

Figure 3. VSD imaging of sensory responses (Experiment 3). (A) Field of view for VSD imaging. The sensory stimulus was applied to the contralateral forepaw. (B) Representative example of the spatiotemporal pattern of the forepaw-evoked sensory response. A stimulus was applied at 0 ms. The VSD signal is superimposed on the background cortical image with the corresponding color bars. The upper and lower row images were acquired before (Baseline) and after 1 Hz LC stimulation for 20 min (Post-LC stim). (C) Representative time course of VSD signals. Each trace demonstrates the signal recorded by the pixels, indicated by a block or red square in the first frame in (B). (D–E) Statistical analysis of VSD signals. The mean peak amplitude of the VSD signal was greater in the post-LC stim group (n = 5, \*p < 0.05, paired *t*-test). Data are presented as the mean ± SEM. A, anterior, L, lateral; S1, primary somatosensory cortex; M1, primary motor cortex; M2, secondary motor cortex.