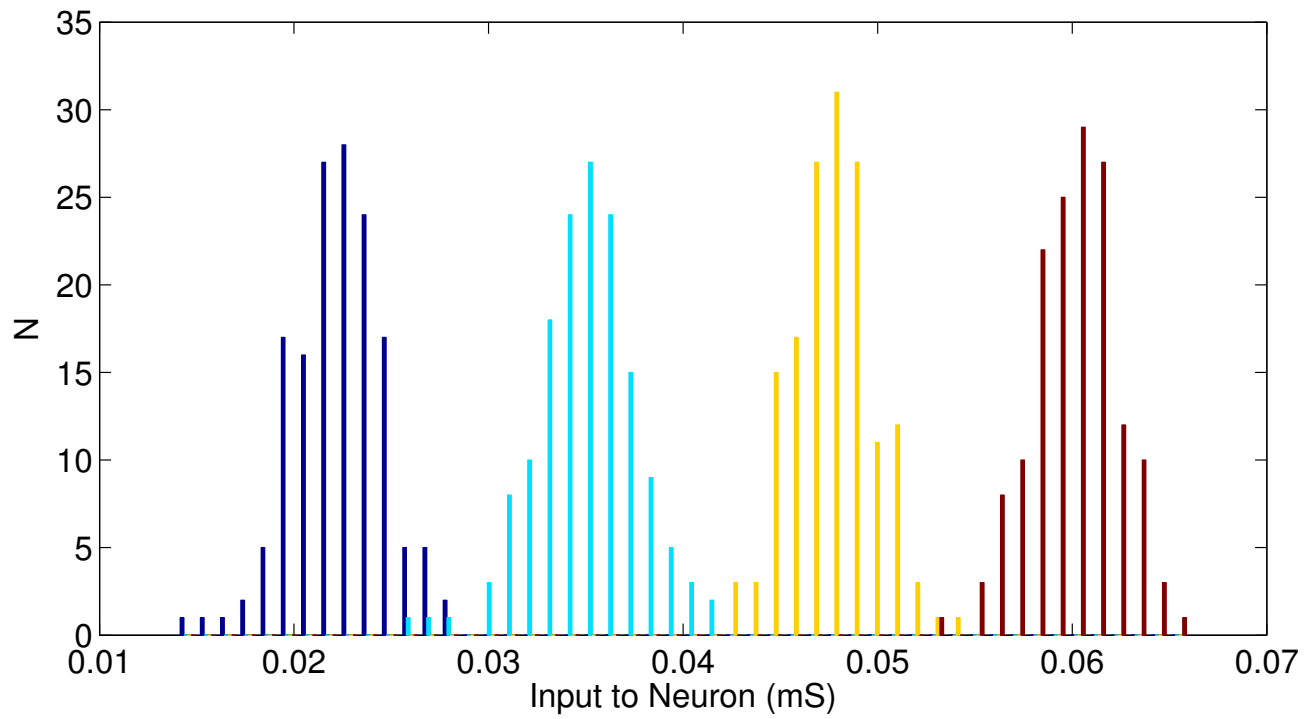
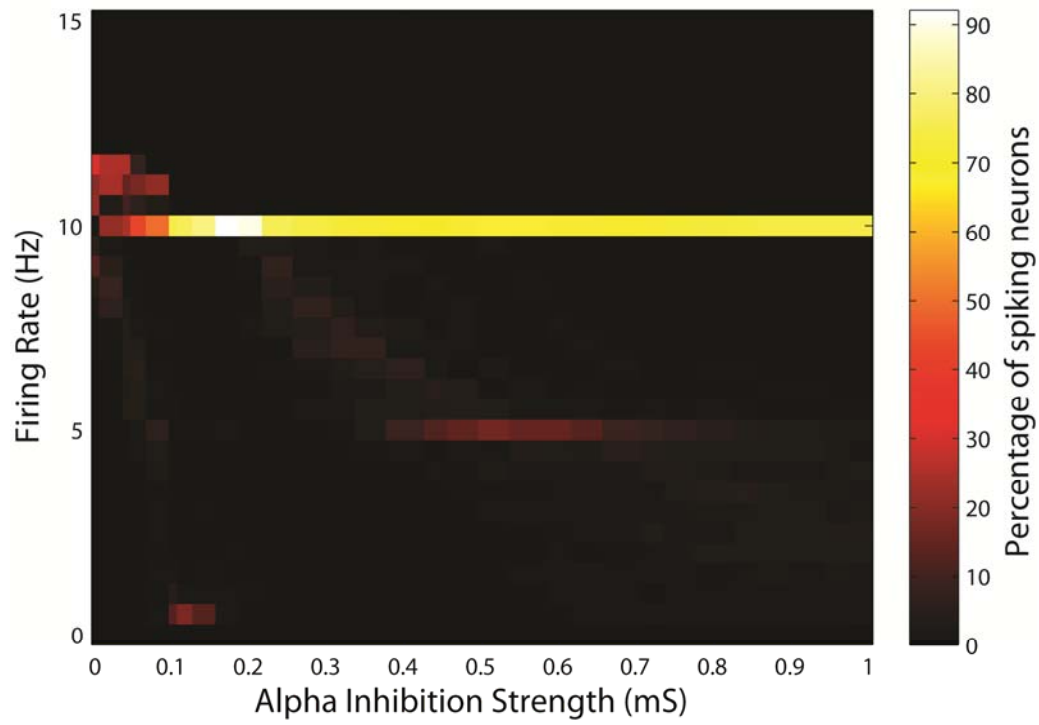


Supplementary Information

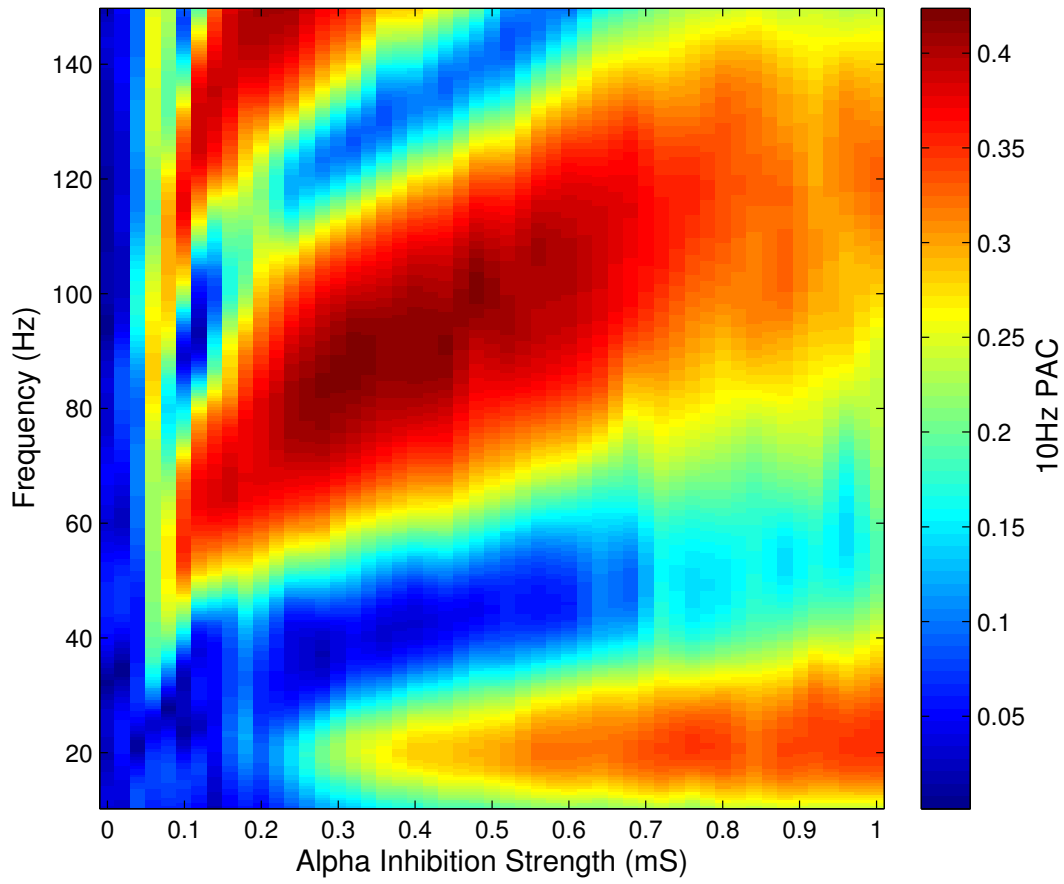


S 1 Fig. Histograms showing the conductance values for the four “spotlights” of imposed AMPA current to the excitatory neurons(see Fig 2B).

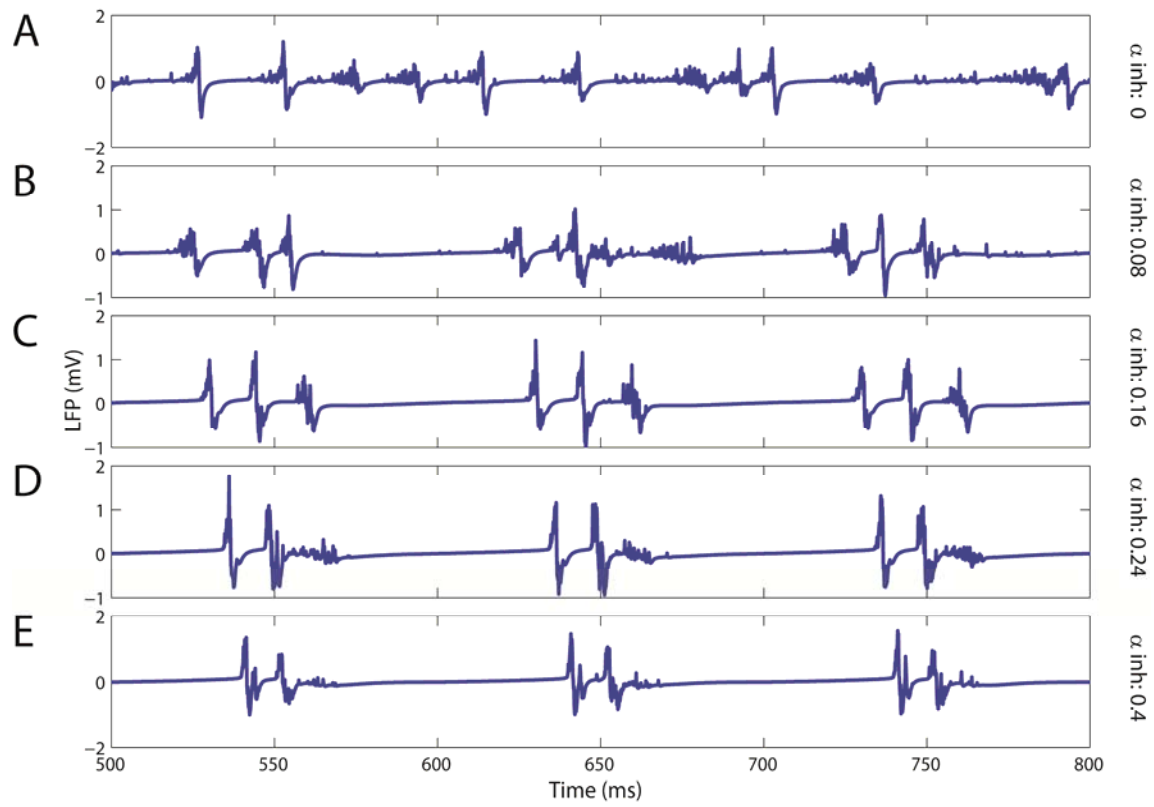


S 2 Fig. Firing rate histogram as a function of alpha inhibition strength for all neurons that actually spike during the 2 second stimulation.

Note the subset of neurons that fire at 5 Hz in simulations with alpha inhibition strength between 0.4 mS and 0.6 mS.



S 3 Fig. Amplitude coupling to 10 Hz phase for different alpha inhibition strengths after Gaussian white noise was added to the simulated LFPs netting a signal to noise ratio of 0.5.



S 4 Fig. Examples of the simulated LFP for different alpha strengths (0, 0.08, 0.16, 0.24 and 0.4 mS for A-E respectively)