





Cat. No. 65-541 **OWNER'S MANUAL**

Please read before using this equipment.

12-Digit Dual-Powered **Desktop Calculator**







RadioShack®























FEATURES

Your RadioShack 12-Digit Dual-Powered Desktop Calculator can be powered from two different sources, so you can use it almost anywhere. Its built-in solar panel provides power when you expose the calculator to light. When there is not enough light, the supplied battery provides power.

Your calculator's features include:

Adjustable Display — tilts forward for easy viewing.

Large 12-Digit Display — makes calculations easy to read.

% **Key** — simplifies calculation of percentages.

Four Function Memory — lets you add to, subtract from, recall subtotals in, and clear all numbers from, memory.

Automatic Shut-Off — conserves battery power by automatically turning off your calculator about 8-10 minutes after the last entry.

Grand Total Key — makes complicated calculations easier.

Backspace Key — deletes the last number entered.

Mark-Up Key — helps you easily determine the cost, final price, and profit margin.

Square Root Key $(\sqrt{})$ — lets you quickly compute the square root of a number.

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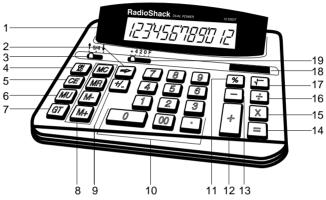








A LOOK AT YOUR CALCULATOR



- 1 Tilting Liquid Crystal Display
- 2 Backspace Key
- 3 **† 5/4 ↓** Switch
- 4 Power ON/AC Key5 Clear Entry Key
- 6 Mark-Up Key
- 7 Grand Total Key
- 8 Memory Keys (Clear, Recall, Subtract, Add)
- 9 Positive/Negative Key

- 10 Number Keys 0–9, 00, and Decimal Point Key
- 11 Percent Key
- 12 Add Key
- 13 Subtract Key
- 14 Equals Key
- 15 Multiply Key16 Divide Key
- 17 Square Root Key
- 18 Solar Panel
- 19 + 4 2 0 F Switch























OPERATION



TURNING ON THE CALCULATOR

Press ON/AC to turn on the calculator. The calculator automatically turns off after about 9 minutes if you do not press any keys. Press ON/AC to turn it back on.

Note: The calculator clears all previous entries when it turns off.

USING THE SPECIAL FUNCTION KEYS

- +/-Press to change the displayed number from positive to negative or from negative to positive.
- Press to delete the last digit entered. Useful when you press the wrong number key.
- 00 Press to enter two zeros at once.

CLEARING ENTRIES

To clear an incorrect entry and continue the current calculation, press CE once (0. appears), then enter the correct value and continue your calculation.

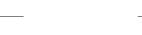
To clear the display and begin a new calculation, press ON/AC (0. appears), then begin the new calculation.

















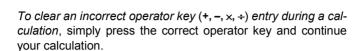












CALCULATION ERRORS

ERROR appears on the display when:

- A calculation result exceeds 12 digits (this is an overflow error — see "Estimating Calculation Results" on Page 7).
- · A memory calculation exceeds 12 digits.
- · You attempt to divide by 0.
- You attempt to calculate the square root of a negative number.

If an overflow error occurs, **ERROR** appears. To clear **ERROR** from the display (without deleting numbers from memory), press **CE**.

If the error occurs in a memory calculation, **MEMORY** flashes and **ERROR** appears. To clear **ERROR** from the display, press **ON/AC**. This also clears the memory.

To clear an error caused by trying to calculate the square root of a negative number or by trying to divide by 0, press **ON/AC**. This also clears the memory.



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If your calculation results in an overflow error, you can estimate the approximate result by following these steps.

- Count the number of digits displayed to the left of the decimal point.
- 2. Remove the decimal point.
- 3. Add as many zeros to the right of the number as there were digits to the left of the decimal point.

For example, if ERROR 923.476988618. appears, the approximate answer is 923,476,988,618,000. If ERROR 31.9703468367 appears, the approximate answer is 31,970,346,836,700.



↑ 5/4 ↓ SWITCH

The setting of this switch determines how the calculator rounds numbers to the right of a decimal point (depending on the +420 F switch setting — see "+420 F Switch" on Page 8).

- Rounds off the rightmost digit of the calculation result to the next highest number.
- 5/4 Rounds off the rightmost digit of a calculation result to the next highest number if the next digit is 5 or more. Rounds off to the next lowest number if the next digit is 4 or less.



















Rounds off the rightmost digit of the calculation result to the next lowest number.

+ 4 2 0 F SWITCH

The + 4 2 0 F switch lets you set how many numbers appear to the right of the decimal point in the displayed result.

With the switch set to +, the calculator automatically inserts a decimal point before the last two digits (for financial calculations).

With the switch set to 4, 2, or 0, the display shows that many digits to the right of the decimal point.

With the switch set to **F** (full display), the display shows as many numbers to the right of the decimal point as possible.

For example (with the ↑ 5/4 ↓ switch set to ↓), when you divide 22 by 7:

With the switch set to:	You see:
+	3.14
4	3.1428
2	3.14
0	3
F	3.14285714285





















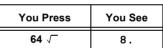
BASIC CALCULATION EXAMPLES

You perform basic calculations (addition, subtraction, and so on) with this calculator as you would with most other algebraic calculators. The following sections include examples of more advanced calculations.

Notes:

- For the calculation examples, the + 4 2 0 F switch is set to F and the † 5/4 \$\frac{1}{2}\$ switch is set to 5/4.
- When an entered value or a calculation result is a negative number less than 12 digits long, appears in front of the number. If the negative number is 12 or more digits long, MINUS appears.

What is the square root of 64?



What is 6% of 48?

You Press	You See
48×6 %	2.88

















GRAND TOTAL KEY

The Grand Total key lets you perform cash register calculations simply and quickly. Every time you press =, the displayed number is memorized and GRAND TOTAL appears. Press GT to display the sum of all memorized numbers. Press GT again to clear GRAND TOTAL from the display, or press ON/AC to clear the display.

Example: Calculate A + B + C where:

$$A = 6 \times 7$$

 $B = 5 + 4$
 $C = 22 - 5$

You Press	You See	
6 × 7 =	GRAND TOTAL	42.
5 + 4 =	GRAND TOTAL	9.
22 – 5 =	GRAND TOTAL	17.
GT	GRAND TOTAL	68.

Example: Calculate the total price and tax for the following purchases:

Nine items at \$5.49 each.

Five items at \$3.29 each.

Four items at \$1.99 each.

You Press	You See	
5.49 × 9 =	GRAND TOTAL	49.41
3.29 × 5 =	GRAND TOTAL	16.45
1.99 × 4 =	GRAND TOTAL	7.96
GT	GRAND TOTAL	73.82





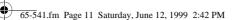




















Add 6% sales tax and display the total amount

You Press	You See	
+6%	GRAND TOTAL	78.25

Note: When you press %, the result is calculated and GRAND TOTAL appears.

USING THE MEMORY KEYS

The memory calculation feature lets you easily do multi-step calculations.

To add a value to memory, enter the desired number or calculation, then press M+. MEMORY appears.

To subtract from a value in memory, enter the desired number or calculation, then press M-. MEMORY appears.

To recall a value from memory, press MR.

To clear the memory, press MC. MEMORY disappears.









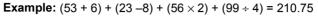












You Press	You See	
53 + 6 M+	MEMORY	59.
23 – 8 M+	MEMORY	15.
56 × 2 M+	MEMORY	112.
99 ÷ 4 M+	MEMORY	24.75
MR	MEMORY	210.75
MC		210.75

Example: $\frac{2392 + 576}{786 - 432} - 73 = -64.6158192091$

You Press	You See	
786 – 432 M+	MEMORY	354.
2392 + 576 +	MEMORY	2′968.
MR	MEMORY	354.
- 73 =	GRAND TOTAL MEMORY MINUS	-64.6158192091























The mark-up key (MU) lets you calculate an item's selling price based on the cost and the desired gross profit margin, and also lets you calculate the gross profit margin based on the cost and sales price.

The Gross Profit Margin (GPM) is the percentage of the sales price that is profit.

$$\frac{\text{Price} - \text{Cost}}{\text{Price}} \times 100 = \text{GPM}$$

Example: What is the original cost of an item selling for \$200 with a gross profit margin of 33%? What is the profit?

You Press	You	See
200 M+×33 +/- MU	MEMORY	134.00
M-	MEMORY	134.00
MR	MEMORY	66.

Example: What is the gross profit margin of an item costing \$100 that sells for \$150? What is the profit?

You Press	You See	
100 M+ – 150 MU	MEMORY	-33.33
150 M-	MEMORY	150.00
MR	MEMORY	-50.





















Note: Disregard the minus (–) signs and read the gross profit margin as 33.33% and the profit is \$50.

You can also easily calculate an item's discounted selling price, an item's final price with sales tax, and the profit.

Example: What is the final price of an item costing \$70 with 5% sales tax? How much is the sales tax?

You Press	You See	
70 × 5 MU		73.50
- 70 =	GRAND TOTAL	3.50

Example: What is the final price of an item selling for \$70 marked down 25%? How much is the discount?

You Press	You See	e
70×25 +/- MU		52.50
-70 =	GRAND TOTAL	-17.50

Note: Disregard the minus (–) sign and read the discount as \$17.50.

Example: Calculate the selling price of an item costing \$100 with a 50% gross profit margin. What is the profit?

You Press	You See	e
100 ÷ 50 MU		200.00
- 100 =	GRAND TOTAL	100.00





















CONSTANTS

When adding, subtracting, or dividing, the last operation and number you enter are held in memory as the constant function, allowing easy calculations with repetitive numbers. Each time you press =, the calculator performs the constant function and displays the results. For example:

(+6 is the constant)

You Press	You See	
4 + 6 =	GRAND TOTAL	10.
5 =	GRAND TOTAL	11.

(-7 is the constant)

$$14 - 7 = 7$$

You Press	You See	
20 – 7 =	GRAND TOTAL	13.
14 =	GRAND TOTAL	7.

(÷7 is the constant) $14 \div 7 = 2$

You Press	You See	
21 ÷ 7 =	GRAND TOTAL	3.
14 =	GRAND TOTAL	2.

When multiplying, the first operation and number you enter are the constant function. For example

$$(4 \times is the constant)$$

$(4 \times IS)$	tne	constant)
4 × 5 =	: 20	

You Press	You See	
4×6 =	GRAND TOTAL	24.
5 =	GRAND TOTAL	20.





















CARE

Your RadioShack 12-Digit Dual-Powered Desktop Calculator is an example of superior design and craftsmanship. The following suggestions will help you care for your calculator so you can enjoy it for years.

- · Keep the calculator dry. If it gets wet, wipe it dry immediately. Liquids might contain minerals that can corrode the electronic circuits.
- · Use and store the calculator only in normal temperature environments. Temperature extremes can shorten the life of electronic devices, damage the battery, and distort or melt plastic parts.
- · Keep the calculator away from dust and dirt, which can cause premature wear of parts.
- · Handle the calculator gently and carefully. Dropping it can damage circuit boards and cases and can cause the calculator to work improperly.
- Use only a fresh battery of the required size and type. Batteries can leak chemicals that damage your calculator's electronic parts.
- Wipe the calculator with a damp cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the calculator.

Modifying or tampering with the calculator's internal components can cause a malfunction and might invalidate the calculator's warranty. If the calculator is not performing as it should, take it to your local RadioShack store for assistance.























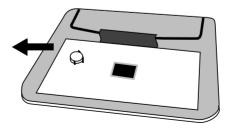
Although your calculator is solar powered most of the time, the supplied back-up battery might eventually weaken and need replacing. If the display speed slows down in low light, replace the 389A battery. For the best performance and longest life, we recommend RadioShack batteries.

Warnings:

- · Keep button-cell batteries away from children. Swallowing a button-cell battery can be fatal.
- · Dispose of an old battery promptly and properly. Do not burn or bury it.

Caution: Use only a fresh battery of the required size and recommended type.

- 1. Use a Phillips screwdriver to remove the three screws on the back of the calculator, then pull apart the front and back case halves.
- 2. Slide the battery toward the open end of the holder to remove it.



























- 3. Insert the new battery with the positive (+) side facing up.
- 4. Snap the case halves back together.
- 5. Reinsert and tighten the screws.

If you do not plan to use the calculator for a long period of time, remove the battery. Batteries can leak chemicals that can destroy electronic parts.











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SPECIFICATIONS



Power Supply Solar Panel and One 389A Button Cell

Dimensions (HWD) $6^{1}/2 \times 7^{1}/4 \times 1$ in $(16.5 \times 18.4 \times 2.5 \text{ cm})$

Specifications are typical; individual units might vary. Specifications are subject to change and improvement without notice.















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Limited One-Year Warranty

This product is warranted by RadioShack against manufacturing defects in material and workmanship under normal use for one (1) year from the date of purchase from RadioShack company-owned stores and authorized RadioShack franchisees and dealers. EXCEPT AS PROVIDED HEREIN. RadioShack MAKES NO EXPRESS WARRANTIES AND ANY IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. ARE LIMITED IN DURATION TO THE DU-RATION OF THE WRITTEN LIMITED WARRANTIES CONTAINED HEREIN. EXCEPT AS PROVIDED HEREIN, RadioShack SHALL HAVE NO LIABILITY OR RESPONSIBIL-ITY TO CUSTOMER OR ANY OTHER PERSON OR ENTITY WITH RESPECT TO ANY LIABILITY. LOSS OR DAMAGE CAUSED DIRECTLY OR INDIRECTLY BY USE OR PERFORMANCE OF THE PRODUCT OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, INCLUDING, BUT NOT LIMITED TO, ANY DAMAGES RESULTING FROM INCONVENIENCE, LOSS OF TIME, DATA, PROPERTY, REVENUE, OR PROFIT OR ANY INDIRECT. SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAM-AGES, EVEN IF RadioShack HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow the limitations on how long an implied warranty lasts or the exclusion of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

In the event of a product defect during the warranty period, take the product and the RadioShack sales receipt as proof of purchase date to any RadioShack store. RadioShack will, at its option, unless otherwise provided by law: (a) correct the defect by product repair without charge for parts and labor; (b) replace the product with one of the same or similar design; or (c) refund the purchase price. All replaced parts and products, and products on which a refund is made, become the property of RadioShack. New or reconditioned parts and products may be used in the performance of warranty service. Repaired or replaced parts and products are warranted for the remainder of the original warranty period. You will be charged for repair or replacement of the product made after the expiration of the warranty period.

This warranty does not cover: (a) damage or failure caused by or attributable to acts of God, abuse, accident, misuse, improper or abnormal usage, failure to follow instructions, improper installation or maintenance, alteration, lightning or other incidence of excess voltage or current; (b) any repairs other than those provided by a RadioShack Authorized Service Facility; (c) consumables such as fuses or batteries; (d) cosmetic damage; (e) transportation, shipping or insurance costs; or (f) costs of product removal, installation, set-up service adjustment or reinstallation.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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