The Circuit Navigation System in companies

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Line graphs are often used in companies

The daily work of an electrical engineer consists of reading documentation, understanding circuits, testing them in your operation, adjusting them, and documenting the results. Depending on the exact field of activity, the portion of these activities and how they are performed may vary. But you always have to deal with line graphs. Those who read documentation, look at line graphs.
Those who want to understand the circuit, analyze it with line graphs. Whoever tests its operation receives measured values and combines them into line graphs.
Whoever adjusts it compares the line graphs before and after the adjustment.
And anyone who documents or presents circuits creates a document or presentation with line graphs.
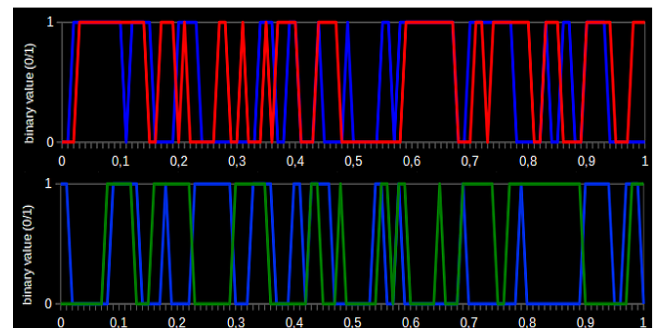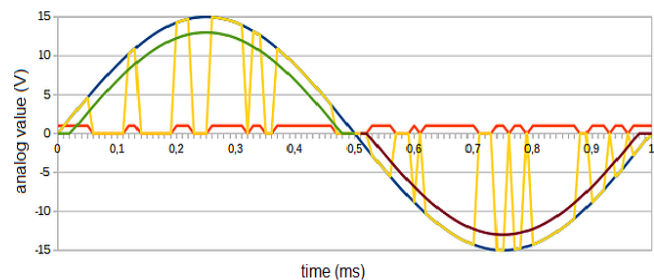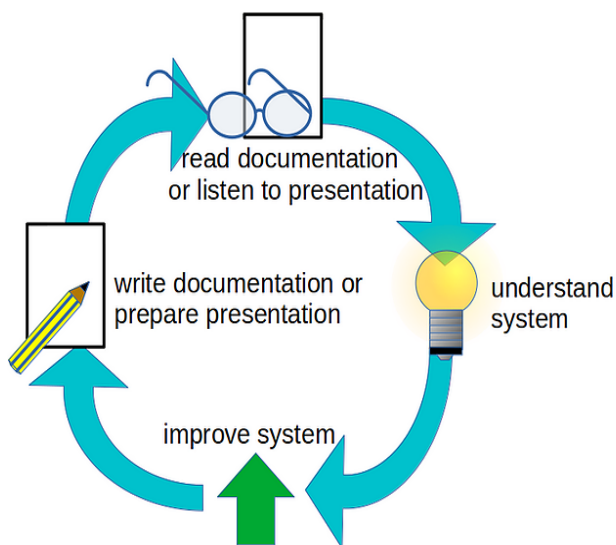

Image 1: Cycle of engineering on the left. Line graphs on the right.

Line graphs are often not useful

Despite their frequent use, line graphs have major disadvantages:
Anyone reading documentation is often confused by the many designations of all the lines and components, and does not even know which line belongs to which component.
Matching all the curves and components in one's head takes a long time and is prone to errors.

We have to do the same, unnecessarily exhausting and error-prone assignment in our heads when we create our own analysis, our own series of measurements.

And when we have gotten the results and then document and present them, the colleague who reads our documentation or listens to our presentation has the same problem: he does not know the names we have given to the lines and tries to assign them in his head.

Animations are created quickly and easily with CirNavSys

With the CirNavSys, current and voltage values can be automatically generated as an animation video. For this you need only a few clicks:

First you have to feed a circuit to the CirNavSys.

Then in the second step, you can either let the program make a simulation calculation or you can transfer your own measurement series as tables to the program.

And you can choose which voltage and which current should be displayed.

CirNavSys does the rest automatically. In a few seconds you get an animation which is quicker and easier to understand and which gets along without unnecessarily confusing designations of current curves and voltage curves. So you have not only saved hours of tedious assignment, but also a lower risk of error.
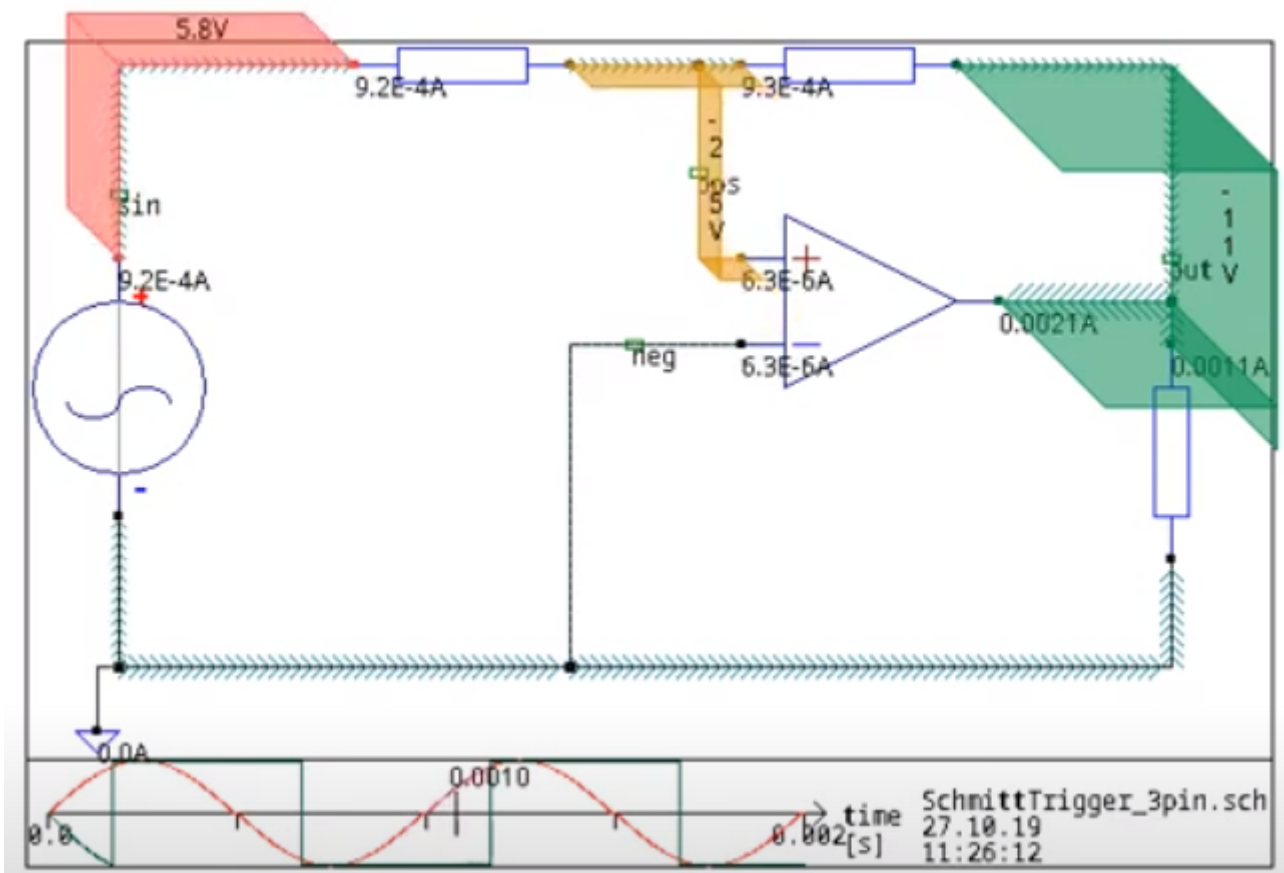

Image 2: Integrated visualisation of the CirNavSys of a Schmitt trigger
This image is a screenshot from an automatically generated animation video of the CirNavSys. See at https://www.youtube.com/watch?v=olrnA55cao0

Conclusion

Wherever you have to deal with line graphs at work:
Ask yourself if it is really necessary to assign all the curves to the components in your head again or if an animation of the CirNavSys would be better at this point. You can use your working time and your concentration for more important things.