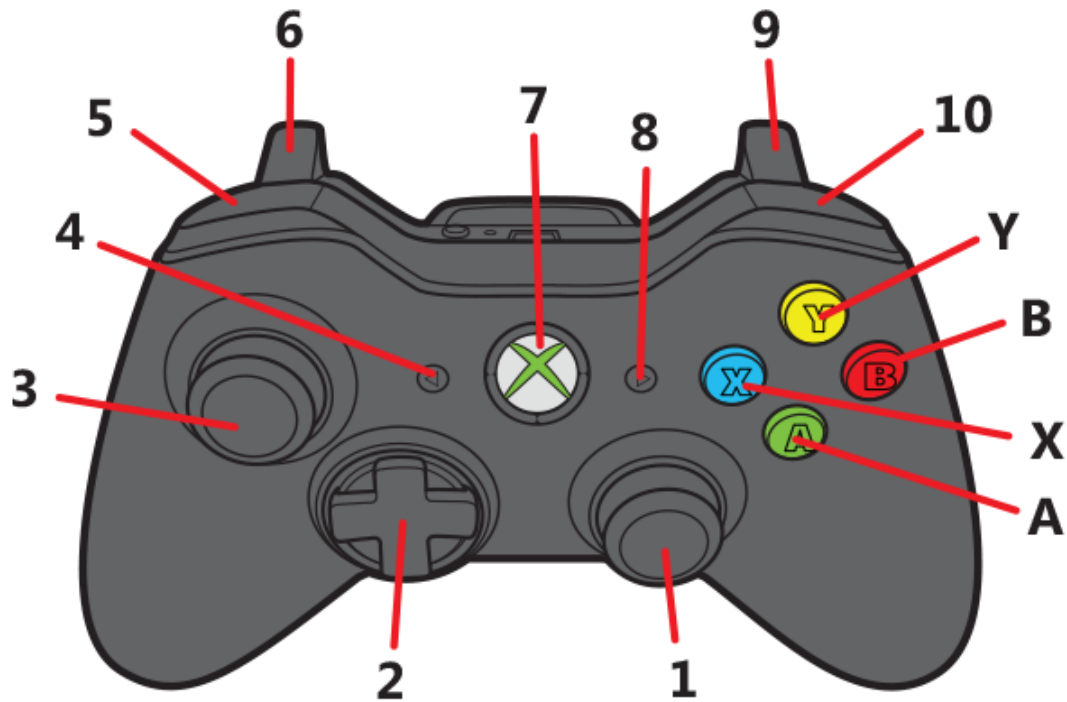


Xbox Controller Button Mapping for arms and wheel

This README file provides a visual mapping of every button on an Xbox controller and its function.



Button Descriptions

1. **Rigth Stick:** Controll Thorvald
2. **D-pad:** Controlling end effectors
3. **Left stick:** Controlling arms
4. **Back Button:** Used to decrease the arm speed
5. **LB Button:** Decreese the driving speed
6. **LT Button:** Controll the arm in z-direction, LT is positiv direction
7. **Xbox Button:** -----
8. **Start Button:** Increese the arm speed
9. **RT Button:** Controll the arm in z-direction, RT is negativ direction
10. **RB Button:** Increese the driving speed
11. **Y Button:** Switches between the end effectors
12. **B Button:** Moves the arm to home position, moves the end effector to home position when Y is beeing pressed.
13. **A Button:** Call the homing service that realign the wheels
14. **X Button:** Switches between the arms

L3 and **R3** the safety service is called and the robot stops.

More info

LT and **RT** need to be pressed down completely before they are in use.

L3 is **Left stick** pressed down, and **R3** is **Right stick** pressed down.

Usage

You can refer to this button mapping diagram when driving thorvald and controlling the arms with the `teleop_arm_and_wheels.py`

When endeffectors are not active they will follow the arms so that the camera always follows the y-axis (global frame). The tilt will remain from its last setpoint.