

How To Run the EPSP-IPSP Model

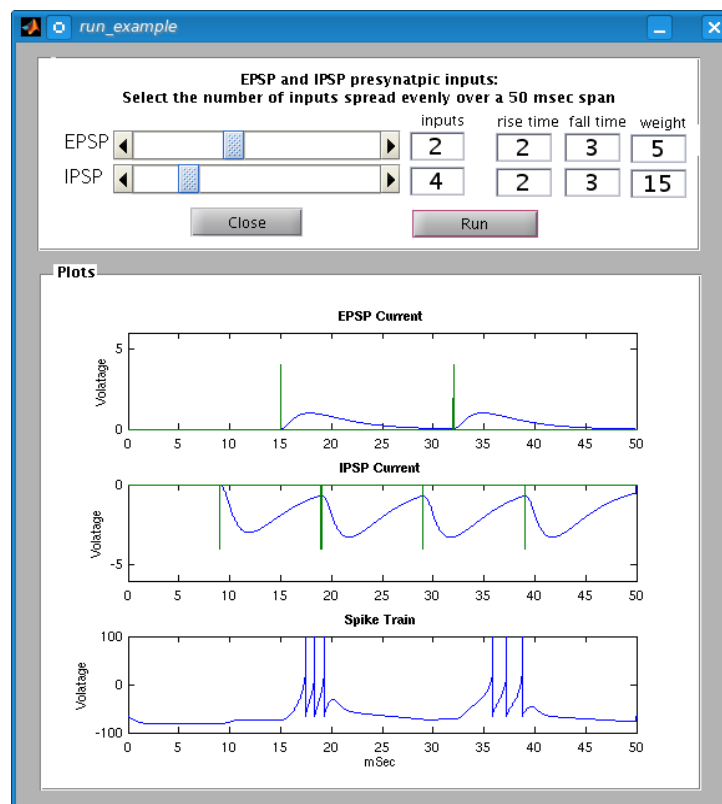
Download the epsp_ipsp.zip file and unzip the file.

Run matlab and cd to the epsp_ipsp directory. In the Matlab prompt type:

```
>> epsp_ipsp_gui
```

select Example->'run example'

This will pop up the run_example GUI. The default inputs will be entered and selecting 'Run' will display the graphs. The graphs will display the EPSP current, the IPSP current, and the spike train in the postsynaptic cell. The green bars in the EPSP and IPSP current graphs show the timing of inputs.



The number of inputs (range: 05), the rise time, fall time and weights (range: 010) can all be adjusted. The graphs will show the effects of the EPSP and IPSP currents and the spike rate in the postsynaptic cell. The graphs will update to new inputs when the Run button is pressed. The EPSP and IPSP currents are effected by the cells membrane voltage that is shown in the bottom graph. The best way to see the rise time and fall time effect on the EPSP and IPSP current is to set the weights at 10 and use only 1 input.