

S-72.3340 Instructions for Simulation Assignment

Regarding the Exercises

- There are four separate simulation studies/problems provided in the zip file <SimulationProblems.zip>.
- Unzip the file and run each simulation according the instructions provided in the attached PDF document (double-click to open file) of each simulation .dds file (see Figure 1).

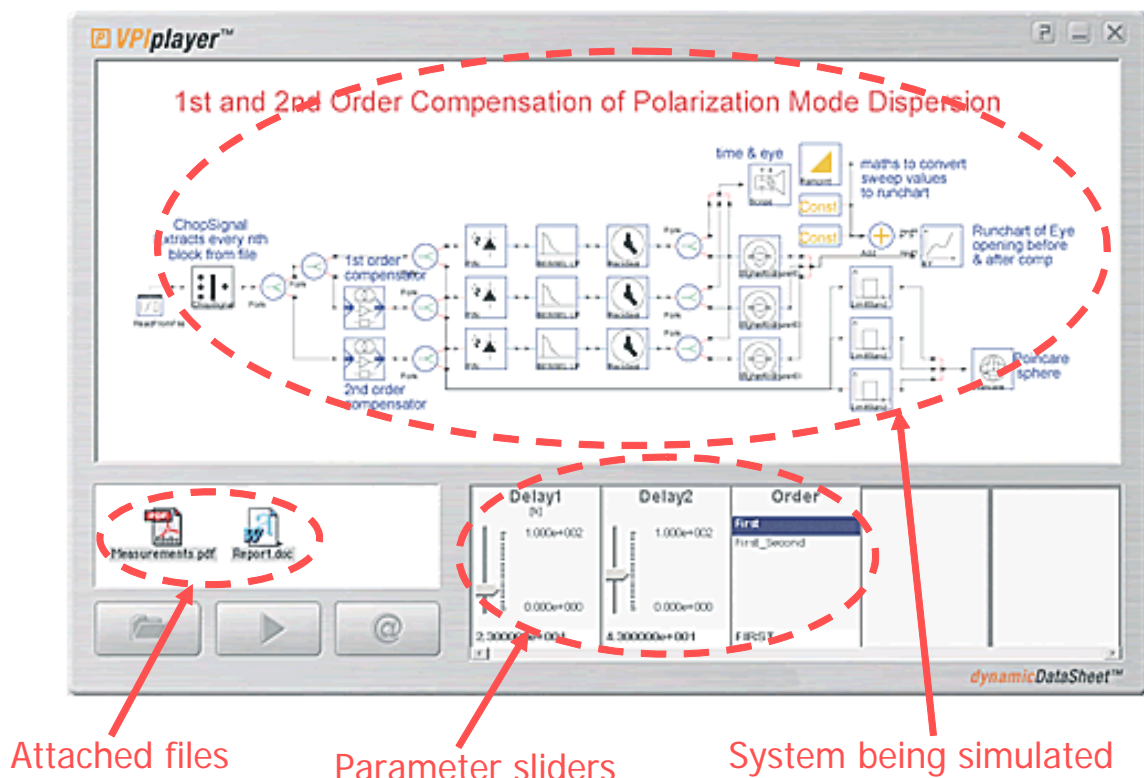
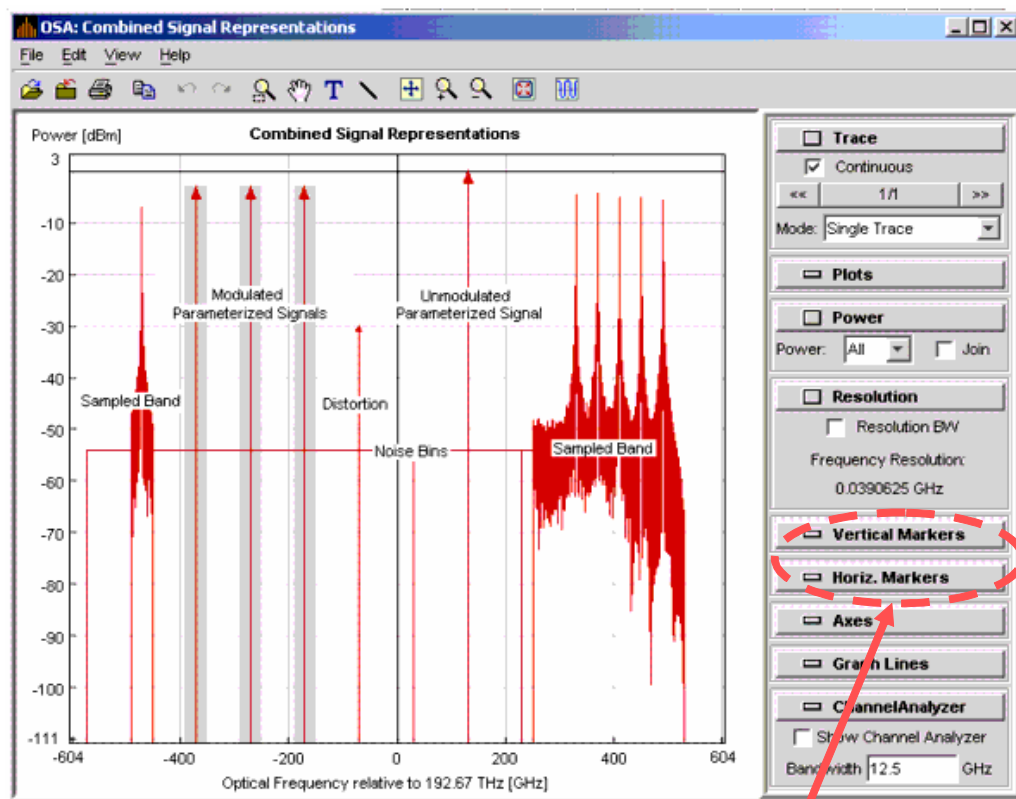


Figure 1 The main parts of the VPIplayer GUI.

- The exercises for each simulation are also provided in the accompanying .doc file. Run the simulations and provide answers to the questions based on the simulation results.
- The VPIplayer GUI may also include parameter sliders (see Figure 1) for varying some simulation parameters according the instructions provided.
- Compile all your answers for simulations 1 to 4 in a **single report**. Submit your report in PDF or word format by email to edward.mutafungwa@tkk.fi by **Friday 11th May 2007**.

Tips on Taking Measurements from Simulation Outputs

- After running the simulation, the output will be presented in the form of tables or 2D XY plots. Furthermore, the results could depict as plots usually displayed in oscilloscopes or spectrum analyzers.
- The values of various points in the plot can read directly by printing and using a ruler.
- However, for increased measurement accuracy of the oscilloscope and spectrum analyzer plots, it is recommended that you use the vertical and horizontal markers (see **Figure 2**).



Double-click to
expand menus

Figure 2 A screenshot of an optical spectrum analyzer plot.

- By double clicking on the Vertical and Horizontal marker, the menus are expanded as shown in **Figure 3**.

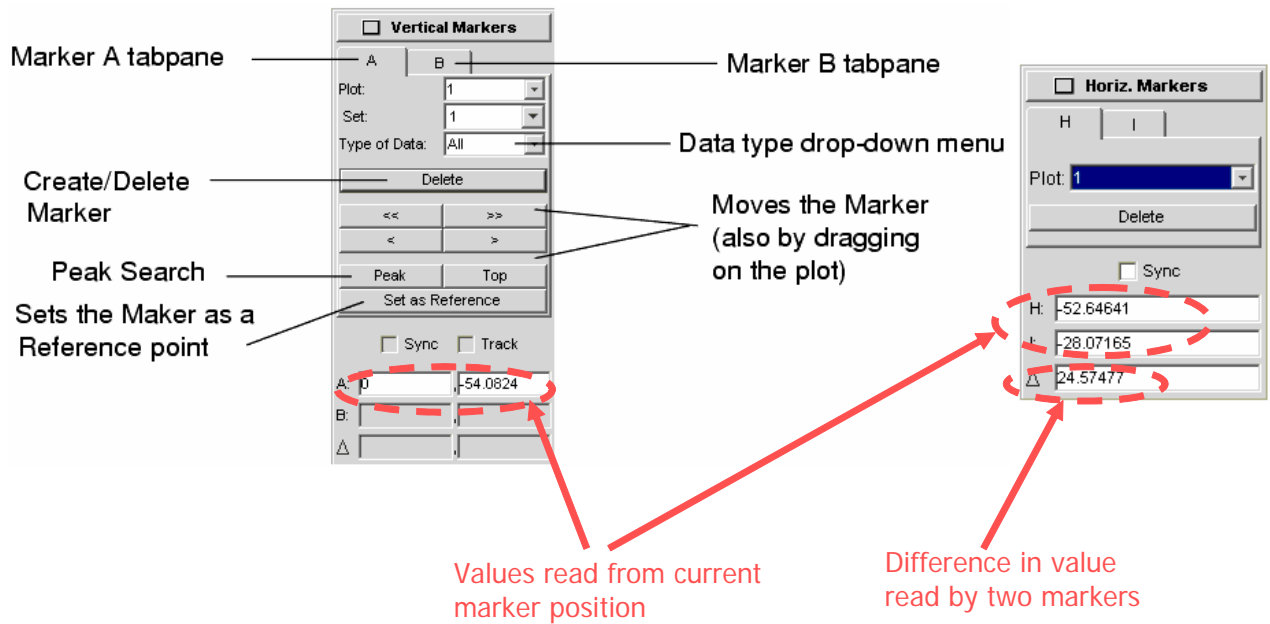


Figure 3 The expanded menu for vertical and horizontal marker menus.

- Create/delete, control and move the markers (A/B vertical markers, H/I horizontal markers) by clicking on the required tabs in the menus as shown in **Figure 3**.
- Alternatively, you could move the created markers by using the mouse to drag the marker to a required point in the plot.