

[10.6] Add units to built-in Units menu

The built-in 89/92+ Units menu is lacking many common units. For example, the Area menu has only two units, and the Acceleration menu has no units. You can remedy this by defining your own units, in terms of the built-in units. In addition, the 89/92+ can recognize the categories for many of these units, and place them in the correct category so you can access them with the [UNITS] key.

The basic idea is to store the unit definition as a user-defined unit. For example, to save a cubic inches unit as a unit called `_in3`, use

```
_in^3→_in3
```

Note the use of the underscore character '_', which defines a unit. Now the Volume units menu shows

```
...
_galUK
_in3
_l
...
```

This unit can be used just like any other built-in unit. For example, to convert 5 liters to cubic inches, use

```
5_l▶_in3    which returns 305.12_in3
```

If you use many user-defined units, it is convenient to have a program that defines them all at once. Here is an example of such a program:

```
units()
Prgm
©Define new units
©10oct00 dburkett@infinet.com

©Area units
_in^2→_in2
_ft^2→_ft2
_yd^2→_yd2
_mi^2→_mi2
_cm^2→_cm2
_m^2→_m2
_km^2→_km2

©Volume units
_in^3→_in3
_ft^3→_ft3
_yd^3→_yd3
_mi^3→_mi3
_cm^3→_cm3
_m^3→_m3
_km^3→_km3

©Speed units
_ft/_s→_fps
_m/_s→_mps

©Acceleration units
_ft/_s^2→_fps2
_m/_s^2→_mps2

©Density units (not in built-in menu)
_kg/_m^3→_kgm3
```

```
_1b/_ft^3→_1bft3
```

```
EndPrgm
```

Just run *units()* to define all the units it includes. Note that the density units will not be put in the built-in menus, since there is no Density category. These units can be used by typing them in the command line, or by putting them in a custom menu.

Note that your custom units cannot be archived. The 89/92+ considers them to be system variables, and prevents the archive.

(Credit to Mike Grass)