Controllers

This page is for describing how to use the manual controllers we have for the sub.

Joystick

This is composed of two programs, joystick_driver and joystick_control. The joystick_driver reads the joystick and publishes the joystick's state to a topic, while joystick_control subscribes to this topic and publishes control messages.

Forward/back and left/right cause the sub to move forward/back, left/right as expected. Twisting the joystick controls the sub's yaw. The hat affects pitch and roll, while pulling the trigger resets the sub to a neutral orientation. The throttle is used for controlling the depth of the sub, with the min and max depths are controlled by settings in the parameter server.