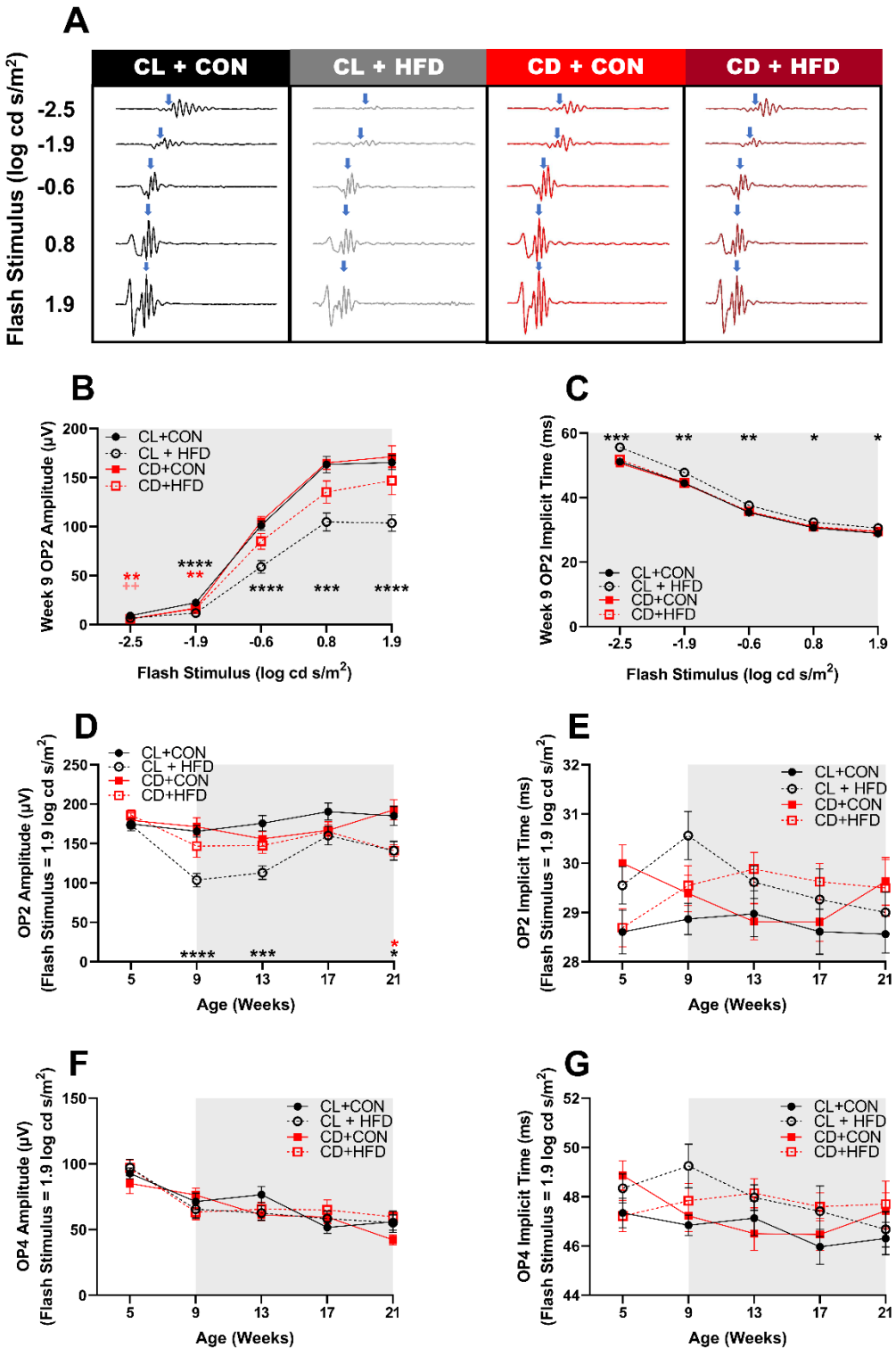

Supplemental Figure 3. HFD treatment and developmental circadian disruption impair ERG oscillatory potential (OP) amplitudes. (**A**) OP waveforms representative of OP2 at 9 weeks of age (1 week after HFD) in response to scotopic stimuli show visible amplitude deficits in the CL+HFD group. Blue arrows indicate the peak for the OP2

wave. (**B**) At 9 weeks of age, the CL+HFD group had both decreased OP2 amplitudes (2-way ANOVA, group*step: $F(12, 280) = 6.33$, $p<0.0001$) and (**C**) delayed OP2 implicit times (2-way ANOVA, group*step: $F(12, 280) = 5.62$, $p<0.0001$), as shown in the intensity response curves. Over time, the CL+HFD group had decreased (**D**) OP2 amplitudes (mixed-effects, group*time: $F(12, 260) = 2.44$, $p=0.005$) at 9, 13, and 21 weeks of age; the CD+HFD group also developed OP2 deficits at 21 weeks. There were no differences in (**E**) OP2 implicit times (mixed-effects, group*time: $F(12, 260) = 1.54$, $p=0.11$), (**F**) OP4 amplitudes (mixed-effects, group*time: $F(12, 260) = 1.38$, $p=0.18$), or (**G**) OP4 implicit times (mixed-effects, group*time: $F(12, 260) = 1.24$, $p=0.26$). Data are presented as mean ± SEM and analyzed by 2-way ANOVAs or mixed models with Dunnett tests. *p<0.05 **p<0.01 ***p<0.001 ****p<0.0001 vs CL+CON group. Black asterisks indicate CL+HFD group, red asterisks indicate CD+HFD, and pink crosses indicate CD+CON group. Grey shading indicates period of diet treatment. For each timepoint, CL+CON n=16-19, CL+HFD n=14-19, CD+CON n=15-19, CD+HFD n=15-21.