Macros and Examples

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
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1 Definition of Macros

Macros are little pieces of drawing and can contain lines, texts and circles. These are inserted into the drawing as if they have been drawn using the last options, so they use the current settings (e.g. for linethickness). They do not use the settings for arrowheads, as these are only used by the TeXCad32 drawing machinery.

2 Saving Macros

When you choose in the menu file–Save Macro the current choice is saved in the macro directory under the name you specify. The file extension is `.tcm` for TexCad Macro. To each macro belongs a reference point.

Example Draw something like ⊐⎕⊏ . Select all and save it as macro with the name `a-rh` (for resistor horizontal). **Then you have to choose a reference point.** Choose the left endpoint as reference point by clicking on this point.
(The meaning of the 'a-' in the name will become clear a little later.)
Then

1. The file `a-rh.tcm` will be written

2. The directory is stored as 'macro directory'. Whenever you load or save a macro in or from a new directory, this will be your 'macro directory'.

3 Loading Macros

When you choose 'Load Macro' and select 'a-rh.tcm' you will be asked for a reference point. Click on some point in your drawing. The macro will be inserted into your drawing so that the left end is the point you have choosen.
The macro is then selected.
After loading a macro TeXCad32 activates the moving-mode, so you can adjust the position of the macro if you forgot the correct reference point. When the macro is placed

correctly, don't forget to unselect the elements before you load the next macro. Clipping is ignored.

4 Shortcuts

This way of inserting macros is very cumbersome. So you may use the following shortcuts:

- Press `Ctrl-m` and then a single key. This loads the first macro in the macro-directory whose name begins with the letter. So in the example `Ctrl-m` + `a` will load `a-rh.tcm`.

- `Ctrl-r` will load the last macro again.

5 Some Examples

This diode is only a thick line and an arrow with angle set to $0.52 \approx \frac{\pi}{6}$ and arrowlength to $1.414 \approx \sqrt{2}$.

Scaling with the center in the middle of the 'body' and y-factor 1 and x-factor -1 gives this element.

and rotation gives this.
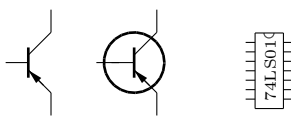
A transistor, an old fashioned transistor and an integrated curcuit. The label was placed with `\rotatebox{90}{\tiny 74LS01}` using `pstricks.sty` resp. `pdftricks.sty`.

The second transistor was constructed out of the first by copying (Ctrl-c), moving the transistor and inserting (Ctrl-v) the first one again in the old place.