

wxLL short manual

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The input file (*.llin* file) is a text file which you can create using a text editor. Each line is either a command or a comment. The commands have the form

`command_name arg arg arg [arg arg`

where *arg* is a number or a string or a character. The rules are:

- The commands are case sensitive.
- The delimiters between the arguments are space ' ', equal sign '=', comma ',' or tabulation.
- The order of commands (except special cases) is not important. But the last of similar commands (except *ell*) overrides preceding.
- Unknown or erroneous commands invoke warning.
- Many commands have default values.
- The empty strings in the input file are ignored. The double space at the beginning of a line denotes a comment.
- The arguments after square bracket '[' are optional.

The commands are:

cc *text string* Descriptive name of the project (will be passed through all task flow);

rem, REM ; Comment (ignored);

run Run calculations automatically;

invisible Run calculations automatically without invoking GUI;

aggr=*v* Aggressor net number. If defined, only one column of inductance matrix is calculated;

ah=*v* Discretisation step, define mesh step if it is not defined in boundary elements;;

lmbddef=*v* Default London λ ;

symm Infinite ground plane $y = 0$ as mirror plane;

lambda *v1 v2 v3 ...* Table of London λ ;

pt *label x y* Point (vertex), label (not necessary number) and coordinates;

el *0(or s) net n x0 y0 x1 y1* Segment, boundary element, n- number of mesh points;

el *1(or q) net n x0 y0 x1 y1 x2 y2* Spline;

el *2(or c) net n x0 y0 R +1/-1(direction)* Clockwise/anticlockwise circle;

elp *0(or s) net p0 p1 [n* Segments defined using points labels *p0, p1* ;

elp *1(or q) net p0 p1 p2 [n* Quadratic spline;

elp *2(or c) net p0 R clock/anticlock [n* Circle;

box *x0 x1 y0 y1 n [n1 [n2* Conductor (net) *n* is rectangular box. *n1* and *n2* are numbers of mesh points.

Here is an example of input file:

```
cc Alsop et al 6.2, L11=0.02655, L22=0.1136, L12=0.024914;
symm=1
ah=2
lambda 0.135 0.154
el 0 1 28 -7.0 0.2 7.0 0.2
el 0 1 3 7.0 0.2 7.0 0.7
el 0 1 28 7.0 0.7 -7.0 0.7
el 0 1 3 -7.0 0.7 -7.0 0.2
el 0 2 18 -4.5 1.2 4.5 1.2
el 0 2 5 4.5 1.2 4.5 2.0
el 0 2 18 4.5 2.0 -4.5 2.0
el 0 2 5 -4.5 2.0 -4.5 1.2
```