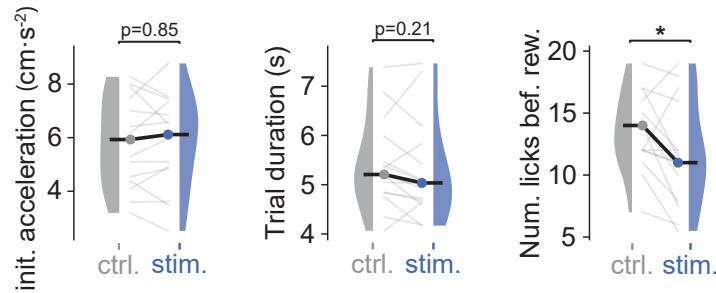
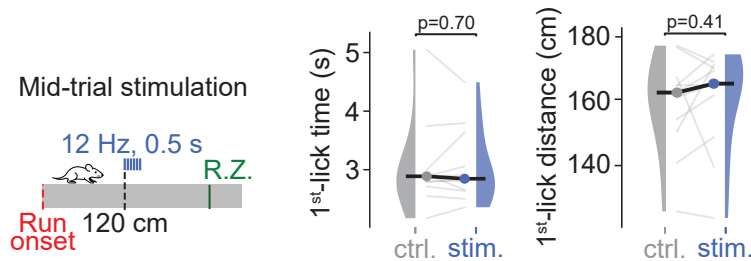


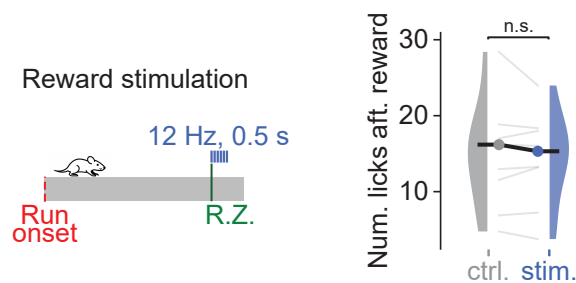
a Run onset stimulation did not affect onset locomotion or trial length



b Stimulating at run onset was necessary; mid-trial stimulation had no effects



c Phasic LC stim. did not suppress licking *per se*; number of licks did not change with rew. stim.



Extended Data Fig. 3 | Controls for run onset phasic LC stimulation. **a**, Phasic run onset LC stimulation did not affect animals' run onset acceleration or trial duration; stimulation decreased numbers of licks before rewards. **b**, Phasic LC stimulation at mid-trial (120 cm) did not induce changes in 1st lick timing, suggesting that effects of run onset phasic LC stimulation was task-phase-dependent. **c**, Phasic LC stimulation at reward did not alter number of licks during consumption, indicating that phasic LC stimulation did not suppress licking *per se*.