

Supplemental Figure S1. Electrophysiological properties of anteriodorsal thalamic nucleus

(A) Nissl-stained coronal brain section from a rat shows the location of microdrive-lowered tetrodes in anterodorsal nucleus (AD) (marked with blue dashed line), which is confirmed by the presence of head-directional (HD) cells. The white arrow denotes the location of the tetrode tips, which is above to the dorsal boundary of the anteroventral nucleus (AV, marked with red dashed line). (B) Example of head-directionality of a slow-spiking HD cell (blue trace) with preferential direction of firing in 180-240 degrees, compared to a slow-spiking theta cell (red trace). (C) Example of head-directionality of a fast-spiking HD cell (blue trace) with preferential direction of firing in 120-240 degrees, compared to a fast-spiking theta cell (red trace). Note the difference in the firing frequency (y-axis) for the units in (B) and (C).