Chapter 13

Customization

Creating menus

The HP 49G enables you to create a custom menu. The menu can contain labels for operations, commands, and other objects that you create or group together for your convenience.

A custom menu is identified by the reserved variable CST. Therefore, you create a custom menu by naming a list of menu items CST. You can also use the MENU command to store a list in CST.

A custom menu is a type of function key menu; that is, the items on the menu appear across the bottom of your screen and can be selected by pressing the corresponding function key.

You can create a custom menu—that is, a CST variable—in each directory. This enables you to have a different custom menu in each directory.

To create a custom menu

1. Enter a list of label–object pairs, one pair for each menu item.

   The syntax for each label–object pair is { “label”, object }. Also, to prevent an object being evaluated, you should enclose the object in tick marks ('). Each pair is a sub-list within the main list.

   Objects can be of many types, such as variable names, programs, strings, and unit objects. For example:

   {{"m^3", '1_m^s'}, {"VOL", VOLUME}, {"TIME", 'TIME()'}}

   In this example, the menu items will be labelled m^3, VOL, and TIME respectively. The first inserts the cubic metre unit expression, the second inserts the string “VOLUME”, and the third returns the current time.
2. Press ▶ to move the cursor outside the main list.
3. Press STO▶.
4. Enter CST.
5. Press ENTER.

In RPN mode: follow steps 1, 4, and 3.

To display a custom menu

1. Press ↰ (CUSTOM).

The menu labels appear across the bottom of your screen. You access a menu item by pressing the corresponding function key.

Customizing the keyboard

You can assign alternative functionality to any key on the keyboard (including alpha and shifted keys). This enables you to customize the keyboard to your particular needs.

Your customized keyboard is called the *user keyboard*, and it is active whenever you are in *user mode*.

User mode

To activate user mode

- If you want to execute only one operation on the user keyboard, press ↰ (USER).
- If you want to execute several commands on the user keyboard, press ↰ (USER) ↰ (USER). (You press ↰ (USER) again to deactivate the user keyboard.)

The ↰ (USER) key combination is a three-way switch, much like the (ALPHA) key. Pressing the combination once activates user mode only for the next operation, while pressing it twice consecutively locks user mode on, requiring a third press to turn the mode off. If you prefer to lock user mode on after pressing ↰ (USER) just once, set flag –61.

Assigning user keys

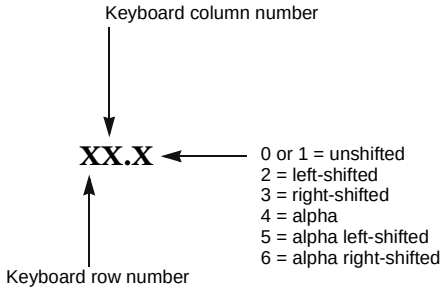
You can assign commands and other objects to a user key (including shifted keys).

To assign an object to a user key

1. Press (CAT) ASN.
2. Enter the object to be assigned to the user key.
3. Press (↱)(,).
4. Enter the key code that identifies the user key.

   The code is made up of the row number, column number, and shifted status. For example, 23.4 indicates the key at row 2 and column 3 when pressed with the (ALPHA) key. See the diagram below.
5. Press (ENTER).

In RPN mode: follow steps 2, 4, and 1.



For example: 23.4 = (ALPHA) (TOOL)

User key codes

To assign a command to a user key

1. Press (CAT) STOKEYS.
2. Between the parentheses, enter a list with the command name as the first element—enclosed within tick marks—and the user key code as the second element.

   User key codes are explained in the illustration above.

   For example: STOKEYS({'TIME()', 31.0}).
3. Press (ENTER).

In RPN mode: follow steps 2 and 1.

To unassign a user key

After you have assigned a user key, the assignment remains in effect until you re-assign the key (using the ASN or STOKEYS commands) or until you unassign the key. An unassigned user key reverts to its default use.

1. Press (CAT) DELKEYS.
2. Enter the user key code.

   User key codes are explained in the illustration on page 13-3.
3. Press (ENTER).

In RPN mode: follow steps 2 and 1.

Disabling keys

Disabling keys in user mode

When you are in user mode, you can disable the keys that have not been assigned a special use (that is, all the keys that still perform their default function). To do this:

1. Press (CAT) DELKEYS.
2. Type S.
3. Press (ENTER).

In RPN mode: follow steps 2 and 1.

Once disabled, a key can be enabled by assigning it a special use (see "To assign an object to a user key" on page 13-3) or by deactivating user mode (by pressing (↰) (USER)).

To enable disabled keys

1. Press (CAT) DELKEYS.
2. Type 0 (that is, zero).
3. Press (ENTER).

In RPN mode: follow steps 2 and 1.

If you assign or disable the keys necessary to re-enable keys, or necessary to cancel user mode, you will be stuck in user mode. You will then need to reboot the calculator by holding (ON), pressing and releasing (F3) and then releasing (ON).

Recalling and editing user key assignments

To recall the current user key assignments

1. Press (CAT) RCLKEYS.
2. Press (ENTER)

In RPN mode: follow step 1.

The RCLKEYS command returns a list of all the current user key assignments. Each assigned object is listed with its corresponding user key code. If the first item in the list is "S", then unassigned user keys are enabled; otherwise, unassigned users keys are disabled.

To edit the user key assignments

1. Recall the current user key assignments (see previous section).
2. Press (▼) to open the command line editor.
3. Edit the key assignments you want to change.
4. Press (ENTER).
5. Press (CAT) STOKEYS.
6. Press (HIST).
7. If the user key assignment list you just modified is not highlighted, highlight it.
8. Press (ENTER) twice.

In RPN mode: follow steps 1, 2, 3, 4, and 5.