

Recoil Robotics

2024 Robot User Manual

Version 2/26/24-2

Driver User Interface

The driver is responsible for controlling the robot's movement around the playing field.
The driver uses one joystick attached to the driver station as controller 0.

Control	Function
Joystick Y axis	Forward/reverse speed
Joystick Twist	Turn speed
Joystick Trigger	Low Gear - while held, cut speed 50%
Button 9 (front left)	Reverse driving direction
Button 7 (middle left)	Normal driving direction

Operator User Interface

The operator is responsible for controlling the robot subsystems other than the drivetrain. They control the intake/output, Goose angle and climb. Operator controls are via a Logitech F310 gamepad.

NB: Make sure the Logitech gamepad is in Flight Mode with the LED OFF!

SubSystem	Control	Function	Control ID
Intake/Output	Intake Auto	Intake a note with automatic motor stop on note detection. <i>(Not implemented yet)</i>	
	Intake Manual	Press and hold to run the intake motors. Note sensor ignored	Left Bumper
	Deposit Note	Run motors to feed the note out of the mechanism and into the amplifier.	Right Bumper
	Stop	Immediately stop all motors	Btn B
	Discard	Spit a note out of the intake	Right Stick Click
Goose	Move up	Move arm to output/top position.	Btn Y
	Move mid	Move arm to the driving position	Btn X
	Move down	Move arm to intake/bottom position.	Btn A
	Manual	Manually move arm up or down.	Left Thumbstick Y Axis
Climb	Climb	Retract the pneumatics on the climb mechanism.	Back
	Descend	Extend the pneumatics on the climb mechanism.	Start

