Robot instructions (How_to_operate_the_robot_20221001.docx or .pdf):



- SHUTDOWN (led goes OFF)
- BOOT (led goes ON in 30 secs)

Display 1

- LOADING STATUS
- TIMER



- START
- STOP (0.5s < press < 5 sec)
- RESET (>5 sec press)

Display 2

- INFO
- COUNTDOWN MOVES

SHUTDOWN: Closes the Raspberry Pi OS, wait 15 seconds before to unplug the robot.

BOOT: After a shutdown, a short press starts the boot (takes 30secs to complete); Boot starts automatically after the robot is plugged.

START: Only when Display2 shows Press.

STOP: Stops the robot, at any moment, when it is "moving"; If the button is released within 5 seconds the python script is reloaded and the robot gets ready again for a new cycle.

RESET: Ends the python script. Raspberry Pi OS remains up (use SHUTDOWN before unplug).

The robot has 2 main working modes:

- A) Without any screen connected; This is the default mode, that starts once the robot is energized.
- B) With a screen connected, by wiring or via SSH.

To quit mode A) or B), press STOP for 5 seconds. Displays segments go full ON and OFF shortly after.

To start mode B):

- Quit mode A)
- Connect to the raspberry pi (i.e. with VNC viewer, via SSH)
- Activate the virtual environment (source /home/pi/.virtualenvs/bin/activate)
- From root (/home/pi) enter the cube folder (cd cubotone/src)
- Run the python script (python Cubotone.py)