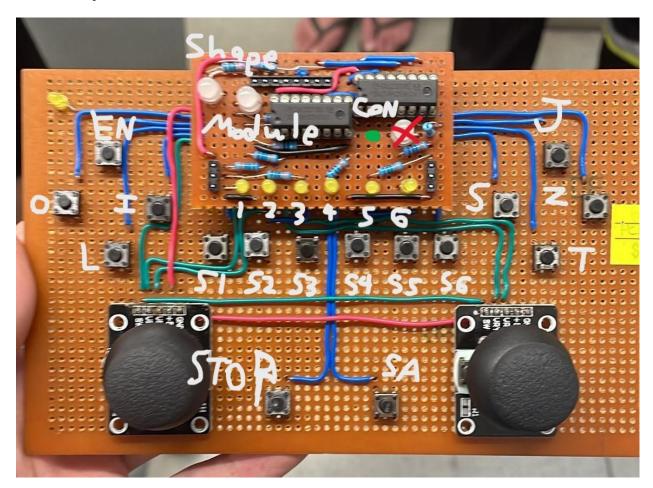
# Smorphi Pilot Custom Controller User Manual

## **Board layout**



#### **Buttons:**

O: Change shape to 'O'

I: Change shape to 'I

L: Change shape to 'L

S: Change shape to 'S

Z: Change shape to 'Z'

J: Change shape to 'J'

T: Change shape to 'T'

STOP: Stop all movement SA: Unlock all solenoids

EN: Enable module selection

S1: Solenoid 1 unlock / Module 1 select

S2: Solenoid 2 unlock / Module 2 select

S3: Solenoid 3 unlock / Module 3 select

S4: Solenoid 4 unlock / Module 4 select

S5: Solenoid 5 unlock

S6: Solenoid 6 unlock

#### \*Module select sequence:

- 1. Press and hold EN
- 2. Press and hold module to be selected
- 3. Let go of EN
- 4. Let go of module

#### Indicators:

CON: Connected to robot (Robot is replying)

1 to 6: Solenoid engaged (Refer to Appendix A for reference to shapes)

Shape: Shape smorphi thinks it is in (Not implemented)

Module: Module selected

Module 1: Red

Module 2: Green (Not implemented correctly)

Module 3: Blue Module 4: Cyan

### Joysticks:

Left (Move in straight line, linearly):

<sup>\*</sup>Move modules apart before unlocking solenoids

**UP:** Move forward

UP LEFT: Move forward left (Diagonally)

UP RIGHT: Move forward right (Diagonally)

LEFT: Move left

RIGHT: Move right

DOWN: Move backward

DOWN LEFT: Move backward left (Diagonally)

DOWN RIGHT: Move backward right (Diagonally)

Right (Rotate about centre, angular / Rotate module(s) about pivot):

LEFT: Rotate left RIGHT: Rotate right

#### Appendix A:

