

VR Teleoperation Controller Guide

Meta Quest Controllers — Robot Arm & Mobile Base Control

Left Controller

- G** **Grip Button (Side)**
Hold to control **left arm** position. The robot arm tracks your hand movements in 3D space.
- T** **Trigger**
Hold to **close** the left gripper. Release to open.
- X** **X Button**
Press to **return left arm** to its home position.
- J** **Thumbstick**
Controls robot **locomotion** (forward/backward, turning).

Right Controller

- G** **Grip Button (Side)**
Hold to control **right arm** position. The robot arm tracks your hand movements in 3D space.
- T** **Trigger**
Hold to **close** the right gripper. Release to open.
- A** **A Button**
Press to **return right arm** to its home position.
- J** **Thumbstick**
Controls robot **locomotion** (strafing left/right).

⚡ Quick Reference

Button	Action	Details
Grip (Side)	Move robot arm	Hold to activate arm tracking; release to stop
Trigger	Gripper open / close	Hold to close the gripper; release to open
Orientation	Wrist control	Controller roll and pitch are matched on the robot wrist
A / X	Return to home	Returns the respective arm to its initial home position
Thumbsticks	Locomotion	Move the robot's mobile base around the environment

Tips for Best Results

- ✓ Press and **hold** the grip button before moving your hand — the arm tracks relative motion from where you first gripped.
- ✓ Both arms can be operated **simultaneously** — each controller independently controls its respective arm.
- ✓ Use the **A or X button** at any time to safely return an arm to its starting position.
- ✓ Control is **relative** — release the grip button to reposition your hand comfortably, then press grip again to continue controlling the arm from where it left off.
- ✓ Use the **thumbsticks** to reposition the robot before performing arm tasks.