Supplementary Figure 3. Effects of inactivation on the amplitude of saccades.
The graph format is same as for Fig. 3a and Supplementary Fig. 2. The red symbols plot data showing significant inactivation effects (two-tailed t-test, \( P < 0.01 \)), whereas open symbols indicate data without a significant difference (\( P > 0.01 \)). The blue crosses plot data from seven saline control experiments. In the population, thalamic inactivation significantly altered saccade amplitude in the contraversive memory-guided tasks (two-tailed t-test, \( P < 0.01, n = 47 \)), but not in other four tasks (\( P > 0.05 \)). Saccade amplitude was not altered following saline injection in all six paradigms (\( P > 0.05, n = 7 \)). The difference in means before and after inactivation averaged –0.03 \( \pm \) 0.24, 0.41 \( \pm \) 0.48 and 0.54 \( \pm \) 0.57 for contraversive saccades in the visual, external and internal tasks, respectively, and 0.07 \( \pm \) 0.31, 0.23 \( \pm \) 0.43 and 0.22 \( \pm \) 0.40 for ipsiversive saccades, respectively. A one-way ANOVA showed that the changes in saccade amplitude were different across paradigms for contraversive saccades (\( P < 0.05 \)), but not for ipsiversive saccades. For contraversive saccades, a post-hoc comparison (Scheffe) detected a significant difference between the visually-guided saccades and each of the memory-guided saccades (\( P > 0.05 \)).