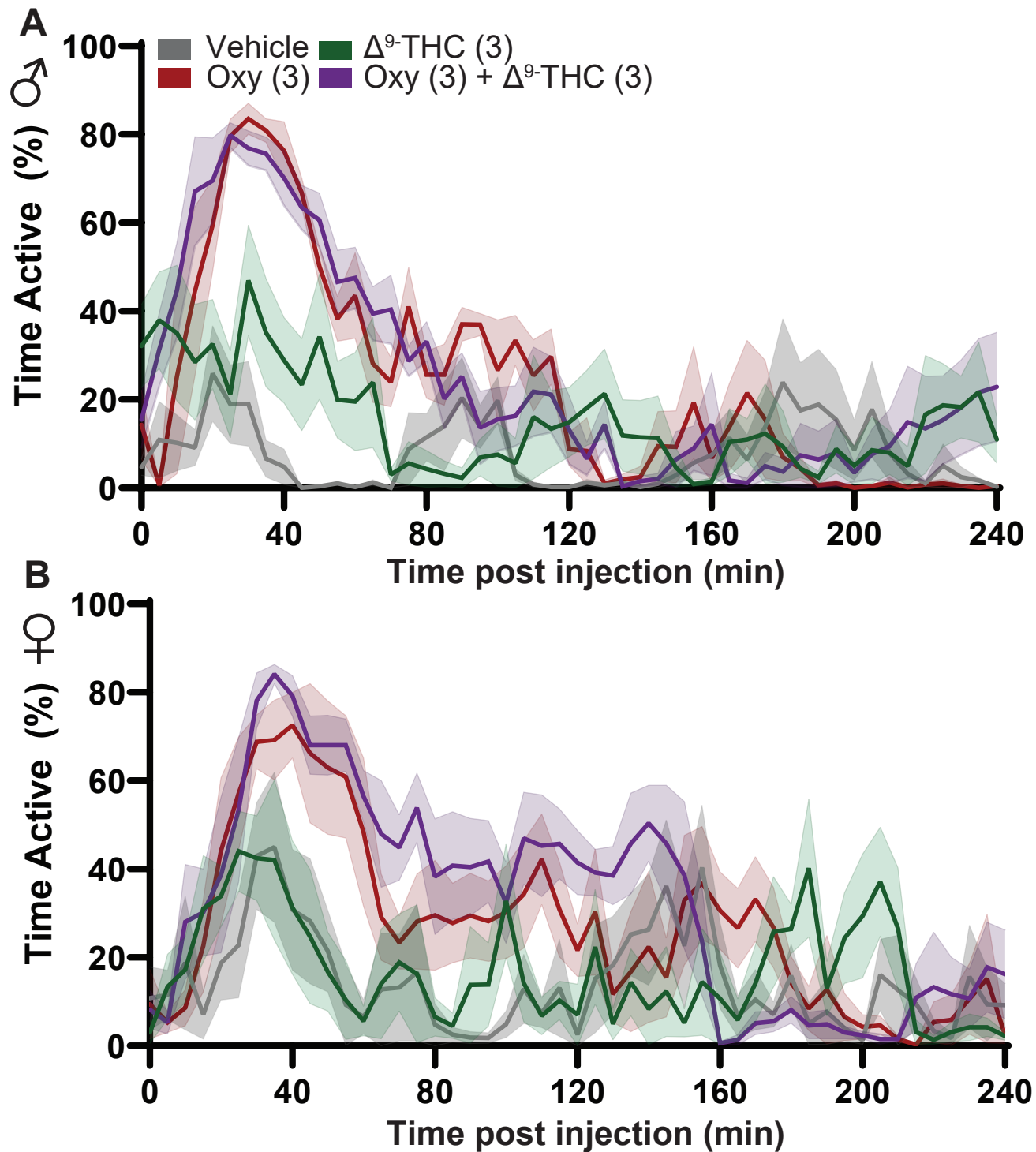
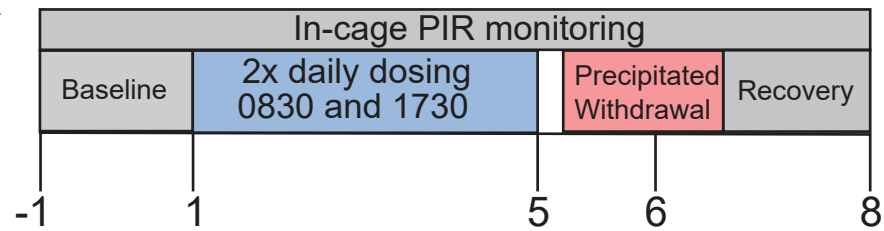


Supplemental Figure 1

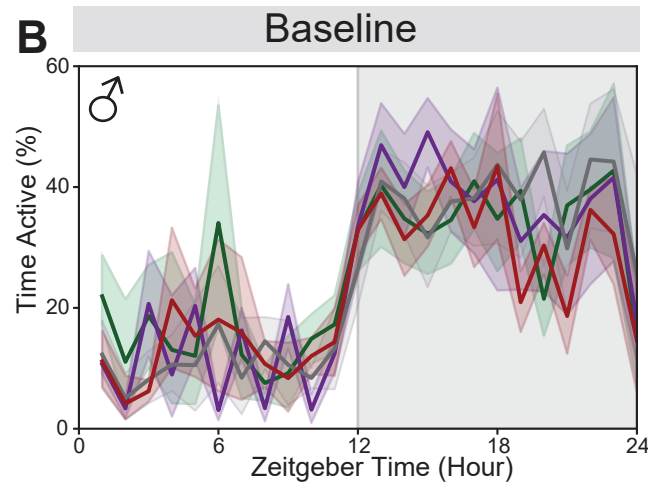
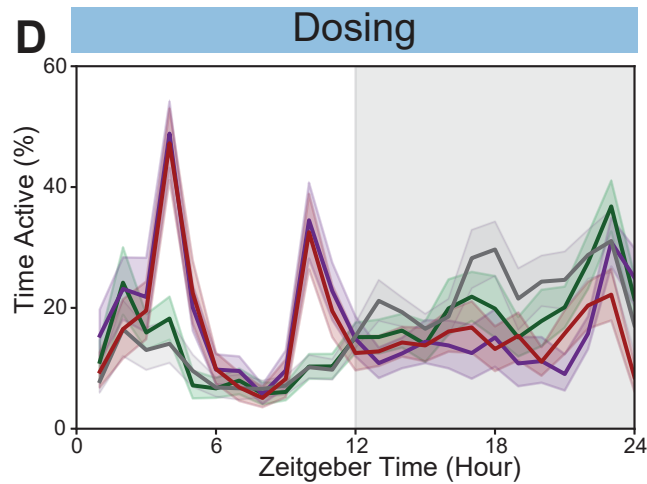
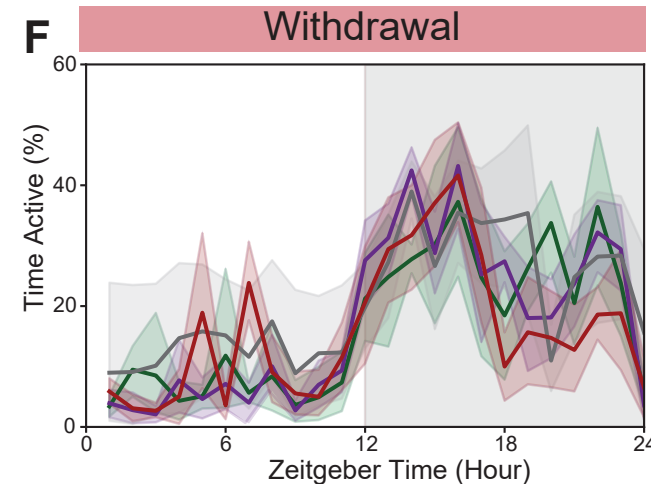
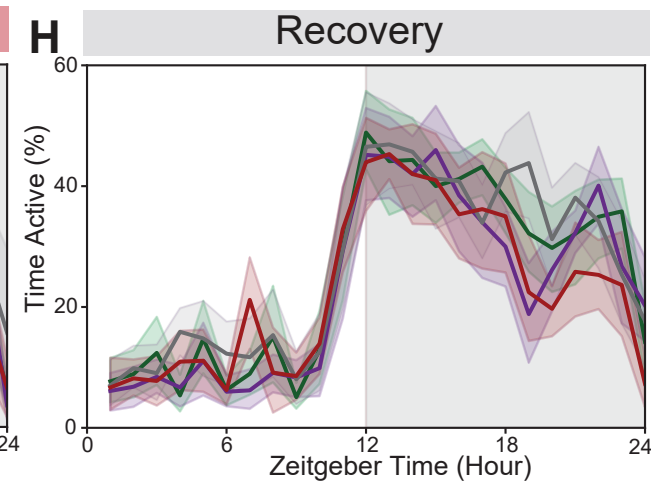
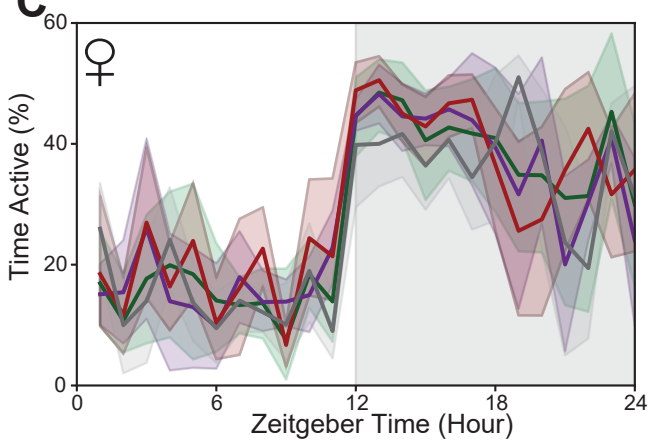
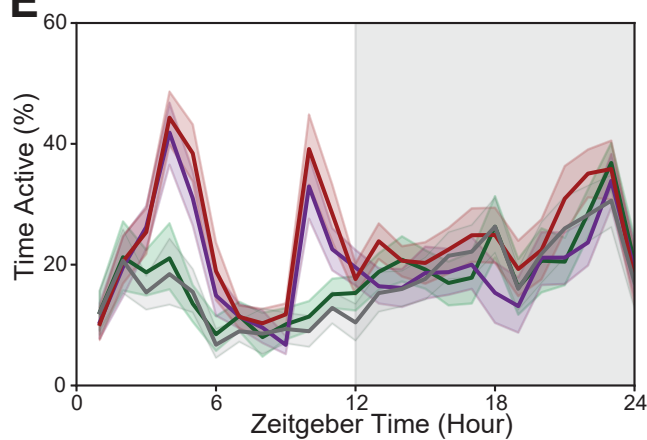
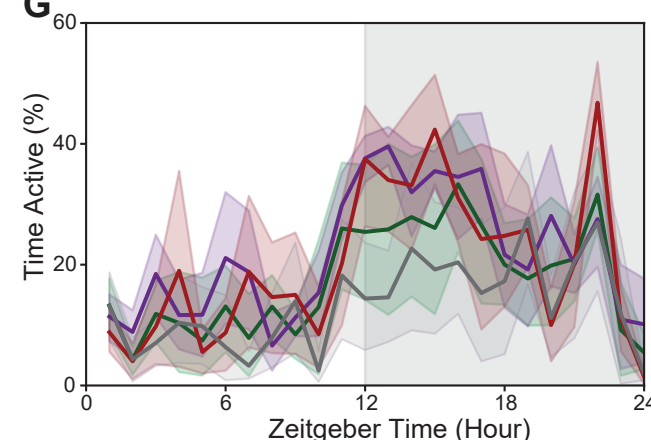
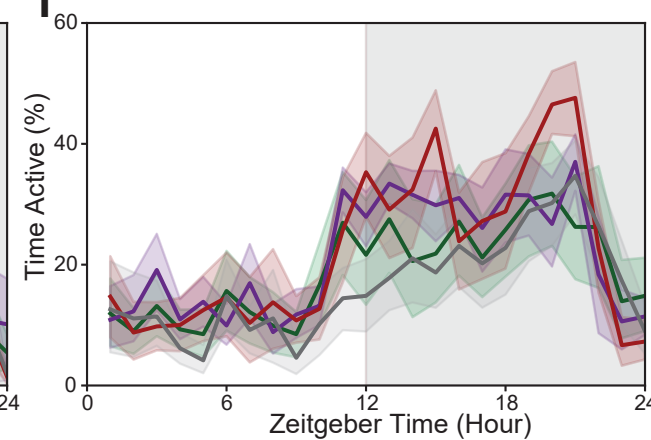


Supplemental Figure 1. Homecage activity traces following a drug administration. Activity data from Pallidus devices were plotted as 5 min bins. Vehicle, Oxycodone (3 mg/kg s.c.), Δ^9 -THC (3 mg/kg s.c.), or a combination of oxycodone and Δ^9 -THC was administered at the 0 min mark in both males (A) and females (B). Oxycodone and combination treatment of oxycodone and Δ^9 -THC produced transient increases in activity in both males and females. Data represented as mean \pm SEM. N = 5-6 per group

Supplemental Figure 2

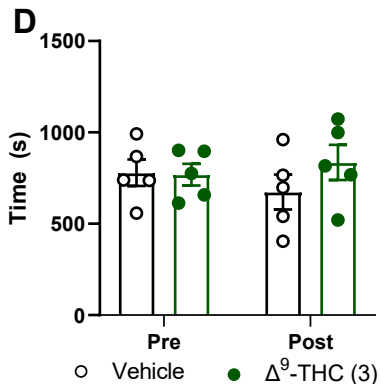
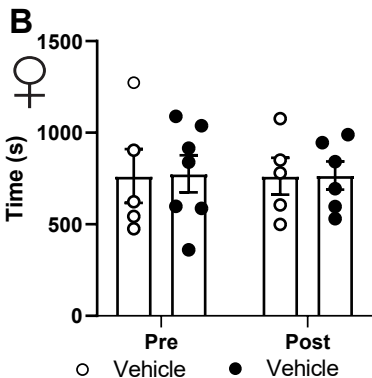
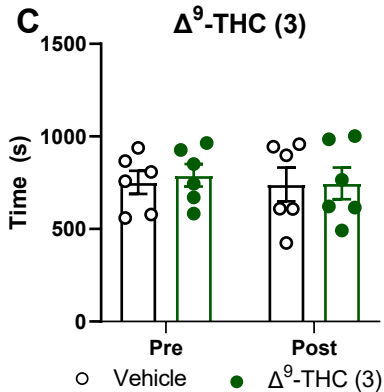
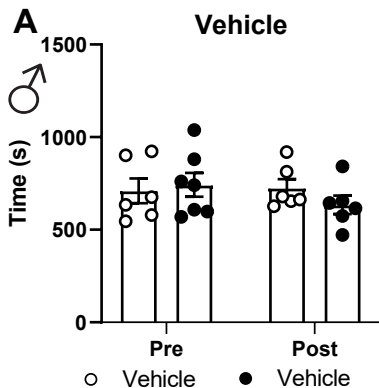
A

■ Vehicle ■ Δ^9 -THC (3)
■ Oxy (3) ■ Oxy (3) + Δ^9 -THC (3)

B**D****F****H****C****E****G****I**

Supplemental Figure 2. Oxycodone and combination of Δ^9 -THC with oxycodone produce alterations in circadian activity during the dosing phase. Schematic of experimental timecourse (A). Activity data from Pallidus devices were plotted as 1 hr bins and averaged for each phase of the experiment. Activity was similar across all groups during the baseline phase of the experiment in both males (B) and females (C). During the dosing phase, treatment with oxycodone and a combination of oxycodone and Δ^9 -THC produced a spike in activity during the light phase in both males (D) and females (E) that corresponded to the time when the treatment was administered. There were slight differences between groups during the withdrawal phase (F,G) and groups appeared mostly similar during the recovery phase (H,I). Data represented as mean \pm SEM. N = 5 per group

Supplemental Figure 3



Supplemental Figure 3. Vehicle and Δ^9 -THC do not produce alterations in chamber

preference. Administration of vehicle only or Δ^9 -THC (3 mg/kg s.c.) did not produce alterations in chamber preference in either males (A,C) or females (B,E). Data represented as mean \pm SEM. N = 5-6 per group