Summary of 'simple_hh_MN'

1 Assignments

$$\boldsymbol{\alpha_{denom}} = \overbrace{\left(\overbrace{1.0}^{ID:67909008/344,US:0(M/M:0.75/1.25)} + \boldsymbol{\alpha_{denom,exp}}\right)}^{ID:67908048/345,US:21(M/M:-224895.965305/1124486.3604)}$$

$$\boldsymbol{\alpha_{denom,cl}} = \begin{cases} \boldsymbol{\alpha_{denom}} & if\, \boldsymbol{\alpha_{denom}} < \overbrace{2800.0}^{ID:67908240/469,US:12(M/M:2100.0/3500.0)} \\ \overbrace{2800.0}^{ID:67910480/471,US:12(M/M:2100.0/3500.0)} & otherwise \end{cases}$$

$$\boldsymbol{\alpha_{denom,exp}} = \overbrace{\_\_\_\exp\_\_\_\left(x = \boldsymbol{\alpha_{denom,x}}\right)}^{ID:68029328/326,US:21(M/M:-224896.965305/1124485.3604)}$$

$$\boldsymbol{\alpha_{denom,x}} = \overbrace{\overbrace{\left(\overbrace{\boldsymbol{V}}^{ID:67975056/2,US:-2(M/M:-0.1375/0.0875)} + \overbrace{\langle -27.5\ \mathrm{mV}\rangle}^{ID:67908880/318,US:-5(M/M:-0.034375/-0.020625)}\right)}^{ID:67908176/319,US:-2(M/M:-0.165/0.06)} \cdot \overbrace{\langle -0.10752688172\ \left(10^3\right)}^{ID:68061136/320,US:7(M/M:-13}}^{ID:68061072/321,US:5(M/M:-6.45162/17.741955)}$$

$$\boldsymbol{\alpha_{kf,n}} = \frac{\overbrace{\overbrace{\langle 3.1\ \mathrm{ms}^{-1}\rangle}^{ID:67908560/87,US:12(M/M:2325.0/3875.0)}}^{ID:67910672/89,US:12(M/M:-710.292022149/3558.10296789)}}{\boldsymbol{\alpha_{denom,cl}}}$$

$$\boldsymbol{\alpha_{ks,n}} = \frac{\overbrace{\left(\overbrace{\left(\overbrace{\langle 0.2\ \mathrm{ms}^{-1}\rangle}^{ID:67957392/245,US:8(M/M:150.0/250.0)} + \overbrace{\langle 0.0\ \left(10^6\right)\mathrm{m}^{-2}\cdot\mathrm{kg}^{-1}\cdot\mathrm{s}^2\cdot\mathrm{A}^1\rangle}^{ID:67952912/246,US:0(M/M:0.0/0.0)} \cdot \overbrace{}^{ID:67940944/247,U}\right)}^{ID:67944080/248,US:8(M/M:150.0/250.0)}}^{ID:67936464/257,US:8(M/M:-49.8851520294/249.42}}{\overbrace{\left(\overbrace{1.0}^{ID:67953040/249,US:0(M/M:0.75/1.25)} + \_\_\_\exp\_\_\_\left(x = \overbrace{\left(\overbrace{\langle -2.96\ \mathrm{mV}\rangle}^{ID:67954960/250,US:-8(M/M:-0.0037/-0.00222)} + \right.}^{ID:67937488/251,US:-2(M/M:-0.14046/0.0845}\right)}^{ID:68061520/253,US}\right)}^{ID:67938640/255,US:20(M/M:-}}^{ID:67939024/256,US:20(M/M:-149646.028944/74823}$$

2 State Variable Evolution

$$\frac{d}{dt}\overbrace{V}^{ID:67975056/2,US:-2(M/M:-0.1375/0.0875)} = \overbrace{\overbrace{1.0}^{ID:66651280/3,US:0(M/M:0.75/1.25)} \cdot \overbrace{\langle 0.1\ \left(10^{12}\right) \mathrm{m}^2 \cdot \mathrm{kg}^1 \cdot \mathrm{s}^{-4} \cdot \mathrm{A}^{-2} \rangle}^{ID:68058384/4,US:37(M/M:75000000000.0/1.25e+11)} \cdot i_{sum}}^{ID:66650704/7,US:14(M/M:-5786.65305432/14627.7766372)}$$

$$\frac{d}{dt}\overbrace{kf_n}^{ID:67974672/106,US:1(M/M:-0.3875/1.8775)} = \frac{\overbrace{\left(\infty_{kf,n} - \overbrace{kf_n}^{ID:67974672/106,US:1(M/M:-0.3875/1.8775)}\right)}^{ID:67921872/460,US:2(M/M:-2.12336955398/1.631961619)}}{\tau_{kf,n}}^{ID:67920912/461,US:12(M/M:-1541.539095/3758.64750194)}$$

$$\frac{d}{dt}\overbrace{ks_n}^{ID:67974288/333,US:1(M/M:-0.3875/1.8775)} = \frac{\overbrace{\left(\infty_{ks,n} - \overbrace{ks_n}^{ID:67974288/333,US:1(M/M:-0.3875/1.8775)}\right)}^{ID:67907920/406,US:2(M/M:-2.12731893764/1.63663478224)}}{\tau_{ks,n}}^{ID:67960528/408,US:9(M/M:-201.482340575/282.143365274)}$$

$$\frac{d}{dt}\overbrace{na_h}^{ID:67974864/412,US:1(M/M:-0.3875/1.8775)} = \frac{\overbrace{\left(\infty_{na,h} - \overbrace{na_h}^{ID:67974864/412,US:1(M/M:-0.3875/1.8775)}\right)}^{ID:67967760/413,US:2(M/M:-2.12745842805/1.6374008023)}}{\tau_{na,h}}^{ID:67966160/414,US:18(M/M:-199584.913455/41194.9478403)}$$

$$\frac{d}{dt}\overbrace{na_m}^{ID:67974480/358,US:1(M/M:-0.3875/1.8775)} = \frac{\overbrace{\left(\infty_{na,m} - \overbrace{na_m}^{ID:67974480/358,US:1(M/M:-0.3875/1.8775)}\right)}^{ID:67963856/360,US:2(M/M:-2.12662942755/1.6363926828)}}{\tau_{na,m}}^{ID:67961104/362,US:16(M/M:-22081.4454673/34864.6386164)}$$

$$\frac{d}{dt}\overbrace{syn_{ampa,A}}^{ID:67973904/126,US:6(M/M:-12.5/62.5)} = \overbrace{\overbrace{-1.0}^{ID:67936400/238,US:0(M/M:-1.25/-0.75)} \cdot \overbrace{syn_{ampa,A}}^{ID:67973904/126,US:6(M/M:-12.5/62.5)} \cdot \overbrace{\langle 10.0}^{ID:68058768/239,US:1}}^{ID:68058704/240,US:20(M/M:-125000.0/62500}{}^{ID:67938000/241,US:20(M/M:-625000.0/125000.0)}$$

$$^{ID:67938512/296,US:15(M/M:-20833.3125/4166.6625)}$$