



Supplementary Figure 1. Transient stimuli and responses of model 0 with the total number of AMPAR set to 80. A: Calcium waveform for LTP stimulus with 3 strong tetani of 100 Hz, 1 second, separated by 600 seconds. B: Calcium waveform for LTD stimulus with 900 pulses at 1 Hz. C: AMPAR responses to LTP stimulus. Levels of receptor in the internal and membrane pools are shown. Conductance is computed as a percentage of the value if all the AMPAR were in the membrane and doubly phosphorylated. Phosphorylation of a single GluR1-Ser831 is assumed to give 1.5x unphosphorylated conductance, and phosphorylation of both GluR1-Ser831 subunits gives 2x the unphosphorylated conductance. D: AMPAR responses to LTD stimulus. E: CaMKII responses to LTP stimulus, showing movement of kinase between cytosolic and PSD fractions. F: CaMKII responses to LTD stimulus.