 6 F CE/C ÷ =	■ C 78.9 ÷ 1.23 = 64.1463414634 * Quotient

PROBLEM	EXAMPLE	ENTER	TOUCH	TAPE
Constant Division	$48.75 \div 975 = .05$ $214.50 \div 975 = .22$ $321.75 \div 975 = .33$	5/4 48.75 975 214.50 321.75	+ 0 1 2 3 4 6 F CE/C ÷ = = =	■ C 48.75 ÷ 975.00 = Constant 0.05 * Quotient 214.50 = 0.22 * Quotient 321.75 = 0.33 * Quotient

PROBLEM	EXAMPLE	ENTER	TOUCH	TAPE															
Constant Division W/Accumulation	<table border="1"> <thead> <tr> <th>CITY</th> <th>SALES</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>BOSTON</td> <td>\$ 987</td> <td>50.31%</td> </tr> <tr> <td>CHICAGO</td> <td>654</td> <td>33.33</td> </tr> <tr> <td>LOS ANGELES</td> <td>321</td> <td>16.36</td> </tr> <tr> <td>TOTALS</td> <td><u>\$1,962</u></td> <td><u>100%</u></td> </tr> </tbody> </table>	CITY	SALES	%	BOSTON	\$ 987	50.31%	CHICAGO	654	33.33	LOS ANGELES	321	16.36	TOTALS	<u>\$1,962</u>	<u>100%</u>	5/4 987 654 321	+ 0 1 2 3 4 6 F CE/C ÷ + + + * % + % + % + *	■ C 987.00 ÷ 987.00 + 654.00 + 321.00 + 1962.00 * Total Sales 1962.00 = 50.31% Boston % 50.31 + 654.00 = 33.33% Chicago % 33.33 + 321.00 = 16.36% Los Angeles % 16.36 + 100.00 * Proof
CITY	SALES	%																	
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TOTALS	<u>\$1,962</u>	<u>100%</u>																	

PROBLEM	EXAMPLE	ENTER	TOUCH	TAPE
Sequential Multiplication/Division	$\frac{3.21 \times 65.4}{987}$ $= .21$	5/4 3.21 65.4 987	+ 0 1 2 3 4 6 F CE/C × ÷ =	■ C 3.21 × 65.40 ÷ 987.00 = 0.21 * Result

PROBLEM	EXAMPLE	ENTER	TOUCH	TAPE
Percentage W/Discount	Price: \$95.72 Discount: 15% Discount Amount: \$14.36 Net: \$81.36	5/4 95.72 15	CE/C × %	C 95.72 × 15.00% 14.36* Discount 81.36%M Net

PROBLEM	EXAMPLE	ENTER	TOUCH	TAPE
Percentage W/Tax	Price: \$3.56 Tax: 5% Tax Amount: \$.18 Net: \$3.74	5/4 3.56 5	CE/C × %	C 3.56 × 5.00% 0.18* Tax 3.74%A Net

PROBLEM	EXAMPLE	ENTER	TOUCH	TAPE
Ratio	50 = 25% of 200	50 200	CE/C ÷ %	C 50.00 ÷ 200.00 = 25.00% Ratio

PROBLEM	EXAMPLE	ENTER	TOUCH	TAPE																							
Automatic Grand Total	<table> <tr> <th>UNITS</th><th>PRICE</th><th>EXTENSION</th></tr> <tr> <td>11</td><td>\$1.25</td><td>\$13.75</td></tr> <tr> <td>12</td><td>1.36</td><td>16.32</td></tr> <tr> <td>13</td><td>1.47</td><td>19.11</td></tr> <tr> <td></td><td>Gross</td><td>\$49.18</td></tr> <tr> <td>15% Discount</td><td></td><td>7.38</td></tr> <tr> <td>5% Tax</td><td></td><td>2.09</td></tr> <tr> <td>Net</td><td></td><td><u>\$43.89</u></td></tr> </table>	UNITS	PRICE	EXTENSION	11	\$1.25	\$13.75	12	1.36	16.32	13	1.47	19.11		Gross	\$49.18	15% Discount		7.38	5% Tax		2.09	Net		<u>\$43.89</u>	<div>5/4</div> <div>+ 0 1 2 3 4 6 F</div> <div>(Model 306 Only)</div> <div>CE/C</div> <div>C</div> <div>11</div> <div>125</div> <div>12</div> <div>136</div> <div>13</div> <div>147</div> <div>15</div> <div>5</div> <div>+</div>	<div>11.00 ×</div> <div>1.25 =^M</div> <div>13.75 * Extension</div> <div>12.00 ×</div> <div>1.36 =^M</div> <div>16.32 * Extension</div> <div>13.00 ×</div> <div>1.47 =^M</div> <div>19.11 * Extension</div> <div>49.18 *^I Gross</div> <div>49.18 ×</div> <div>15.00%</div> <div>7.38 * Discount</div> <div>41.80 %^M</div> <div>41.80 ×</div> <div>5.00%</div> <div>2.09 * Tax</div> <div>43.89 %^A Net</div>
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SPECIFICATIONS

USABLE TEMPERATURE: 0-40°C

CIRCUITRY: MOS-LSI

POWER INPUT: 50/60 HZ, 120V \pm 15%
50 HZ, 240/220V \pm 15%

POWER CONSUMPTION: 20 WATTS

DIMENSIONS: 8 $\frac{3}{8}$ " x 10 $\frac{7}{8}$ " x 3 $\frac{1}{8}$ "

WEIGHT: 6 LBS.

One year guarantee. This Victor electronic calculator is guaranteed to the original purchaser for one full year for all parts and labor, providing repair work is performed in an authorized Victor Service Center. Guarantee excludes transportation or travel to and from Service Centers.

Any guarantee statutory or otherwise, does not include service and/or replacement or repair of parts when damage or defect is a result of accident, abuse or the elements.

To assure future optimum performance, ask your Victor representative about low cost full coverage offered by a Victor Extended Guarantee Protection plan.

REPLACING PAPER TAPE

1. Open printer cover.
2. Tear off and remove old paper roll. Depress paper advance to remove remaining paper. (*Do not pull paper out*)
3. Install new roll with leading edge feeding from *bottom*.
4. Fold leading edge back one inch and insert into rear of printing mechanism, following direction of raised arrows.
5. Lift tear off blade and depress paper advance until sufficient paper feeds through.
6. Snap back tear off blade and tear off excess paper.
7. Replace printing cover.

CHANGING RIBBON

1. Open printer cover.
2. Lift tape between paper roll and printer to provide enough slack to reach ribbon spools.
3. Remove spool not engaged by red lever first, switch lever to other side, and remove second spool.
4. Install new ribbon black edge up placing first spool on spindle not engaged by red lever, switch lever to other side and replace second spool. Thread new ribbon along outside of guides and in front of print wheels.
5. Rotate spools to take up slack and replace printer cover.



VICTOR

VICTOR COMPTOMETER CORPORATION
BUSINESS MACHINES DIVISION
3900 NORTH ROCKWELL ST. • CHICAGO, ILLINOIS 60618