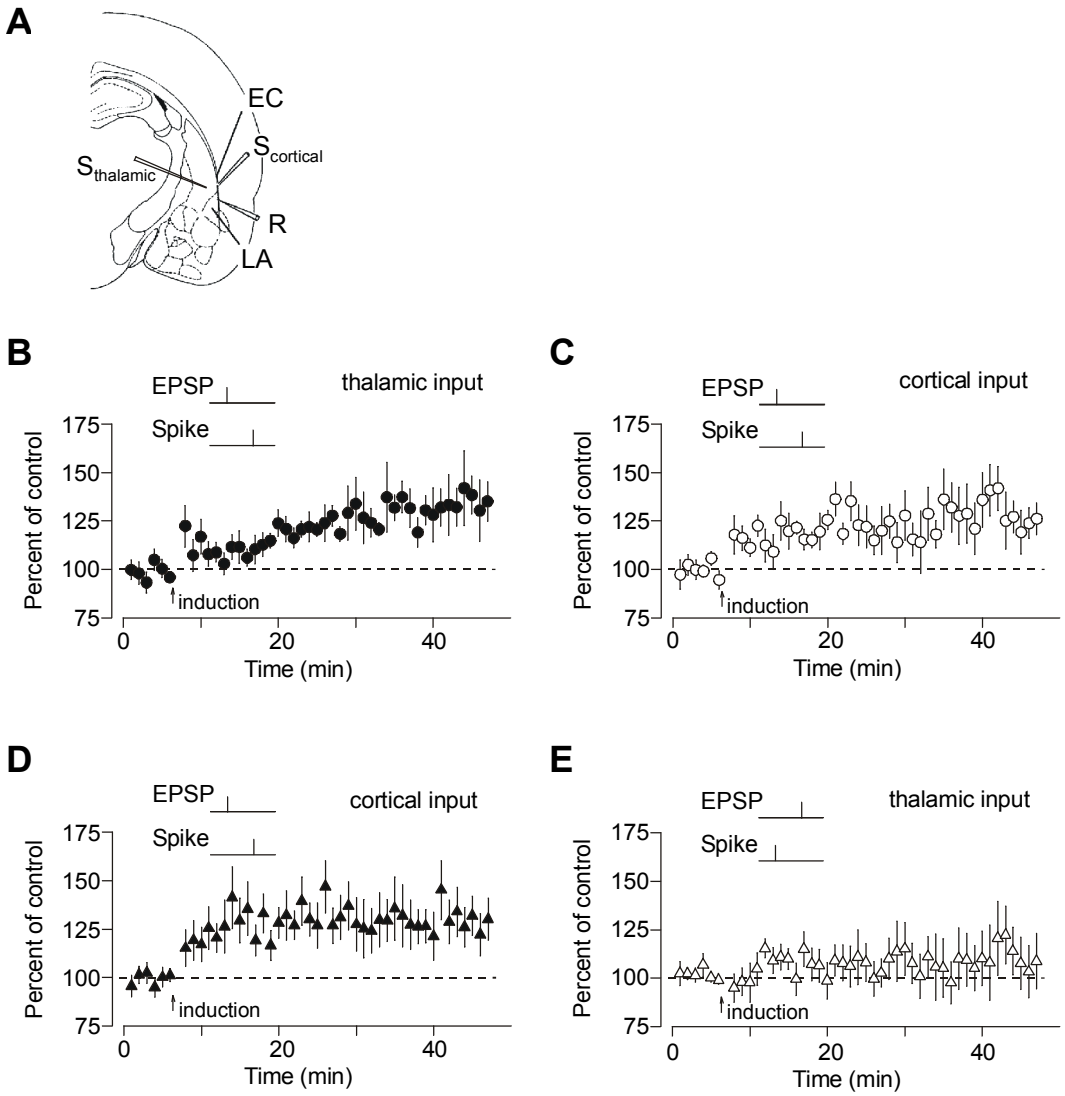
SUPPLEMENTAL MATERIAL

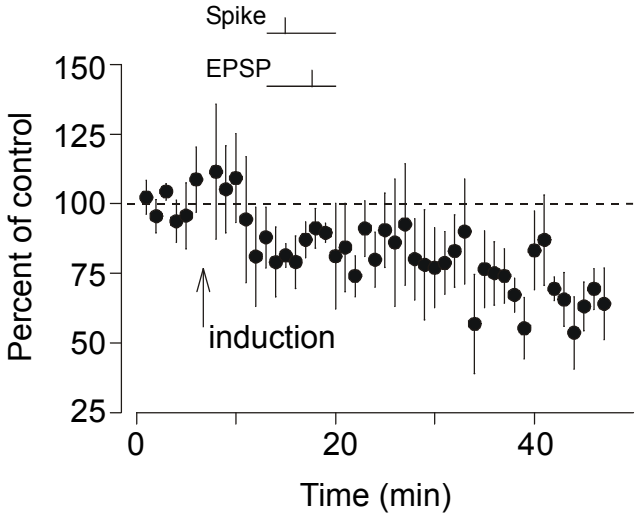
Supplemental Figure S1. Synaptic Plasticity in Cortical and Thalamic Inputs to the LA Under Different Experimental Conditions.



(**A**) A schematic representation of the experimental design that shows the position of the recording (R) and stimulation (S) electrodes. EC, external capsule. (**B**) Summary graph of the LTP experiments in thalamic input without PTX in the bath solution at room temperature, when postsynaptic neuron was depolarized to –20 mV during the induction (n = 8). To induce LTP, 80 EPSPs were evoked at a frequency of 2 Hz; each EPSP was paired with action potential induced

in a recorded neuron with 4-8 ms delay from the onset of the EPSP. (**C**) LTP in cortical input is induced in the presence of PTX in the bath solution at 30° C – 32° C with a protocol consisting of 3 EPSPs paired with 3 APs (with the EPSP-AP delays of 4-8 ms) at 30 Hz, repeated 15 times at 0.2 Hz (n = 9). The external solution contained 2.5 mM Ca^{2+} and 1.0 mM Mg^{2+}. (**D**) LTP in cortical input is induced in the presence of PTX in the bath solution at 30° C – 32° C with a protocol as in (C) (n = 9). The external solution contained 2.0 mM Ca^{2+} and 1.3 mM Mg^{2+}. (**E**) Summary graph of the experiments in thalamic input in the presence of PTX in the bath solution at 30° C – 32° C, when AP preceded the EPSP by 4-8 ms during the induction ("LTD protocol"). An induction protocol consisted of 3 APs paired with 3 EPSPs (with the AP-EPSP delays of 4-8 ms) at 30 Hz, repeated 15 times at 0.2 Hz (n = 8). Data points, mean ± SEM.

Supplemental Figure S2. LTD in Thalamic Input is Induced in Slices From P10 – P11 Rats.



The protocol for LTD induction consisted of 3 APs paired with 3 EPSPs (with the AP-EPSP delays of 4-8 ms) at 30 Hz, repeated 15 times at 0.2 Hz in the presence of PTX in the bath solution (mean ± SEM, n = 4).