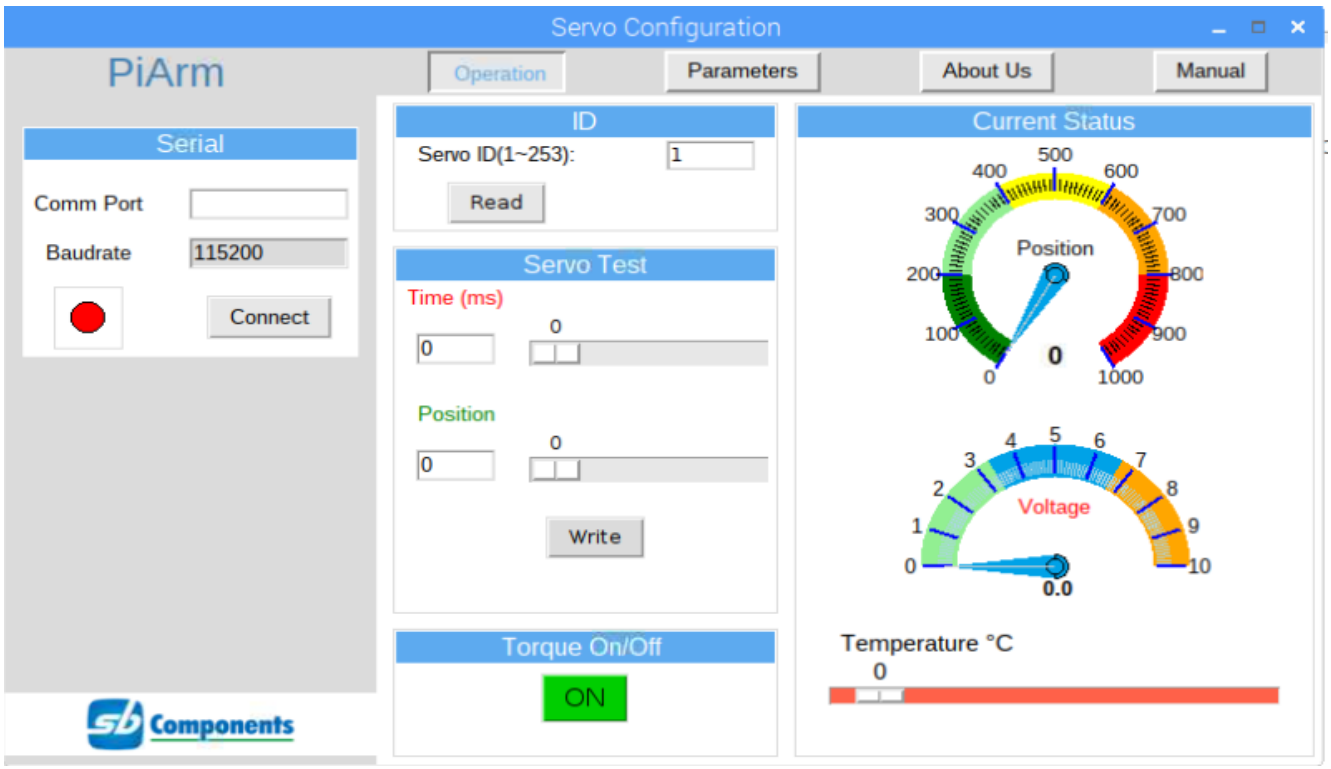
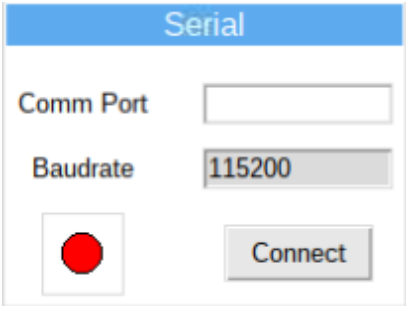
PiArm Servo Configuration
INSTRUCTION MANUAL

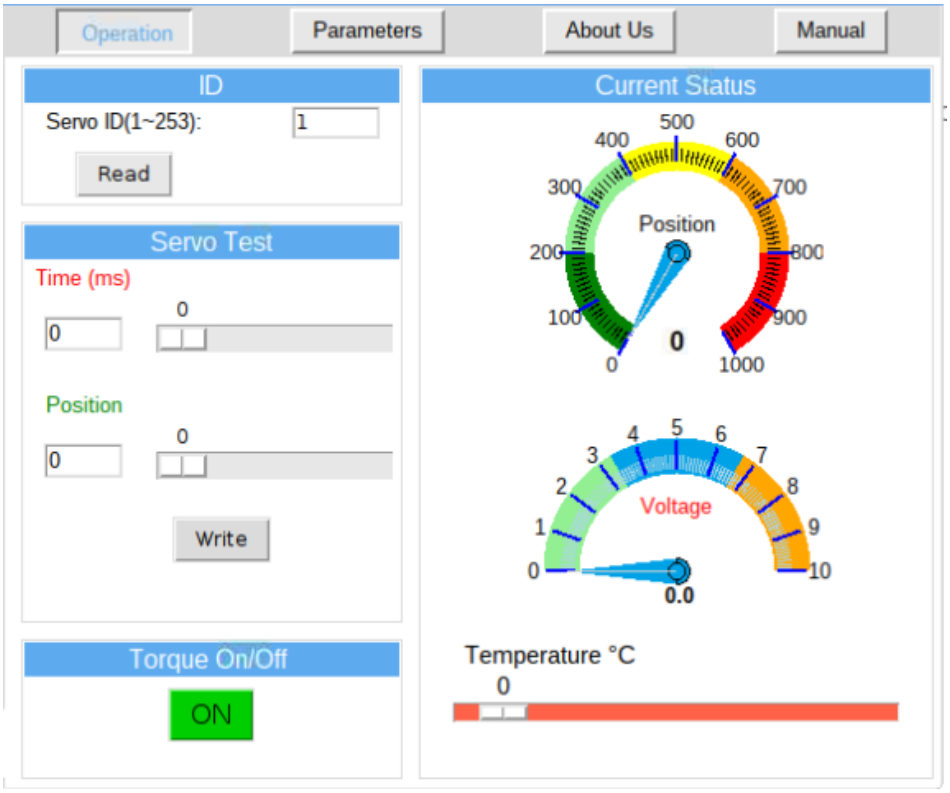


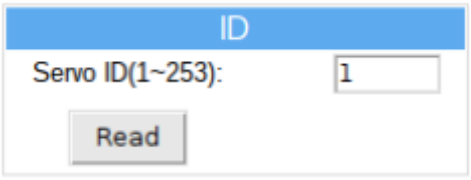
1: Serial:



- **Comm Port:** Enter Comm Port number in the text field.
  a : If connected through GPIO, enter **'ttyS0'**
  b : Else if connected through USB, enter **'ttyUSB0'**
- **Baudrate:** The required baudrate for Servo motor is '115200 bps', which shall remain constant.
- **Connect:** Connect or Disconnect comm port.

2: Operation:





- **Servo ID:** Enter Servo motor's ID to 'Read' or 'Write' data. By default motor's ID is set to '1'.

- **Time(ms):** Time for motor to change position. Enter the value in milliseconds.
- **Position:** Change position of motor using slider or text box. Slider may not change the position if Servo Id is not entered or comm port is not connected.
- **Write:** If position was set using text box, the action will be performed using 'Write' button.

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- **Torque:** Used to enable/disable servo torque.
  If enabled, stops the manual moment of servo motor.
  Disabled torque will allow the free manual moment of servo motor.

- **Position:** Display current position of motor in discrete values ranging from 0 to 1000.
- **Voltage:** Display voltage at servo motor.
- **Temperature:** Display Temperature of servo motor in centigrade.

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NOTE :
Current Status works when read button is pressed.

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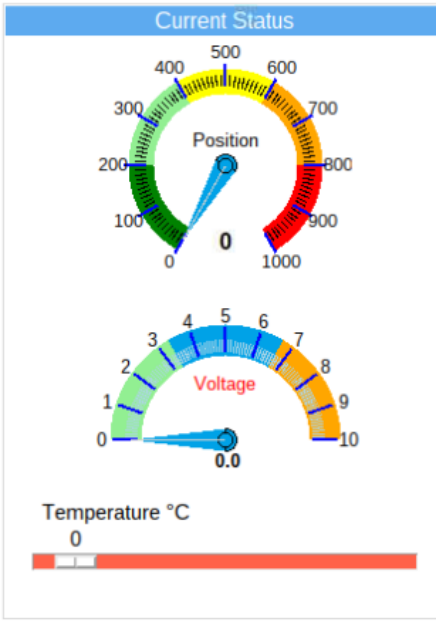

3: Parameters:

This Frame is used to read and write information(motor ID, angle limit, voltage limit, temperature limit and LED status) into Servo motor.

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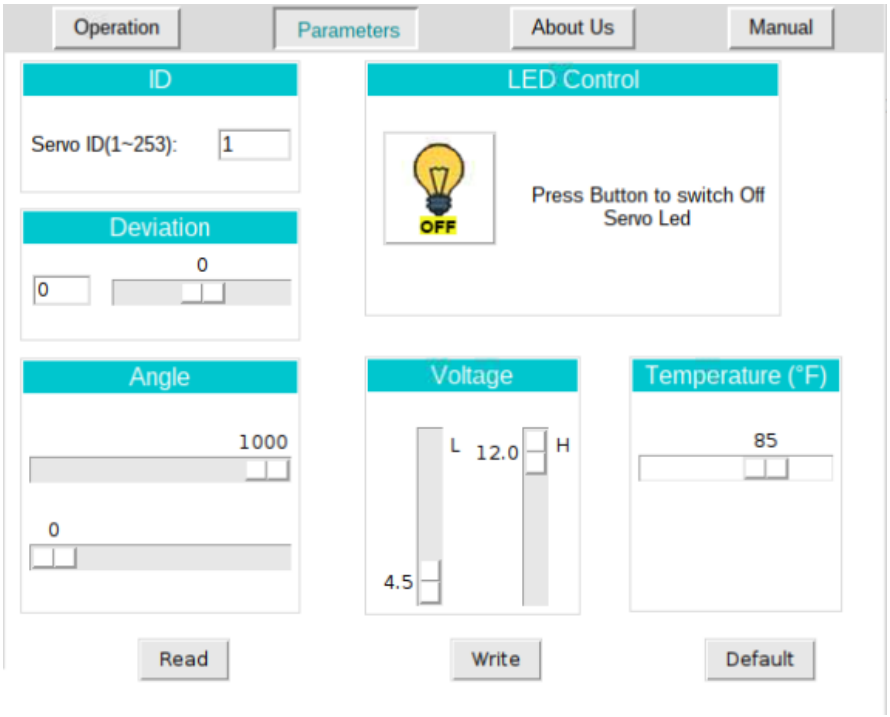
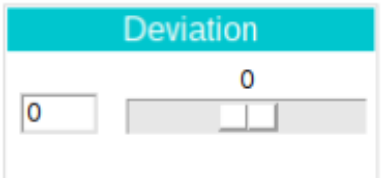
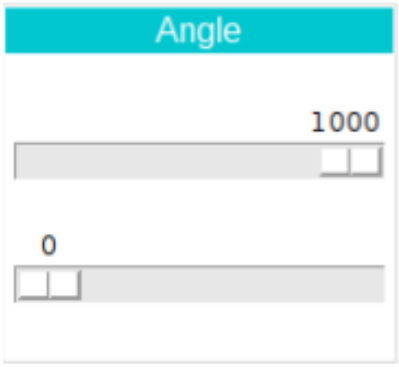


- **Servo ID:** If ‘Read’ button is pressed, the value of the textbox changes to the value read from servo motor.
  Else, in ‘Write’ case, the Servo parameters will change to the entered parameters.

- **Deviation:** Slide this bar to change the deviation of the motor. The ‘Read’ button will display the current deviation of the servo. If you slide the deviation slider, and press ‘Write’ button, it will set new deviation angle for the servo.





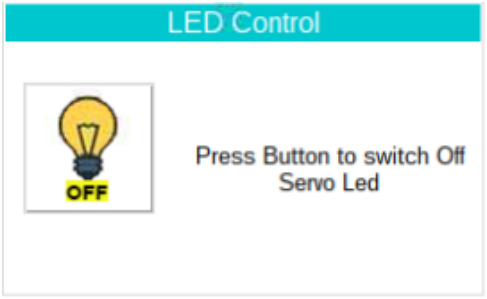
- **Angle:** Set the limits for servo motor angle. The upper slider is upper angle limit, and lower slider is lower angle limit.

  If the angle is not in range the ‘BLUE’ LED of servo will blink.

  The ‘Read’ button will set the slider to current angle limits.

  The ‘Write’ button will set new limits for motor.

- **LED Control:** Set the LED blinking for servo motors.
  The ‘Read’ button will read the LED state of servo.
  The ‘Write’ button will set LED state to OFF or ON.



NOTE :
The warning LEDs for voltage, temperature and angle will glow even if LED control is set to off.

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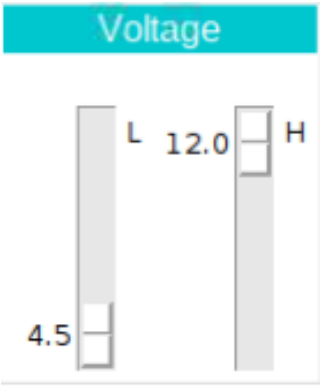


- **Voltage:** Set the voltage limits for servo motors.
  ‘L’ is the lower voltage limit and ‘H’ is higher voltage limit.
  If the voltage is not in range the warning LED of servo will blink.

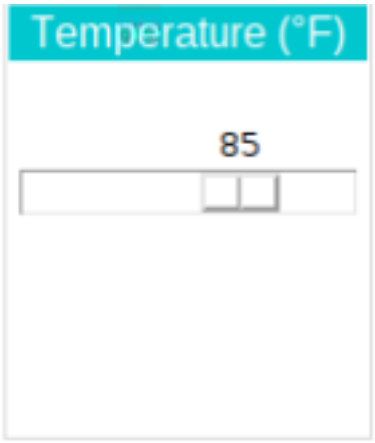
  The **‘Read’** button will read the voltage limits of servo and set the sliders respectively.

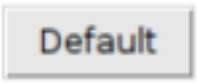
  The **‘Write’** button will set voltage limit to current slider position.

- **Servo ID:** Set the maximum temperature limit for servo motors. If the temperature is not in range the warning LED of servo will blink.

  The **‘Read’** button will read the temperature of servo and set the slider.

  The **‘Write’** button will set maximum temperature to current slider position.



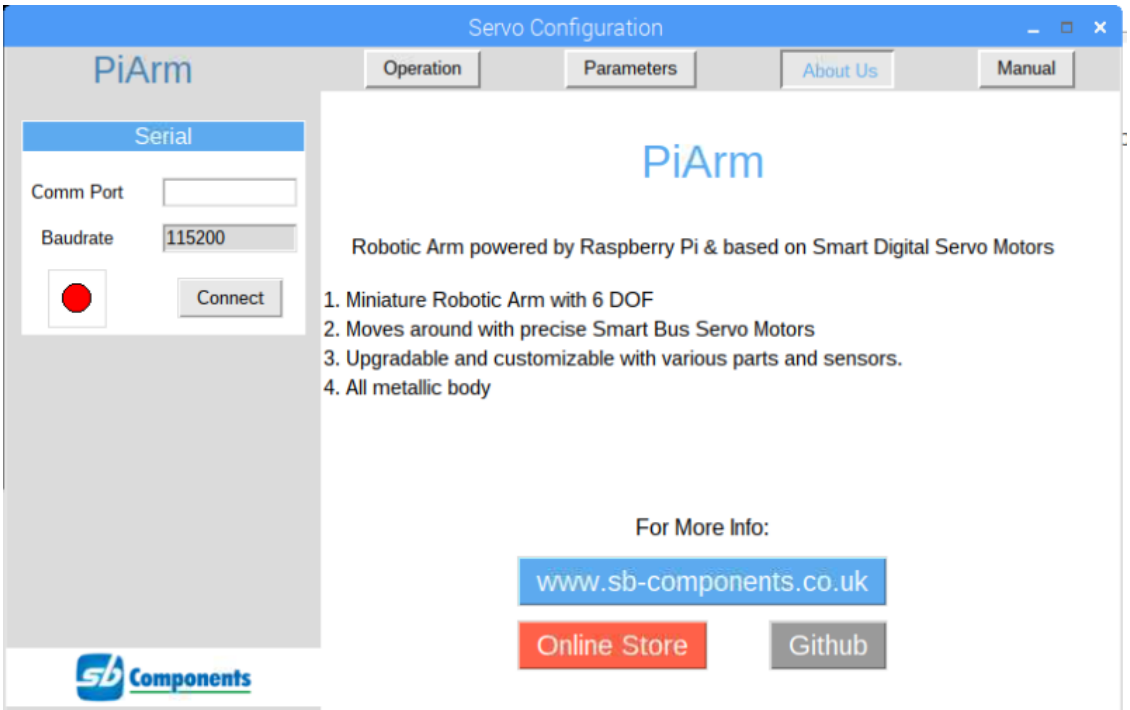


- **Default:** Default button will set servo parameters to defaults.

NOTE :
Use **‘Parameter’** window with care. If PiArm is connected to Raspberry Pi and **‘Write’** button is pressed, same configuration will be set to all servos, including servo ID.

4: About Us :

- This window shows information about PiArm.
- ‘Online Store’ button will open link to our store.
- ‘Github’ button will open the github link of PiArm code.



5: Manual :

This button will provide the software manual in PDf format.