

## The HP49G Pocket Guide

*The HP49G Pocket Guide is one of the best documents presently available to using the HP49G. Never has HP introduced a calculator with so much functionality with so little documentation. This is a clear indication of their having to introduce the HP49 for the back to school market of 1999. Below are corrections to the Pocket Guide by Eric Rechlin. It is clear that they didn't even bother to use a spell checker before printing. I copied Eric's posting and formatted it to Times New Roman adding line spacing for easier reference and note adding. Aside from the errors HP did make one improvement. They numbered the pages! rjn 8/30/99*

*It looks like I didn't bother to use a spell checker either (thank you Notepad). Now my typos are fixed. Eric 1999/09/10*

Guide to this list of corrections: hardkeys appear in brackets like [TOOL] and softkeys appear in pipes like |PURGE|.

On multiple pages:

Equation Writer should be two words, not one, if you go by the way it's written in the User's Guide

Use the HP49 minifont, not the HP48 minifont. There's a **big** difference: the 49's font is monospaced and supports lower-case letters.

For cases where softkey menus are shown, remember the 49 supports up to 5 of any characters, so it's |FLAGS| not |FLAG|.

Check spacing between words in the normal font and words in the HP48 font: some don't have enough spaces and others have too many spaces, which looks really bad.

On both the cover and page 3, the infinity symbol is shown instead of a multiplication sign.  
The HP49 keys font has one big problem: the [X] and [multiplication] key symbols look nearly identical! Please fix this somehow.

Page 1:

"You'll find such power tools either on their own keys or via [TOOL]." isn't quite right (are any "power tools" on [TOOL]?). Maybe it could be better written as "You'll find such power tools both on their own keys and via [APPS]."

Page 2:

"(rectangular, polar, cylindrical, or spherical)" should be "(rectangular, polar/cylindrical, or spherical)"

"you adjust setting by highlighting" should be "you adjust settings by highlighting"

"This book assumes that Flag -117 is clear" should be "This book assumes that Flag -117 is set"

Page 3:

"to those labelled" could be "to those labeled"

Page 4:

"As you'll see with the simple math exercises on the previous page" should be "As you saw with the simple math exercises on the previous page"

"and its result, if any, on the right side of the screen" should be "and its result on the right side of the screen" (there is ALWAYS a result in algebraic mode)

Page 5:

"This neatly highlights " should be "This neatly highlights our"

"indefinitely --maintaining" should be "indefinitely--maintaining"

Page 6:

"in Area," should be "in AREA,"

Here is a replacement for part of the section under Invoking Names:

"In any menu, including VAR, a menu item is just a typing aid, a shortcut for typing the name and, if in RPN mode, pressing [ENTER]. When in algebraic mode, [ENTER] must be manually pressed to evaluate the name, which is placed on the command line. So pressing a VAR menu key treats that name like any other name, putting its name on the command line if in algebraic mode. So, after the above examples, pressing [QUIZ] (or typing [ALPHA][ALPHA]QUIZ), followed by [ENTER] (if in algebraic mode), will put 93 into the history.

"99 STO(QUIZ)" should be "99\>QUIZ" (where \> is the STO triangle/arrow)

Page 7:

Some more reserved names are MODULO, REALASSUME, PERIOD, VX, EPS, CASINFO, and PRIMIT. These are all for the CAS and should be listed on this page as well.

Page 8:

"For example, press [DIR3] now" should be "For example, press [DIR3] now, followed by [ENTER] if you are in algebraic mode"

"whose menu selection, [PGDIR]" should be "whose menu selection, [PURGE]"

The last paragraph on this page is completely wrong. Here is a replacement:

"Notice that the FILER menu has two numbers at the top for measuring memory storage. The first number measures the free memory (in bytes) left in your machine; the second number measures the size (in bytes) of the currently selected object(s)."

Page 10:

"shows you the ASCII NUMber" should be "shows you the ASCII number"

"use [UpArrow] and [DownArrow] to select" should be "use [LeftArrow] and [RightArrow] to select" (this makes a little more sense)

"the menu available under [RightShift][CHARS]" should be "the menu available under [LeftShift][PRG][NXT][CHARS]"

Page 11:

"5\*Hyp" in the pretty-print formula should be "5\*HYP"

The third to the bottom paragraph could be better written as this:

"Note that you cannot use implied multiplication (i.e. omit the [\*] keystroke) if multiple variables are in a row, or they are interpreted as a single multi-character variable name."

Page 12:

Please use the HP49's font here, and remember that it uses lower-case names and allows up to 5 characters in a label (#55 looks especially bad).

Page 13:

"The [RightShift]-shifted [RightShift][UNITS] menu items" should be "The [LeftShift]-shifted [RightShift][UNITS] menu items"

Page 14:

Same applies here as on page 12.

Page 16:

The result is actually  $P^2 * (\ln(X) + \ln(Y))$

In the second to the bottom paragraph, "on the command line" should be "in the Equation Writer" (or else it won't work)

Page 17:

The result is not "X=2" but "{X=2 X=1/5}" (in pretty print, of course)

Page 18:

"to your prefernces" should be "to your preferences"

"Set radians mode" should be "Set radians mode if it isn't already set", as radians mode is the default

"select Reset plot" should be "select Reset all"

Page 20:

"The HP 49G can draw 15 types of mathematical plots" should be "The HP 49G can draw 16 types of mathematical plots" (this mistake is even on the outside packaging of the 49G!)

Fast3D should be between Slopefield and Wireframe.

Page 22:

Numerical differentiation doesn't work this way; maybe it's a bug in ROM

Stepwise differentiation (Step-by-step differentiation?) doesn't work this way either; maybe it's also a bug in ROM

The implicit result should be " $2 * Y(X) * d1Y(X) + 2 * X = 0$ ", and "derY(X,1)" should be "d1Y(X)" (two occurrences)

Page 23:

The first example integral is missing the division bar.

"Now press [RightShift][EVAL] to calculate the integral" should be "Now press [ENTER] once more to calculate the integral"

In the second keystroke example, for the double integral, remove the [ALPHA] before each of the two [X]s: it's unnecessary.

"you just press [RightShift][EVAL] once more" should be "you just press [ENTER] once more"

Nothing under the Symbolic Integration header seems to apply; maybe there is a big bug in the ROM.

Page 24:

"Note that you can use that menu to set" should be "Note that you can use that menu, if flag -117 is set, to set" (or maybe this is a bug in the ROM)

"coordi-nates" should be "coordinates"

"dimen-sional" should be "dimensional"

Entering [10,\<45] (where \<) is the angle symbol) doesn't work! You must leave out the comma for it to work (maybe this is a bug in ROM).

Page 25:

[9][+/-][SPC][SPC][1] should be [9][+/-][SPC][1]

"Notice how the [SPC] key becomes the [,] (comma) key automatically in algebraic mode." Sorry, but this doesn't work.

"then [DownArrow]" should be "then [DownArrow][RightShift][LeftArrow]"

Page 26:

The paragraphs beginning with "Results" and "And note" should be replaced with this:

"Note that the results (Mean: 78.42 and Std Dev: 15.00...) have been put into a list in the history back at the default screen."

Page 28:

STACK and MEM are missing at the beginning, CHARS and MODES go between PICT and IN, TIME goes after OUT, and RUN and ERROR should be swapped around.

Page 30:

"re-sponse" should be "response"

Page 31:

"To acknowledge more than once such alarm, you can use |ACKA|." should be "To acknowledge all past-due alarms, you can use |ACKA|."

Page 32:

Use these new paragraphs instead of what is there:

"Receiver: Press [OK] and move through the directory tree to the directory where the incoming data is to be stored. Press [NXT] and then [RECV]."

"Sender: Press [OK] and move through the directory tree to the directory where the outgoing data is now stored. Use the arrow keys and [ENTER] to select the object you want to send; they'll be numbered to indicate their order of transmission. Now press [NXT] and then [SEND]."

"System Memory" should be under RAM. Under Flash ROM, you need these:

"System Software

(Operating system, CAS, and other built-in software--no alteration)"

"Port 2

(Any object types--storage only--no alteration!)"

"Port memory is different than" should be "Port memory is different from"

Page 33:

"objects residing in Port memory" should be "objects residing in port memory"

Page 35:

"If no keystrokes are shown, look for the command under [TOOL]" can be removed. This sentence only applies to ONE command--PURGE--so it's kind of pointless.

Pages 36-75 contain the command listing, which I am not going to proofread yet.

Page 76:

"which use a list of four binary integers"

Page 77:

"-52 Clear: The level-1 object is displayed on up to the maximum number of visible lines"

Page 78:

- 70 Set: ->GROB uses newline characters to make multiline grobs  
Clear: ->GROB shows newline characters and makes single line grobs
- 71 Set: Disassembler shows addresses only for labels  
Clear: Disassembler shows addresses on all lines
- 75 Set: Each keystroke clicks audibly  
Clear: Keystrokes are silent
- 76 Set and clear settings are swapped
- 80 through -82: remove "If the current font is FONT6"
- 84: unused
- 90: remove "If current font is FONT6"
- 91 Set: The Matrix Writer creates lists of lists  
Clear: The Matrix Writer creates arrays
- 92 Set: MASD defaults to System RPL mode  
Clear: MASD defaults to assembly mode
- 93: unused
- 95: Clear: RPN mode

Page 79:

- 97 Set: Lists are displayed vertically  
Clear: Lists are displayed horizontally
- 98 Set: Vectors are displayed vertically  
Clear: Vectors are displayed vertically
- 99 Set: CAS verbose mode -- shows extra calculus information  
Clear: CAS quiet mode
- 100 Set: Step-by-step mode enabled  
Clear: Final result is given immediately
- 110 Set: Matrix code optimized for large matrices  
Clear: Matrix code optimized for normal matrices
- 114 Set: Shows terms in ascending powers ( $1+X+X^2$ )  
Clear: Shows terms in descending powers ( $X^2+X+1$ )
- 117 Set and clear settings are swapped
- 119 Set: Non-rigorous mode (simplify  $|X|$  to  $X$ )  
Clear: Rigorous mode (don't simplify  $|X|$  to  $X$ )

Page 80:

Type 3 is shown as  $\begin{bmatrix} 1. & 2. \\ 3. & 4. \end{bmatrix}$

Type 20 is shown as  $\pounds 123d$ , where  $\pounds$  is the universal currency symbol, not as  $\langle 123d \rangle$

Type 21 is shown as 0.062E1, not Long Real

Type 22 is shown as (1E0,4E0), not Long Complex

Type 24 is shown as the character (d, for example), not Character

Type 28 is called Integer and is shown as 64, for example

Type 29 is called Symbolic Array and is shown as  $\begin{bmatrix} 1 & 2 \end{bmatrix}$

[ 'a' 'b' ]], for example

Type 30 is called Font and is shown as Ft8\_0:SYSTEM 8, for example.

Under System Information, the deep-sleep shutdown key sequence doesn't work (bug in ROM?)

[ON]-[F1], for screen dumps, should be [ON]-[UpArrow]

[ON]-[F4], to cancel the next repeating alarm, should be [ON]-[9]

Page 81:

Character 161 should be the Euro symbol, not a space.

The following characters have the wrong key combination listed, so I am listing the correct combination after each character number (& means to hold down the shift key):

35: [LeftShift][3]

60: [RightShift][<]

92: [alpha][RightShift][5]

96: [RightShift]&[EQW]

123: [LeftShift][+][RightArrow][Backspace]

125: [LeftShift][+][Backspace]

128: [alpha][RightShift][6]

145: (use [RightShift][CHARS])

153: [alpha][RightShift][U]

159: [LeftShift][0]

160: [alpha][RightShift][4]

161: [alpha][RightShift]&[2]

162: (use [RightShift][CHARS])

168: (use [RightShift][CHARS])

176: [alpha][RightShift]&[6]

191: [alpha][RightShift]&[3]

192-214, 216-246, and 248-255 all have key combinations as well; use the [CHARS] application to find them