

SpeedUI

A rectangular button with a dark, textured background and the word "ENTER" in white, sans-serif capital letters.

SpeedUI Features Overview

- [Intro](#)
- [Stack Display Configuration](#)
- [Algebraic Expression Display](#)
- [SysRPL Display](#)
- [Program Object Display](#)
- [Starting an editing Session](#)
- [The new and extended edit Menu](#)
- [Multiple Object Clipboard](#)
- [Keyword Catalog](#)
- [Keyword Parameter Help](#)
- [SpeedUI Options](#)
- [SpeedUI Options Input Form](#)
- [Flag Browser](#)
- [Character Set Browser](#)
- [Matrix Editor](#)
- [Memory Browser](#)
- [Direct BINT Entry](#)
- [Quick start Menu](#)
- [SpeedBrowser](#)
- [Master-Detail Choose](#)
- [SysRPL Editor](#)
- [Stack display status area](#)

Intro:

This is a small 'walkthrough' for **SpeedUI**, the modular and speedy user interface replacement for the HP-48 G series.

After installation, you will first see the new six-level stack interface.

It has some enhancements over the most stack displays.

It displays the amount of memory left and indicates the ports status.

If you have a GX, it will show the bank count. That is, how many banks of 128K you have on your card.

It supports SysRPL object display and editing.

For more details, please check the [stack display status area description](#)

```

063626 <1><01>
[ HOME ]
6: 45
5: 78
4: 123
3: 45677
2: "SpeedUI"
1: "for HP-48G+/GX"
IOPAR CST

```

To enable or disable the various options, just call the SpeedUI stack display configuration utility, SETUPU.

Valid keys are ▲ / ▼ for moving the highlight, ► or ◂ for selecting/deselecting an item, ON or OFF to toggle an option, and CANCEL to cancel any changes and exit the setup utility.

Pressing ENTER sets the chosen stack display modes, and exits the utility.

```

STACK DISPLAY CONFIG MENU
Alg. Font      Medium
EQ View        ON
Use TED        OFF
SysRPL Mode    OFF
Enhanced Stack ON
Stack Levels   6
CANCEL OK

```

The 6-level stack has EQ-Stk ability, also called 'pretty print'.

This feature has been adapted from the JAVA stack display environment,

but in contrast to JAVA, SpeedUI supports UFL, but doesn't need it to run.

If the user also installs UFL, chars will be displayed using UFL,

which means that small font displays can show upper- and lower case chars.

```

051579 <1><01>
[ HOME ]
6: 45
5: N
4: ∫ SIN(X)+2·COS(X⁻¹) dX
3: 0
2:
1: √X
IOPAR CST

```

The 6-level stack has System RPL display and editing capability.

For the SysRPL environment to work, you need to have JAZZ 6.8+ installed.

(This feature has been adapted from the JAVA stack display environment)

```

053023 <1><01>
[ HOME ]
6: % 45
5: % 78
4: % 123
3: % 45677
2: $ "SpeedUI"
1: $ "for HP-48G+/GX"
EXAM IOPAR CST

```

(The ML Decompiler has been adapted from the JAVA stack display environment)

This includes cursor movement, scrolling, skipping text, deleting text, and everything else.

The LIFO flag determines whether the latest pasted clipboard entry will be deleted from the clipboard or not.

Here you can manage the clipboard contents.

Press **ON** or **EXIT** to exit the clipboard browser.

```
003645 <1><01>
{ HOME }
1: DIR
  VARNAME PRGS
  DIR
  VARNAME MEDIAN
  « RCLZ DUP SIZE
  OBJ→ DROP → s n m «
EXAM IDPAR CST
```

```

027394                                     P <1><01>
{ HOME }
DROP → s n m
j Z- OBJ → DROP n
→LIST 50 %TILE j
ROLLED NEXT m →ARRY
s STOS
[SKIP][SKIP] [DEL][DEL] [INS] [↑STK]

```

```

027394                                     P <1><01>
{ HOME }
DROP → s n m
j Z- OBJ → DROP n
→LIST 50 %TILE j
ROLLO NEXT m →ARRY
s STOZ
MARK COPY PASTE VCLP LIFO CAT

```

DELETE SELECTED ITEM(S) ?

"J Σ- OBJ → DROP N"

"NEXT"

☒ YES ☐ NO ☐ CANCEL ☐ OK

Now press **⏏** to start the command catalog.

The command catalog has a hotkey search feature, which lets you quickly jump to a command with a specific starting letter.

Hotkey jumps are performed almost instantly if the SpeedUI CHOOSE replacement library is installed.

Press **α** then the letter S to instantly jump to the first keyword starting with that letter.

Pressing **ENTER** will echo the currently selected keyword to the editline at the current cursor position.

Press **ON** or **⏏** to exit the command catalog without echoing.

Now press **⏏** to start the parameter browser,

which will show you all possible parameter combinations for a given keyword.

Press **ON** , **⏏** or **⏏** to exit the parameter browser.



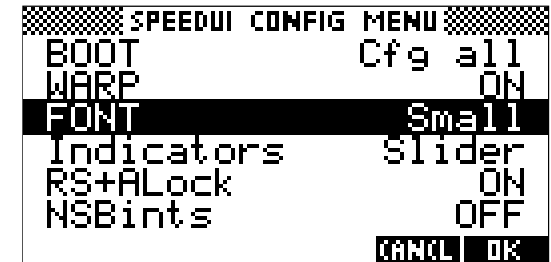
[\[Back to Top\]](#)

SpeedUI adds some new display and input options to certain UI elements, like CHOOSE boxes or the full screen browser, and greatly enhances the available input options, like direct BINT entry, or automatic ALPHA lock when pressing certain delimiter keys.

To enable or disable the various options, just call the SpeedUI general configuration utility, SETUPB, either by pressing the backarrow key during a warmstart, or by name (if UF.LIB is installed) .

Valid keys are **▲** / **▼** for moving the highlight, **▶** or **↵** for selecting/deselecting an item, **ON** or **CANCEL** to cancel any changes and exit the setup utility.

Pressing **ENTER** sets the chosen stack display modes, and exits the utility.



SpeedUI 9.07 added the ability to create and use input forms with five item rows instead of the usual four rows.

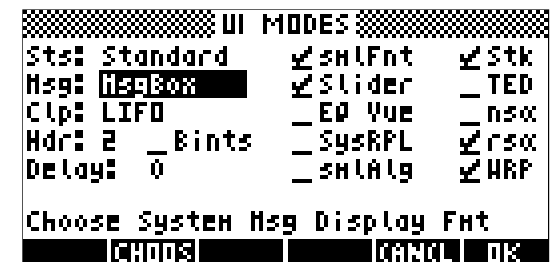
The new general SpeedUI configuration input form (SETUPD in UF.LIB) serves as an example.

This new feature will also work with the built-in form engine, as long as the SpeedUI shared library CF.LIB is installed.

Not all UI modes indicated by the input form are enabled in SpeedUI 9.08 yet.

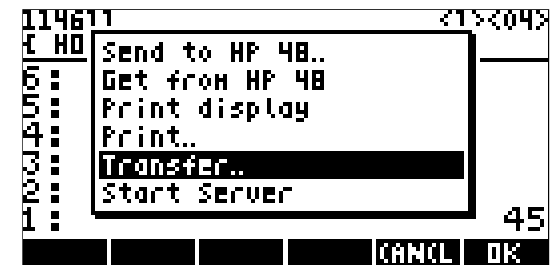
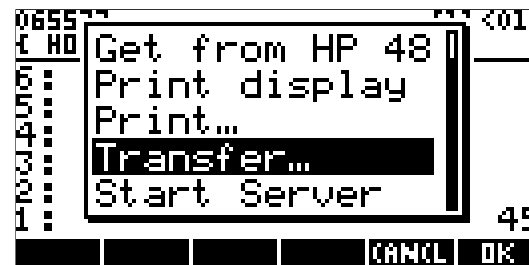
The status line type, header line count, and longhold delay can be set, but have no effect so far.

These features will be included in one of the next releases of SpeedUI.



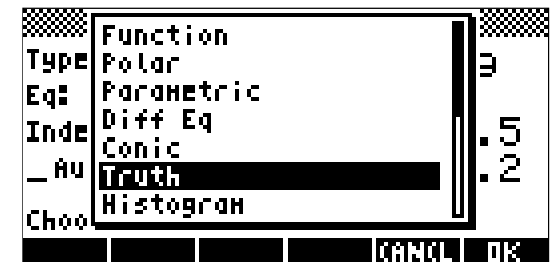
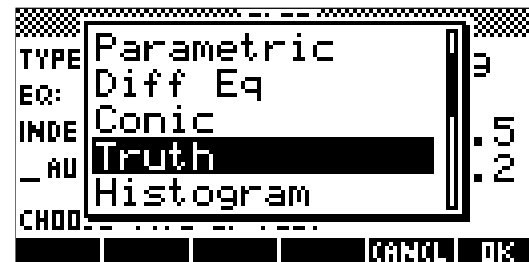
The picture to the right shows a CHOOSE box with 'more-to-come' indicators set to slider, and font set to medium size.

The picture to the far right shows the same CHOOSE box with font set to small size.



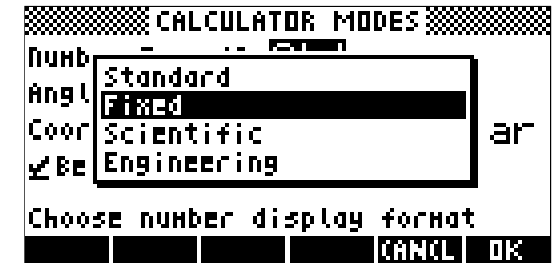
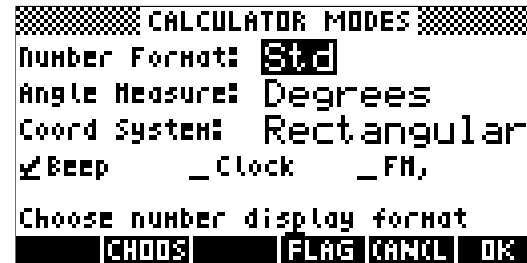
The comparison of the plot type choose boxes also shows the difference very clearly. Using the SpeedUI small font option, up to two more items can be seen at the same time.

The picture to the far right shows the same CHOOSE box with font set to small size.



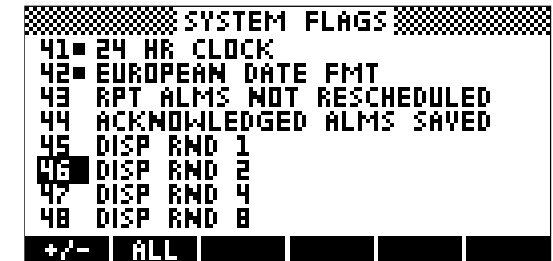
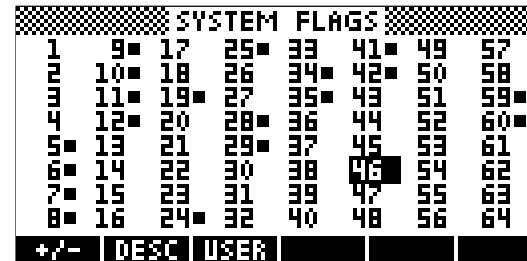
The MODES menu is another example for the seamless integrated SpeedUI extensions.
CHOOSE/Option fields yield a CHOOSE box using the selected font size and indicator.

Press **ON** or **MODE** to return to the MODES main screen.

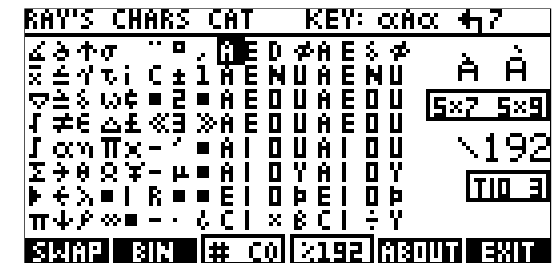


If you have B3.LIB installed, the normal flag browser will be replaced by my super fast flag catalog.

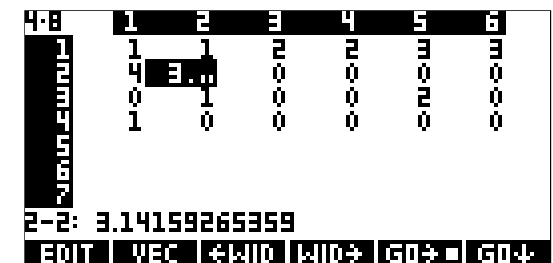
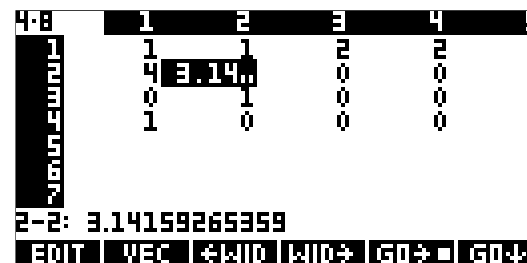
My flag catalog can also display the user flag settings, of course.



If you have B2.LIB installed, the normal character set browser will be replaced by my super fast charset catalog, which can display 128 chars at a time, has two charset pages, and features the same character echoing functionality as the built-in character set browser.



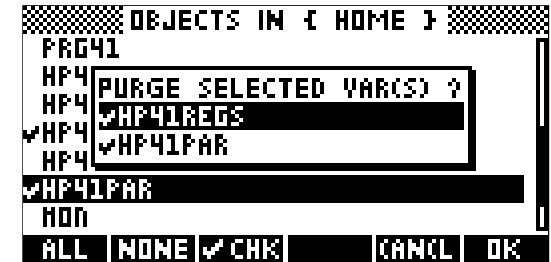
If you have EA.LIB installed, the normal MatrixWriter will be replaced by my super fast MatrixWriter, which can display up to seven item rows and up to six columns at a time.
The new MatrixWriter starts using the same font size setting as for CHOOSE boxes, however font size can be switched between small and medium size while in the MatrixWriter.



If you have B3.LIB installed, the normal Memory Browser will be replaced by my super fast MemBrowser, which can display up to seven item rows at a time.

The new MemBrowser uses the same font size setting as for CHOOSE boxes.

MemBrowser features delete confirmation, and direct toggling between fast and detail item view.

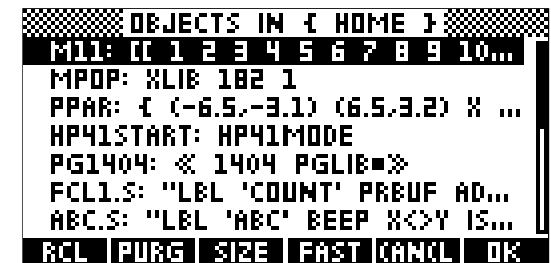
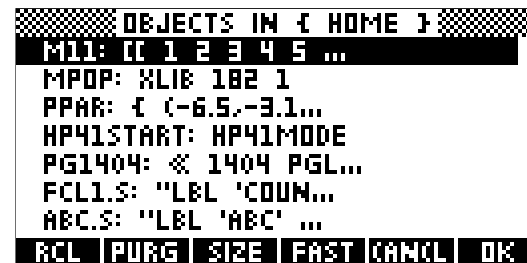


Older versions of B3.LIB worked with a fixed 'char count per row' constant for both medium and small fonts for historical reasons. From version 8.01 on, this limitation is history.

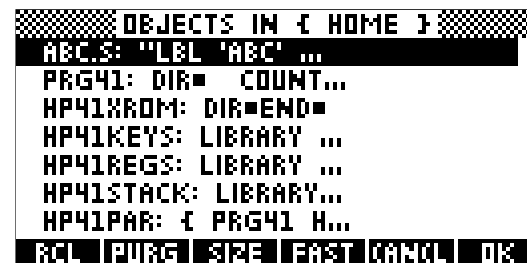
Now full screen and windowed CHOOSE boxes of any width can display the maximum possible character count per row.

The picture to the right shows the SpeedUI Memory browser in full screen mode, font set to small size, and detailed view.

The picture to the far right shows the same display with the new dynamic char count adjustment.



The comparison of the right and the far right choose window shows the difference very clearly. The new B3.LIB version from 8.01 and on will show much more information on the same row where possible, avoiding unnecessary short truncated displays as the previous versions did.



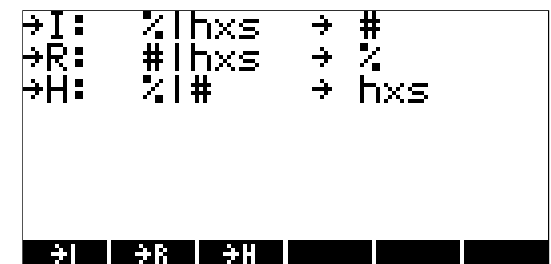
[\[Back to Top\]](#)

If you have UI.LIB installed, you'll have the option to create and manipulate system binary integers (BINTs) directly on the stack like ordinary numbers.

Additionally, there is an new sub-menu in the **MTH** menu.

Press **MTH**, then **NXT**, then **BINTS** to get into the BINTS menu. The functions in this menu let you convert a value between reals, user binary integers, and system binary integers.

Direct keyword help is available by pressing **→** + **▼**.



If you have UI.LIB installed, a new feature called Quick Start Menu (QSM) is available, which ads shortcuts to (suitable prepared) libraries, their main (or a customized) application by pressing **QSM** or ENTER, or the chosen libs main menu by pressing the **MENU** key.

The 2 entries 'CmdCat' and 'SpeedUI Edit Menu' are always available, the entry 'SpeedUI Setup' will be available when UF.LIB is installed. The other entries will be added dynamically when the appropriate libraries are installed. Each menu entry is defined by the individual library. Currently there are three external libraries customized by me which support the QSM mechanism: The Periodic Table Lib, the Input Form Builder, and the Zengrange HP-41CV emulator.

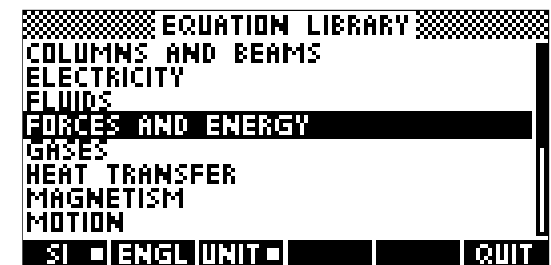
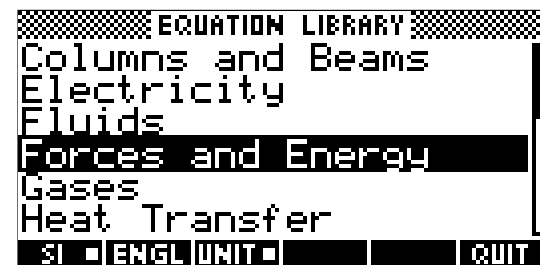


The QSM can be invoked by pressing **→** + **◀**, or alternatively by longhold-**MTH**.

If you have the SpeedBrowser (SB.LIB) installed, you'll have the option to browse the Equation Library using the small font.

SpeedBrowser is much faster than the built-in full-screen browser.

Additionally, there is a user accessible front-end to create custom full-screen browsing applications, either single-pick or multi-pick, and either from UserRPL or SysRPL.



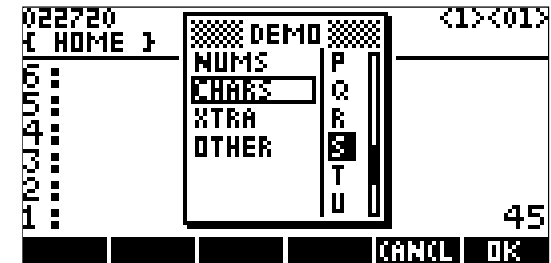
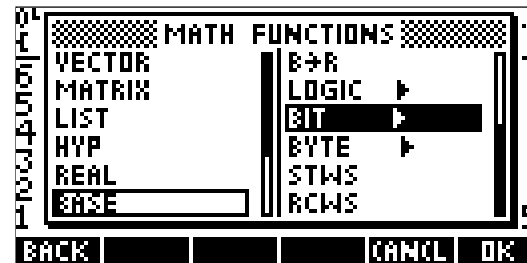
[\[Back to Top\]](#)

If you have B3.LIB _and_ B6.LIB installed, you'll get another thing you never saw on an HP-48.

The Master-Detail CHOOSE box extension!

It supports unlimited nesting levels, with forth and back navigation.

B3.LIB already includes the core Master-Detail CHOOSE functionality, B6.LIB adds some user functions and examples, like the ones to the right.



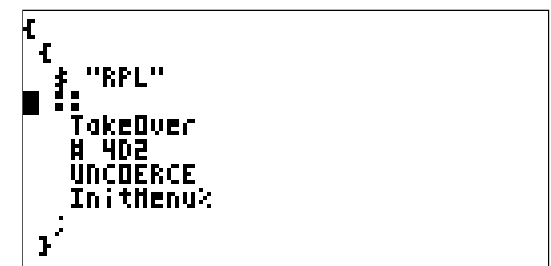
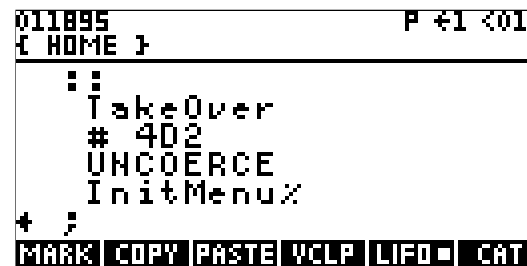
[\[Back to Top\]](#)

If you have JAZZ v6.8+ and RPL.TAB installed, you'll get a SysRPL and ML display and editing environment.

You can choose to use either the SpeedUI editor (left pic) or TED (right pic) , the editor supplied with JAZZ.

Please note that using the SysRPL environment uses much temporary memory due to the entries table (RPL.TAB) . Also note that the SysRPL environment support is still in beta stage.

(This feature has been adapted from the JAVA stack display)



[\[Back to Top\]](#)

Stack display status area:

Here's an example for a status area with all indicators lit, and time and date display.

```
017618 GR22 HLT12345 USR AP <1><01>
... HOME PRG41 } 30.09.07 04:17:53
```

The format is **mmmmmm G Rxx HLT 12345 USR A P [1] [##]**

- m** up to 6 digits of available memory (integer)
- G** or R for GRAD or RAD. If empty: DEG
- Rxx** POLAR or SPHERICAL mode. If empty: RECT
- HLT** HALT indicator. If on, there may be a suspended environment.
- 1-5** State of first five USER flags. Lit when set.
- USR** 1US, USR. Indicate USER mode state. Empty when NOT in USER mode.
- A (ALG)** Algebraic entry mode
- P (PRG)** Program entry mode
- [1]** Port 1 indicator. [1] means Port 1 is read-only.
- <1>** Port 1 indicator. <1> means Port 1 is read-write.
- <-1** Port 1 indicator. <-1 means Port 1 is merged.
- [2]** Port 2 indicator. [2] means Port 2 is read-only (S only).
- <2>** Port 2 indicator. <2> means Port 2 is read-write (S only).
- <-2** Port 2 indicator. <-2 means Port 2 is merged (S only).
- [##]** Port 2 indicator. ## indicates number of banks (G only).
- <##>** Port 2 indicator. <##> means Port 2 is read-write (G only).

[\[Back to Top\]](#)

Any questions or suggestions? Feel free to contact me. Have fun.

Raymond Del Tondo (Magic48ges@gmx.de)