How to operate the robot: 03 October 2021

Robot instructions (How_to_operate_the_robot_20211003.docx or .pdf):

(power button)	• SHUTDOWN (led goes OFF) • BOOT (led goes ON in 30 secs)	**Display 1**	• LOADING STATUS • TIMER
(black button)	• 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 (`workon cv`)
  • From root (`/home/pi`) enter the cube folder (`cd cube/kociemba`)
  • Run the python script (`python AF_cube_robot.py`)