

HP 30b Business Professional Quick Start Guide



Edition 1

HP Part Number: NW238-90201

Legal Notices

This manual and any examples contained herein are provided "as is" and are subject to change without notice. Hewlett-Packard Company makes no warranty of any kind with regard to this manual, including, but not limited to, the implied warranties of merchantability, non-infringement and fitness for a particular purpose. In this regard, HP shall not be liable for technical or editorial errors or omissions contained in the manual.

Hewlett-Packard Company shall not be liable for any errors or for incidental or consequential damages in connection with the furnishing, performance, or use of this manual or the examples contained herein.

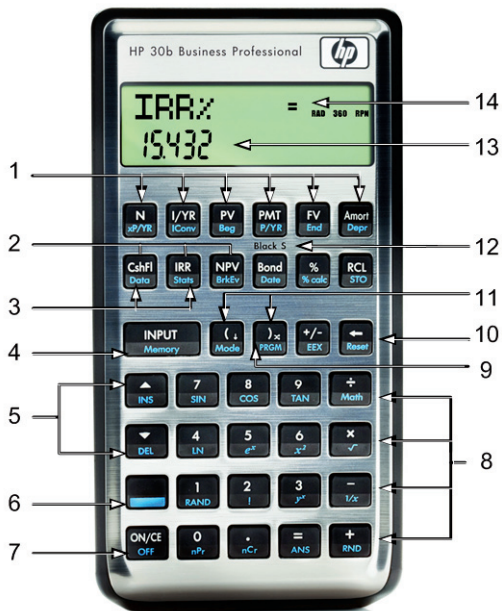
Copyright © 2009 Hewlett-Packard Development Company, L.P.

Reproduction, adaptation, or translation of this manual is prohibited without prior written permission of Hewlett-Packard Company, except as allowed under the copyright laws.

Hewlett-Packard Company
16399 West Bernardo Drive
MS 66M-785
San Diego, CA 92127-1899
USA

Printing History
Edition 1, July 2009

HP 30b Business Professional



Keyboard Map Legend

No.	Feature	No.	Feature
1	Time Value of Money (TVM) keys	8	Mathematical functions (rows) and Math menu
2	Cash flows, Internal Rate of Return (IRR) and Net Present Value (NPV)	9	Program key (opens program mode)
3	Data and Statistics menus	10	Backspace and Reset menu
4	Input key and Memory menu	11	Parentheses and RPN roll-down and swap keys
5	Up and down arrow (scroll) and insert and delete keys	12	Black-Scholes menu (press and hold the shift key followed by the Bond key for Black-Scholes menu)
6	Shift (access shifted function keys and menus printed in blue)	13	Two line display
7	On/Off	14	Annunciator display area

Table of Contents

HP 30b Business Professional	iii
Keyboard Map Legend.....	iv
Welcome to your HP 30b Business Professional financial calculator.....	1
The Keys.....	1
The Shift Key.....	2
The Input Key	2
The Equals Key.....	3
The On Key	3
Two Line Display	3
Customizing the Calculator	4
Menus, Menu Items, and Assigning Values to Menu Items...8	
The Reset Menu	10
Notes about Special Menus	10
Memory and the Memory Menu	11
Storing and Recalling Numbers	11
Reverse Polish Notation (RPN) Mode.....	11
Keys Used to Manipulate the RPN Stack	14
Algebraic Mode	14
Chain Mode	14
Keys and Functions	15
Basic Financial Calculation Example	21
Warranty and Contact Information	24


Replacing the Batteries.....	24
Customer Care.....	26
Product Regulatory & Environment Information	31
Federal Communications Commission Notice.....	31

1 Getting Started

Welcome to your HP 30b Business Professional financial calculator

This booklet is intended to get you started quickly with the basic features of your HP 30b Business Professional financial calculator. Use it for quick reference. For more detailed information about the HP 30b Business Professional, refer to the HP website, www.hp.com/calculators. The user's guide may be found on the website, and it is highly recommended you refer to the user's guide to thoroughly familiarize yourself with the many features of your calculator.

The Keys

Aside from the shift key, , all of the keys on the HP 30b calculator perform more than one function. The primary function of a key is indicated by the characters printed in white on the upper face of the key. Alternate functions are indicated by the characters printed in blue on the lower face of the key, and, in one instance, printed on the keyboard. See Figure 1.

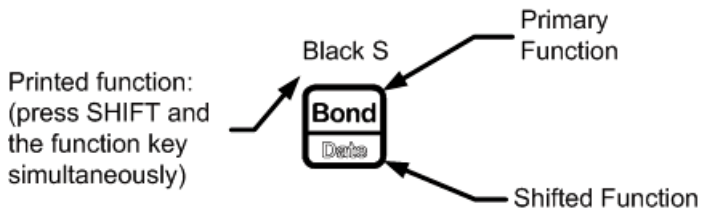







Figure 1


- To specify the primary function on the upperface of the key, press the key alone.
- To specify the shifted function printed in blue on the lower face of the key, press and release the  key, followed by the desired function key.
- To specify the function printed above a key, press and hold  and *simultaneously* press the key below the printed function.

The Shift Key

Pressing the shift key, , turns on a status indicator called an *annunciator* at the top of the display. If you press  once again, or press a function key, the shift annunciator turns off. There are a total of 12 annunciators. When displayed, each signifies the status of the calculator in certain operations. When applicable, the descriptions below identify when an indicator appears on screen.

In this manual, the highlighted portion of the key symbol, or symbols, represents the active function of the key. Unless otherwise indicated, press and release the desired key, or key combination in order from left to right. You do not need to press and hold the keys unless you require the Black-Scholes Calculation menu (**Black S**). Secondary, or *shifted* functions, are preceded by the shift key symbol, .






The Input Key


The Input key, , is used to input values for variables and execute menu items.

The  key is also used in Reverse Polish Notation (RPN) mode to enter


a number on the stack or duplicate it.


The Equals Key

The Equals key, , is used at the end of a mathematical operation to calculate the final result. For example, pressing     in Algebraic mode returns a final result of 3.

The  key, when pressed outside of a mathematical operation, also allows you to request a calculation for the value of an item. This request only applies to items that can be calculated.

The On Key

Pressing the On key, , one time cancels current number entries, mathematical operations, or a menu selection, in that order.

Pressing  repeatedly when performing multiple operations cancels one operation at a time, from the latest to the earliest. For information on resetting the calculator with the Reset menu, refer to the section below titled, *The Reset Menu*.

Two Line Display

There are two lines in the display screen as shown in Figure 2.



Figure 2 Display Screen

The top line of the screen displays operation status, operator symbols, annunciators, and abbreviations of the registers, variables, and menu names. This line is referred to as the *top line*. In Figure 2, **SIN** is on the top line. Note the **RPN** annunciator to the right of the display, indicating that the calculator's operating mode is RPN. The bottom line displays numbers you have entered, or results. This line is referred to as the *bottom line*.

Customizing the Calculator






Table 1-1 lists the functions available for customizing the calculator in the Mode menu, including setting the default language for messages displayed on screen. To open the Mode menu, press . Use the arrow keys,  and , to navigate through the menu. To view the available options in a menu and change a setting, press  with an item displayed. The displayed setting is the active setting. To exit the menu, press .

Table 1-1 Customizing the Calculator








Display/ Function	Description
Turn the calculator on/off	To turn the calculator on, press  . To turn it off, press  . The calculator automatically turns off after approximately five minutes if not in use.
Display contrast	To adjust the display contrast, press and hold  while simultaneously pressing either  or  . Each press of the  or  key increases or decreases the contrast of the display, respectively.

Table 1-1 Customizing the Calculator







Display/ Function	Description
FIX=	<p>Display precision (the number of digits displayed to the right of the decimal point). Default is 2.</p> <p>Key in the number of digits you want and press , or press  until the number of digits you want is displayed. The display precision can be any number from 0-11. If you specify -1, the calculator displays numbers with the most appropriate number of digits after the decimal point. If you find you need to change the FIX setting often, use the following shortcut:</p> <ol style="list-style-type: none"> 1. Press  and release it. Check that the secondary function annunciator is displayed. 2. Press  again, and, without releasing it, press a key, 0-9 that corresponds to the desired FIX setting. FIX settings for 10 and 11 are not available using this shortcut. If you press the decimal point, , instead of a numbered key, FIX=-1 is selected.
Degree or Radian	<p>Angular mode in degrees or radians for trigonometric functions. Default is Degree.</p> <p>Pressing  toggles between these options.</p>

Table 1-1 Customizing the Calculator















Display/ Function	Description
mm.ddyyyy or dd.mmyyyy	<p>Format for dates. December 3, 2010 is entered as 12.032010 in mm.ddyyyy format, or 3.122010 in dd.mmyyyy format. Note the (.) in both formats separating the first and second groups. Default is mm.ddyyyy format.</p> <p>Pressing  toggles between these options.</p> <p>Note that when a date is displayed, a number between 1 and 7 also displays at the right of the screen. This number indicates the day of the week corresponding to that date. Monday is 1, and Sunday is 7.</p> <p>NOTE: in 360-day calendar mode (Cal.360), days of the week are displayed only if the date is valid.</p>
1.23 or 1,23	<p>Selects point or comma as decimal separator.</p> <p>Default is decimal point, 1.23.</p> <p>Pressing  toggles between these options.</p>
1000.00, 1,000.00, 1000,00 or 1.000,00	<p>Selects thousands separator.</p> <p>Default is none, 1000.00.</p> <p>Pressing  toggles between these options.</p> <p>NOTE: the 1000.00 and 1,000.00 options are only available if the decimal separator is set for point (.); 1000,00 and 1.000,00 are available only if the decimal separator is set for comma (,).</p>

Table 1-1 Customizing the Calculator

Display/ Function	Description
Chain, Algebraic, or RPN	<p>Calculation mode. Default is Chain.</p> <p>For more information on operating modes, refer to the sections titled, <i>Reverse Polish Notation (RPN) Mode</i>, <i>Algebraic Mode</i>, and <i>Chain Mode</i> below. Pressing  cycles through these options.</p>
English, Français, Deutsch, or Español	<p>Language setting for messages displayed on screen. Default is English.</p> <p>Pressing  cycles through these options.</p>
Actual or Cal.360	<p>Calendar options for bonds and date calculations. Default is Actual.</p> <p>Pressing  toggles between these options.</p>
Annual or Semiannual	<p>Bond type. Default is Annual.</p> <p>Pressing  toggles between these options.</p>
TVM Standard or TVM Canada	<p>Activate or deactivate the compounding per year option (C/YR) in time value of money (TVM) calculations. This option is primarily used for Canadian mortgage calculations.</p>

Menus, Menu Items, and Assigning Values to Menu Items

Many of the calculator's functions are located within menus. A *menu* is a catalog which permits you to select an item from a list of options. To access a menu, press the key, or secondary-function, key combination for the menu in which you wish to work. To exit a menu, press . For example, to access the Bond menu, press . Once opened, you can scroll through the items in the menu by pressing  or  repeatedly. When you arrive at the last item in a menu, pressing  returns you to the first item. Similarly, pressing  once on the first menu item scrolls to the last item in the menu. Some menus have sub-menus. If an item represents a sub-menu, pressing  with that menu item displayed opens the sub-menu.

Most menu items consist of two parts: a name and an associated number. For example, the **Fixed** item in the Break-even menu is displayed in Figure 3.



Figure 3

The large (=) annunciator shows that the value assigned to **Fixed** is **120,000**.


If you perform a calculation with this item displayed by pressing








for example, **Fixed** is still selected as the current item, but the large (=) annunciator is now turned off, indicating the **3** is not the value assigned to **Fixed**. See: Figure 4.



Figure 4

At this point, to return to the display of the **Fixed** menu item shown in Figure 3, press .









There are four types of menu items:






1. **Read/write.** Read/write menu items, such as **Fixed** in the Break-even menu shown above, are easily recognizable, because when they are selected, both the **INPUT** and small (=) annunciators are lit. When lit, these annunciators indicate that keying in a number and pressing  will store the entered number in the displayed menu item. Pressing  (outside of a mathematical operation) calculates the value for that item based on available data.
2. **Read-only.** Read-only items such as Internal Rate of Return (**IRR%**) in the IRR menu are display-only; they are values computed internally by the calculator.
3. **Write-only.** Write-only items, such as investment interest rate (**Inv. I%**) in the Net Present Value (NPV) menu, are similar to read/write items in that the **INPUT** annunciator is lit when these items are selected, indicating that keying in a number and pressing  stores that number in that menu item. However, the  key does not calculate a value for that item.
4. **Special items.** Special items, such as the **Degree/Radian** option in the Mode menu, the items of the Reset menu, and the items of the Percent Calculation (**%calc**) menu perform an action when  is

pressed. Depending on the menu, this action can be the selection of a sub-menu (%calc), changing a mode or setting (Mode menu), or erasing data (Reset menu).


The Reset Menu

The Reset menu allows you to reset some, or all, of the menu items, variables, and registers to their default values.





To open the Reset menu, press  . **TVM** displays on the top line. Press  or  repeatedly to scroll to a specific item. To validate a choice and reset the selected items, press . Press  to cancel. If you select the command to reset the cash flow (**Cash Flow**), statistics (**Stats**), or all values (**All**) items, you will be prompted to confirm your choice. At the **Del. All?**, **Del. Data?**, and **Del. CF?** prompts, press  again to confirm the reset, or  to cancel.

While working within a specific menu, pressing   takes you directly to the item of the Reset menu that allows you to reset that specific menu. For example, if you are working in the Bond menu and you wish to reset all your entries in the Bond menu, with any item of the Bond menu displayed, press  . **Bond** displays on screen. At this prompt, pressing  resets the Bond menu and returns you to the last item you were working with in the Bond menu.




Notes about Special Menus

The Mode, Memory, Math and Reset menus are unique menus; they allow you to work in another menu simultaneously without having to exit. For example, if you were working in the Bond menu prior to entering one of these menus, pressing  to exit returns you to your previous work in the Bond menu.





Memory and the Memory Menu

The Memory menu contains the following items: memories 1–9 (**Mem 1–9**) and 0 (**Mem 0**), **Cash Flow**, Statistics (**Stats**), and **Memory**. To enter the menu, press  . Press  or  repeatedly to scroll through the items starting with memory 1 (**Mem 1**).


The Cash Flow and Statistics menus share the same memory and are limited to a combined total of 50 memory slots. The number displayed with **Memory** refers to the number of remaining memory slots. When the cash flow or statistics items are displayed, a number also appears on the bottom line. This number indicates the number of memory slots used by the menu.






Pressing  with this number displayed resets the memory of the displayed menu item and erases all entered data. Since entering data in these menus can represent a significant amount of work, you will be asked to confirm your choice. At the **Del.Data?** or **Del.CF?** prompts, press  to confirm, or  to cancel.

Storing and Recalling Numbers


To store a number in the display, press  , followed by the number of the memory in which you wish to store that number, (1-9, or 0). To recall the number later on, press  followed by the memory number. When a memory item is displayed, you can key in a new number and modify the value of the memory by pressing .

Reverse Polish Notation (RPN) Mode

The following information is a brief overview of how RPN works. In RPN mode, numbers are entered first, separated by pressing ,

by an operation key. Pressing the  key is optional after entering a number, if the next key pressed is an operation. Each time you press an operation or function key in RPN, the answer is calculated immediately and displayed. For example, suppose you wanted to add two numbers in RPN, 1 and 2. Press    . The result, **3.00**, is calculated and displayed immediately.







There are four special registers used for storing numbers during calculations, which are stacked on top of one another. Called the *stack*, these registers are designated X, Y, Z, and T. X is on the bottom, and T is on the top. Most often, the number in the display is the number in the X-register. Primarily, the numbers in the X- and Y-registers are the numbers used in calculations. The Z and T registers are used for the automatic retention of intermediate results during chain calculations.

The  key separates numbers in the vertical stack and positions them in the X- and Y-registers, and, in addition to displaying intermediate results, this vertical arrangement of the stack allows you to copy and rearrange numbers without reentering them. For more complex problems requiring two or more operations, you do not need to enter parentheses to set operational priority. Key in numbers and operations inside the parentheses first, followed by those outside of the parentheses. If a problem has more than one set of parentheses, start by working with the operations and numbers in the innermost parentheses and work your way out.





For example, in RPN mode calculate $(3 + 4) \times (5 + 6)$. Although this is a simple example, you can use the principles introduced here when working with more complex problems.

One way to calculate this problem is to key in the numbers and operations within the parentheses first, followed by the operation outside of the parentheses. See Table 1-2.






Table 1-2

Keys	Display and Description
	 <p>Inputs the numbers and the operation in the first set of parentheses. Intermediate results are displayed. Note the (+) and (RPN) annunciators.</p>
	 <p>Inputs the numbers and the operation in the second set of parentheses. Intermediate results are displayed. Note the (+) annunciator.</p>
	 <p>Finishes the operation and displays the results.</p>

Keys Used to Manipulate the RPN Stack


- Press  to perform a roll down of the stack. Note the small arrow on the key. A roll down moves the numbers in each register down one level, and the number in the bottom register moves up to the top of the stack.
- Press  to perform a swap of the stack. Note the small symbol on the key. A swap operation exchanges the numbers of the X and Y registers of the stack.
- If no menu is selected, the  key performs the roll down operation, and the  key performs the swap operation.

Algebraic Mode






To perform the same example in Table 1-2 in Algebraic mode, use parentheses to set the order of operation, and key in the expression as it is written from left to right. Press    (five times) followed by  to set the operating mode to Algebraic. The message on screen, **Algebraic**, confirms your choice. Press  to return to the default calculator screen, then

press:           

Note the expression displays on screen in the order in which it is keyed.

Press  to return a result of **77.00**.

Chain Mode

To perform the same example in Chain mode, use parentheses to set the order of operation as you did in Algebraic mode. Calculations in Chain mode are interpreted in the order in which they are entered. If you press an operation key,    , after pressing , the calculation is continued using the currently displayed value. Use parentheses to set the

order of operation, if you wish to override the left-to-right order of entry.

Keys and Functions

Table 1-3 describes the keys and their functions. Use this table for quick reference. For a complete list of functions, refer to the *HP 30b Business Professional User's Guide*.

Table 1-3 Keys and Descriptions











Keys	Description
	Stores or calculates the number of payments or compounding periods.
 	Multiplies a value by the number of payments per year and stores as N.
	Stores or calculates the nominal, annual interest rate.
 	Interest Conversion menu. Used to convert between Nominal (Nom.%) and Effective (Eff.%) interest rates given compounding periods per year (C/YR).
	Stores or calculates the present value (PV). To a lender or borrower, PV is the amount of a loan; to an investor, PV is the initial investment. PV always occurs at the beginning of the first period.
 	Sets Begin mode (Beg). Payments occur at the beginning of each compounding period.
	Stores or calculates the amount of each periodic payment.

Table 1-3 Keys and Descriptions















Keys	Description
 	Stores the number of payments or compounding periods per year.
	Stores or calculates the future value (FV), a final cash flow. FV always occurs at the end of the last compounding period.
 	Sets End mode (End). Payments occur at the end of each compounding period.
	Amortization. The Amortization menu calculations are based on values stored in the following TVM registers: N, I/R, PV, PMT, P/YR.
 	Depreciation menu. Calculate the depreciation of assets with six different depreciation models.
	Cash Flow list. Enter cash flows into the list as a set of numbered pairs, CF(n) and #CF(n), where n is the index of the cash flow list.
 	Data menu. Enter and store data for statistical operations. Enter a list of x values for one-variable statistics, a list of pairs, (x, F) for weighted, one-variable statistics, a list of numbers x for one-variable statistics, or a list of pairs, (x, y) for two-variable statistics. To enter data, key in a number and press  .
 	Opens the Internal Rate of Return (IRR) and Net Present Value (NPV) menus for cash flow analysis.

Table 1-3 Keys and Descriptions
















Keys	Description
 	<p>Statistics menu. Note: if you attempt to open the Statistics (Stats) menu before entering data, you will be redirected to the Data menu. When opened, the Stats menu displays 2 Vars for two-variable statistics. Press  repeatedly to select the type of statistical operations desired, two-variable, (2 Vars), one-variable, (1 Var), or one-variable weighted (1 Weight). After selecting the type of statistical operation you want, select a sub-menu (Descriptive, Predictions, Sums, and Quartiles) by pressing  or . Press  to open it.</p>
 	<p>Break-even menu. Used to analyze problems involving profit, manufacturing cost, and a fixed price to develop and market products sold at a given price.</p>
	<p>Bond menu. Used for bond calculations.</p>
 	<p>Date Calculation menu. The Date Calculation menu is used to calculate the number of days between two dates, or a second date given a number of days from an initial, or final date.</p>
 	<p>Black-Scholes menu. Performs Black-Scholes calculations. Note: press and hold  and press  simultaneously.</p>

Table 1-3 Keys and Descriptions










Keys	Description
	Percent. Multiplies the displayed number by 100.
	Percent Calculation menu. Used for analyzing business problems involving markup, margin, percent change, and percent of total.
	Recall. Recalls numbers stored in designated memory registers.
	Store. Stores numbers in memory registers.
	Memory menu. The Memory menu contains the following items: the contents of memories 1–9 and 0, the number of entries in the Cash Flow memory, the number of entries in the Statistics memory, and the remaining memory slots.
	Parentheses.
	Mode menu. Sets calculator preferences and number display.
	Program. Creates programs. See the <i>HP 30b Business Professional User's Guide</i> for more information about creating and editing programs.
	Change sign. Changes the sign of a displayed number.

Table 1-3 Keys and Descriptions




















Keys	Description
 	Scientific notation. Displays numbers in scientific notation.
	Backspace. Deletes one number at a time to the left of the cursor, starting with the most recently entered number.
 	Reset menu. Resets some, or all, of the registers.
 	Insert. Inserts a number into a list.
 	Delete. Deletes a number from a list.
 	Calculates sine.
 	Calculates cosine.
 	Calculates tangent.
 	Math menu. Includes trigonometric and inverse trigonometric functions, probability, absolute value, logarithmic functions, and PI.
 	Calculates natural log.

Table 1-3 Keys and Descriptions























Keys	Description
 	Calculates natural exponent to the power of x.
 	Calculates square of x.
 	Calculates square root.
 	Executes the Random function. Returns a random number in the range $0 < x < 1$.
 	Calculates factorial of x (where $-253 < x \leq 253$). The Gamma function is used to calculate x! for non-integers or negative numbers.
 	Calculates y to the x power.
 	Calculates the reciprocal.
 	nPr: the number of permutations of n items taken r at a time.
 	nCr: the number of combinations of n items taken r at a time
 	In Chain or Algebraic mode, recalls the result of the last operation. In RPN mode, returns the content of the Last Number variable.

Table 1-3 Keys and Descriptions

Keys	Description
 	Rounds x internally to the number specified by the display format.

Basic Financial Calculation Example

Table 1-4 illustrates how easily you can perform financial calculations using the HP 30b Business Professional. For more examples and information on financial problems, including cash flows and using cash flow diagrams, refer to the materials available on [www.hp.com\calculators](http://www.hp.com/calculators).

Calculate the monthly payment amount on a 30-year loan of 125,000.00 with a 6.9% annual interest rate, compounded monthly. Assume payments occur at the end of the compounding period, and there are 12 payments per year. This problem may be calculated in RPN, Algebraic, or Chain mode. The problem is calculated in the table below with the mode menu items in their default settings.

Table 1-4






Keys	Display and Description
   	 <p>Clears TVM register.</p>

Table 1-4













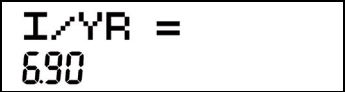





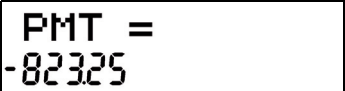

Keys	Display and Description
 	<div data-bbox="433 283 800 383" style="border: 1px solid black; padding: 10px; text-align: center;"> <p>000</p> </div> <p data-bbox="409 396 871 499">Verifies payments occur at the end of each compounding period (optional, as End mode is the default setting).</p>
   	<div data-bbox="433 544 800 645" style="border: 1px solid black; padding: 10px; text-align: center;"> <p>P/YR = 1200</p> </div> <p data-bbox="409 658 871 808">Enters 12 as the number of payments per year as required by the problem. To change the number of payments per year, key in the desired number, then press . Note this value remains stored until you change it.</p>
   	<div data-bbox="433 856 800 956" style="border: 1px solid black; padding: 10px; text-align: center;"> <p>N = 36000</p> </div> <p data-bbox="409 969 871 1060">Enters the number of monthly compounding periods (N) for a 30-year loan (12 payments per year for 30 years).</p>

Table 1-4

Keys	Display and Description
	 <p>Enters the annual interest rate as 6.9%.</p>
	 <p>Enters the present value of the loan.</p>
	 <p>Enters the future value of the loan after it has been paid off.</p>
	 <p>Calculates monthly payment amount. Note the sign is negative; it is money you pay out.</p>

Warranty and Contact Information

Replacing the Batteries

The calculator uses two, 3 Volt CR2032 Lithium batteries. The low battery symbol () appears when battery power is nearly exhausted. Use only fresh batteries when replacing the battery. Do not use rechargeable batteries. To install a new battery:

1. Turn off the calculator. Changing the batteries with the calculator on may erase the contents of the Continuous Memory.
2. Remove only one battery at a time. Gently pry open the back cover. Remove one of the old batteries and replace it with a new battery with the positive polarity symbol facing outward.
3. Remove the other old battery and replace it with a new battery with the positive polarity symbol facing outward.
4. Replace the back cover.

Warning! There is danger of explosion if the battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions. Do not mutilate, puncture, or dispose of batteries in fire. The batteries can burst or explode, releasing hazardous chemicals.

HP Limited Hardware Warranty and Customer Care

This HP Limited Warranty gives you, the end-user customer, express limited warranty rights from HP, the manufacturer. Please refer to HP's Web site for an extensive description of your limited warranty entitlements. In addition, you may also have other legal rights under applicable local law or special written agreement with HP.

Limited Hardware Warranty Period

Duration: 12 months total (may vary by region, please visit www.hp.com/support for latest information).

General Terms

EXCEPT FOR THE WARRANTIES SPECIFICALLY PROVIDED FOR IN SUBSEQUENT PARAGRAPHS OF THIS SECTION, HP MAKES NO OTHER EXPRESS WARRANTY OR CONDITION WHETHER WRITTEN OR ORAL. TO THE EXTENT ALLOWED BY LOCAL LAW, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, SATISFACTORY QUALITY, OR FITNESS FOR A PARTICULAR PURPOSE IS LIMITED TO THE DURATION OF THE EXPRESS WARRANTY SET FORTH IN THE SUBSEQUENT PARAGRAPHS OF

THIS SECTION. Some countries, states or provinces do not allow limitations on the duration of an implied warranty, so the above limitation or exclusion might not apply to you. This warranty gives you specific legal rights and you might also have other rights that vary from country to country, state to state, or province to province.

TO THE EXTENT ALLOWED BY LOCAL LAW, THE REMEDIES IN THIS WARRANTY STATEMENT ARE YOUR SOLE AND EXCLUSIVE REMEDIES. EXCEPT AS INDICATED ABOVE, IN NO EVENT WILL HP OR ITS SUPPLIERS BE LIABLE FOR LOSS OF DATA OR FOR DIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFIT OR DATA), OR OTHER DAMAGE, WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE. Some countries, States or provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

FOR CONSUMER TRANSACTIONS IN AUSTRALIA AND NEW ZEALAND: THE WARRANTY TERMS CONTAINED IN THIS STATEMENT, EXCEPT TO THE EXTENT LAWFULLY PERMITTED, DO NOT EXCLUDE, RESTRICT OR MODIFY AND ARE IN ADDITION TO THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE SALE OF THIS PRODUCT TO YOU.

Notwithstanding the above disclaimers, HP expressly warrants to you, the end-user customer, that HP hardware, accessories and supplies will be free from defects in materials and workmanship after the date of purchase, for the period specified above. If HP receives notice of such defects during the warranty period, HP will, at its option, either repair or replace products which prove to be defective. Replacement products may be either new or like-new.

HP also expressly warrants to you that HP software will not fail to execute its programming instructions after the date of purchase, for the period specified above, due to defects in material and workmanship when properly installed and used. If HP receives notice of such defects during the warranty period, HP will replace software media which does not execute its programming instructions due to such defects.

Exclusions

HP does not warrant that the operation of HP products will be uninterrupted or error free. If HP is unable, within a reasonable time, to repair or replace any product to a condition as warranted, you will be entitled to a refund of the purchase price upon prompt return

of the product with proof of purchase.

HP products may contain remanufactured parts equivalent to new in performance or may have been subject to incidental use.

Warranty does not apply to defects resulting from (a) improper or inadequate maintenance or calibration, (b) software, interfacing, parts or supplies not supplied by HP, (c) unauthorized modification or misuse, (d) operation outside of the published environmental specifications for the product, or (e) improper site preparation or maintenance.

Customer Care

In addition to the one year hardware warranty your HP calculator also comes with one year of technical support. If you need assistance, HP customer care can be reached by either email or telephone. Before calling please locate the call center nearest you from the list below. Have your proof of purchase and calculator serial number ready when you call.

Telephone numbers are subject to change, and local and national telephone rates may apply. If your country or area does not appear in the table below, or if you need additional support information, please visit the web at: www.hp.com/support.

Table 1-5 Customer Care

Country	Hotline Phone	Country	Hotline Phone
Algeria	www.hp.com/ support	Anguila	1-800-711-2884
Antigua	1-800-711-2884	Argentina	0-800-555-5000
Aruba	800-8000 ; 800- 711-2884	Australia	1300-551-664
Austria	01 360 277 1203	Bahamas	1-800-711-2884
Barbados	1-800-711-2884	Belgium (English)	02 620 00 86
Belgium (French)	02 620 00 85	Bermuda	1-800-711-2884

Table 1-5 Customer Care

Country	Hotline Phone	Country	Hotline Phone
Bolivia	800-100-193	Botswana	www.hp.com/ support
Brazil	0-800-709-7751	British Virgin Islands	1-800-711-2884
Bulgaria	www.hp.com/ support	Canada	800-HP-INVENT
Cayman Island	1-800-711-2884	Chile	800-360-999
China	800-820-9669	Columbia	01-8000-51-4746- 8368 (01-8000-51- HP INVENT)
Costa Rica	0-800-011-0524	Croatia	www.hp.com/ support
Curacao	001-800-872-2881 + 800-711-2884	Czech Republic	296 335 612
Denmark	82 33 28 44	Dominica	1-800-711-2884
Dominican Republic	1-800-711-2884	Equador	1-999-119 ; 800- 711-2884 (Andinatel) 1-800-225-528; 800-711-2884 (Pacifitel)
Egypt	www.hp.com/ support	El Salvador	800-6160
Estonia	www.hp.com/ support	Finland	09 8171 0281

Table 1-5 Customer Care

Country	Hotline Phone	Country	Hotline Phone
France	01 4993 9006	French Antilles	0-800-990-011 ; 800-711-2884
French Guiana	0-800-990-011 ; 800-711-2884	Germany	069 9530 7103
Ghana	www.hp.com/ support	Greece	210 969 6421
Grenada	1-800-711-2884	Guadelupe	0-800-990-011 ; 800-711-2884
Guatemala	1-800-999-5105	Guyana	159 ; 800-711- 2884
Haiti	183 ; 800-711- 2884	Honduras	800-0-123 ; 800- 711-2884
Hong Kong	800-933011	Hungary	www.hp.com/ support
India	1-800-114772	Indonesia	(21)350-3408
Ireland	01 605 0356	Italy	02 754 19 782
Jamaica	1-800-711-2884	Japan	00531-86-0011
Kazakhstan	www.hp.com/ support	Latvia	www.hp.com/ support
Lebanon	www.hp.com/ support	Lithuania	www.hp.com/ support
Luxembourg	2730 2146	Malaysia	1800-88-8588

Table 1-5 Customer Care

Country	Hotline Phone	Country	Hotline Phone
Martinica	0-800-990-011; 877-219-8671	Mauritius	www.hp.com/ support
Mexico	01-800-474- 68368 (800 HP INVENT)	Montenegro	www.hp.com/ support
Montserrat	1-800-711-2884	Morocco	www.hp.com/ support
Namibia	www.hp.com/ support	Netherland Antilles	001-800-872-2881 ; 800-711-2884
Netherlands	020 654 5301	New Zealand	0800-551-664
Nicaragua	1-800-0164; 800- 711-2884	Norway	23500027
Panama	001-800-711-2884	Paraguay	(009) 800-541- 0006
Peru	0-800-10111	Philippines	(2)-867-3551
Poland	www.hp.com/ support	Portugal	021 318 0093
Puerto Rico	1-877 232 0589	Romania	www.hp.com/ support
Russia	495 228 3050	Saudi Arabia	www.hp.com/ support
Serbia	www.hp.com/ support	Singapore	6272-5300

Table 1-5 Customer Care

Country	Hotline Phone	Country	Hotline Phone
Slovakia	www.hp.com/ support	South Africa	0800980410
South Korea	00798-862-0305	Spain	913753382
St Vincent	01-800-711-2884	St Kitts & Nevis	1-800-711-2884
St Lucia	1-800-478-4602	St Marteen	1-800-711-2884
Suriname	156 ; 800-711- 2884	Swaziland	www.hp.com/ support
Sweden	08 5199 2065	Switzerland (French)	022 827 8780
Switzerland	01 439 5358	Switzerland (Italian)	022 567 5308
Taiwan	00801-86-1047	Thailand	(2)-353-9000
Trinidad & Tobago	1-800-711-2884	Tunisia	www.hp.com/ support
Turkey	www.hp.com/ support	Turks & Caicos	01-800-711-2884
UAE	www.hp.com/ support	United Kingdom	0207 458 0161
Uruguay	0004-054-177	US Virgin Islands	1-800-711-2884
USA	800-HP INVENT	Venezuela	0-800-474-68368 (0-800 HP INVENT)
Vietnam	+65-6272-5300	Zambia	www.hp.com/ support

Product Regulatory & Environment Information

Federal Communications Commission Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio or television technician for help.

Modifications

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Hewlett-Packard Company may void the user's authority to operate the equipment.

Declaration of Conformity for products Marked with FCC Logo, United States Only

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. If you have questions about the product that are not related to this declaration, write to:

Hewlett-Packard Company
P.O. Box 692000, Mail Stop 530113
Houston, TX 77269-2000

For questions regarding this FCC declaration, write to:

Hewlett-Packard Company
P.O. Box 692000, Mail Stop 510101
Houston, TX 77269-2000 or call HP at 281-514-3333

To identify your product, refer to the part, series, or model number located on the product.

Canadian Notice

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Avis Canadien

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

European Union Regulatory Notice

This product complies with the following EU Directives:

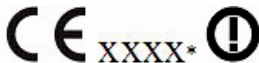
- Low Voltage Directive 2006/95/EC
- EMC Directive 2004/108/EC

Compliance with these directives implies conformity to applicable harmonized European standards (European Norms) which are listed on the EU Declaration of Conformity issued by Hewlett-Packard for this product or product family.

This compliance is indicated by the following conformity marking placed on the product:



This marking is valid for non-Telecom products and EU harmonized Telecom products (e.g. Bluetooth).



This marking is valid for EU non-harmonized Telecom products. *Notified body number (used only if applicable—refer to the product label).

Hewlett-Packard GmbH, HQ-TRE, Herrenberger Strasse 140, 71034 Boeblingen, Germany

The official EU CE declaration of conformity for this device may be found at:

<http://www.hp.com/go/certificates>.

Japanese Notice

この装置は、クラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。

取扱説明書に従って正しい取り扱いをして下さい。 VCCI-B

Disposal of Waste Equipment by Users in Private Household in the European Union



This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

Chemical Substances

HP is committed to providing our customers with information about the chemical substances in our products as needed to comply with legal requirements such as REACH (*Regulation EC No 1907/2006 of the European Parliament and the Council*). A chemical information report for this product can be found at:

<http://www.hp.com/go/reach>

Perchlorate Material - special handling may apply

This calculator's Memory Backup battery may contain perchlorate and may require special handling when recycled or disposed in California.

产品中有毒有害物质或元素的名称及含量
根据中国《电子信息产品污染控制管理办法》

部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
PCA	X	0	0	0	0	0
外觀殼 / 字鍵	0	0	0	0	0	0

0：表示该有毒有害物质在该部件所有均质材料中的含量均在SJ/T 11363-2006标准规定的限量要求以下。

X：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T 11363-2006标准规定的限量要求。

表中标有“X”的所有部件都符合欧盟RoHS法规

“欧洲议会和欧盟理事会2003年1月27日关于电子电器设备中限制使用某些有害物质的2002/95/EC号指令”

注：环保使用期限的参考标识取决于产品正常工作的温度和湿度等条件