

Supplementary Table 1: Default parameters for compartmental models, unless stated otherwise

<i>Parameter</i>	<i>Compartments</i>	<i>Value</i>
C_m ($\mu\text{F cm}^{-2}$)	All	1.000e+00
R_m (Ωcm^2)		2.201e+04
R_a (Ωcm)		1.664e+02
E_h (mV)		-2.000e+01
E_{leak} (mV)		-7.357e+01
E_{GABA} (mV)		-7.000e+01
E_{AMPA} (mV)		0.000e+00
E_{NMDA} (mV)		5.000e+00
E_{Na} (mV)		6.000e+01
E_{K} (mV)		-8.500e+01
\bar{g}_{Na} (mS cm^{-2})		Axon
	Soma	5.686e+01
	Distal dendrites	9.842e-04
$\bar{g}_{\text{K, dR}}$ (mS cm^{-2})	Axon	1.045e+00
	Soma & dendrites	4.461e-03
$\bar{g}_{\text{K, A}}$ (mS cm^{-2})	Axon	2.982e+02
	Soma & dendrites	2.235e+02
$\bar{g}_{\text{K, M}}$ (mS cm^{-2})	Axon	4.243e+00
	Soma & dendrites	3.320e-01
$\bar{g}_{\text{h, fast}}$ (mS cm^{-2})	All	9.800e-02
$\bar{g}_{\text{h, slow}}$ (mS cm^{-2})		5.300e-02
n_{inh}		12
$\tau_{\text{rise, GABA}}$ (ms)		1.000e+00
$\tau_{\text{decay, GABA}}$ (ms)		1.000e+01
\bar{g}_{GABA} (nS)		1.300e-01
n_{exc}		12
$\tau_{\text{rise, AMPA}}$ (ms)		2.000e-01
$\tau_{\text{decay, AMPA}}$ (ms)		2.500e+00
\bar{g}_{AMPA} (nS)		1.000e-01
$\tau_{\text{rise, NMDA}}$ (ms)		2.000e+00
$\tau_{\text{decay, NMDA}}$ (ms)		5.000e+01
\bar{g}_{NMDA} (nS)		1.000e-01

C_m : Specific membrane capacitance
 R_m : Specific membrane resistance
 R_a : Axial resistivity
 E_{Na} : Sodium reversal potential
 E_{K} : Potassium reversal potential
 E_{leak} : Passive (leak) reversal potential
 AMPA: 2-amino-3-(3-hydroxy-5-methyl-isoxazol-4-yl)propanoic acid
 E_{AMPA} : AMPA-type glutamate receptor channel reversal potential
 NMDA: *N*-Methyl-*D*-aspartate
 E_{NMDA} : NMDA-type glutamate receptor channel reversal potential

E_h : Reversal potential of HCN channels
 \bar{g}_{Na} : Max. fast sodium conductance density
 $\bar{g}_{\text{K, dR}}$: Max. delayed rectifier potassium conductance density
 $\bar{g}_{\text{K, A}}$: Max. A-type potassium conductance density
 $\bar{g}_{\text{K, M}}$: Max. M-type potassium conductance density
 $\bar{g}_{\text{h, fast}}$: Max. fast HCN conductance density
 $\bar{g}_{\text{h, slow}}$: Max. slow HCN conductance density
 n_{exc} : Number of excitatory synapse clusters
 n_{inh} : Number of inhibitory synapse clusters