

Neuron Parameters		
Spike threshold	u_{th}	20 mV
Reset potential	u_r	14 mV
Resting potential	u_{rest}	0 mV
Refractory period	t_{ref}	1 ms
Membrane capacitance	C_m	250 pF
Membrane time constant	τ_m	10 ms
Synaptic Parameters		
Synaptic rise time	τ_r	1 ms
Synaptic decay time	τ_d	1 ms
Synaptic weight	J	
Synaptic delay	d	2 ms
Input Parameters		
<u>Inhibitory network</u>		
Input, mean - I population	μ_I	14 mV
Input, variance - I population	σ_I	6 mV
<u>Excitatory-Inhibitory network</u>		
Input, mean - E population	μ_E	20.8 mV
Input, mean - I population	μ_I	16.5 mV
Input, variance - E population	σ_E	20.8 mV
Input, variance - I population	σ_I	16.5 mV
Network Parameters		
<u>Inhibitory network</u>		
Number of inhibitory neurons	N_I	10,000
<u>Excitatory-Inhibitory network</u>		
Number of excitatory neurons	N_E	8,000
Number of inhibitory neurons	N_I	2,000
Control Parameters		
<u>Inhibitory network</u>		
Control input	I_K	0 – 300 mV
Control delay, direct control	d_c	0 – 30 ms
Control delay, differential control	d_{c1}, d_{c2}	0 – 30 ms, 1 ms
<u>Excitatory-Inhibitory network</u>		
Control gain	K	0 – 300 mV
Control delay, direct control	d_c	0 – 30 ms
Control delay, differential control	d_{c1}, d_{c2}	0 – 30 ms, 1 ms