**Data and code used for making Extended Data Fig. 9**

**Folder: ExtDataFig09a**

Analysis

* ExtDataFig09\_TuningCurve\_OptStim\_Song.m: Code for plotting the tuning curves of pulse and sine songs induced by optogenetics in Extended Data Fig. 9a.

Data/Summary

* dataset.csv: A spreadsheet describing the genotype for each microphone recording channel in each experiment.
* EthogramCombPulseTrain\_\*: Files containing the time course of pulse/sine songs. Row: fly ID; Column: time bins.
* OptStim\_\*: Files containing the timings of optogenetic stimulation in each experiment.

**Folder: ExtDataFig09b-g**

Analysis

* ExtDataFig09\_AveTimeCourse\_OptStim\_SongProb.m: Code for plotting the time courses of song transition probabilities in Extended Data Fig. 9d.
* ExtDataFig09\_TuningCurve\_OptStim\_Song.m: Code for plotting the tuning curves in Extended Data Fig. 9b,c.
* ExtDataFig09\_TuningCurve\_OptStim\_SongProb.m: Code for plotting the tuning curves in Extended Data Fig. 9e-g.

Data/Summary

* dataset.csv: A spreadsheet describing the genotype for each microphone recording channel in each experiment.
* EthogramCombPulseTrain\_\*: Files containing the time course of pulse/sine songs. Row: fly ID; Column: time bins.
* OptStim\_\*: Files containing the timings of optogenetic stimulation in each experiment.