

QArm Recommended Assessment

Basic I/O

1. Create a schematic diagram showing the positive convention of the manipulator when operating in position mode.
2. Do both position mode and PWM mode follow the same positive convention? For example, does commanding the base joint a positive PWM signal cause it to rotate in the same direction as commanding it a positive angle in position mode?
3. In theory, what voltage will you apply to hold the QArm at the home position, with gravity and without gravity?
4. Provide at least one reason why you would develop your own position controller using PWM mode as opposed to using the built-in PID position controller.