



Figure 5-figure supplement 2. Effects of phase-locked activity between interneuron and excitatory synaptic activity. (A) Averaged relative changes of the success rate over time during SC stimuli at 3 Hz and bursts of interneuron APs (top panel schemes, and described in **Figure 5**), when SC stimuli coincided with the interneuron up-state, i.e., during the interneuron bursts of APs ($n = 6$, *left*), or down-state, i.e., during the resting state between two consecutive interneuron bursts of APs ($n = 5$; *right*). (B) Relative changes of synaptic parameters for conditions shown in A. Synaptic efficacy *up*: $P < 0.001$; paired t test. Synaptic efficacy *down*: $P < 0.001$; paired t test. Synaptic efficacy *up* vs *down*: $P = 0.016$; unpaired t test. (C) Relative changes of the success rate over time for up-EPSCs and down-EPSCs, without interneuron stimulation, evoked by SC stimulation at 3 Hz ($n = 8$) and 6 Hz ($n = 11$). (D) Relative values of synaptic parameters in absence of interneuron stimulation. SC stimulation 3 Hz ($n = 8$; $P > 0.05$; paired t test) and 6 Hz ($n = 11$; $P > 0.05$; paired t test). * $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$. Error bars indicate SEM.