

PiMecha Servo Config

Instruction Manual

PiMecha Servo Configuration

Serial 1

Comm Port

Baudrate 115200

Connect

ID

Servo ID (0~253): 1

Read

Servo Test

Time (ms)

0

Position

0

Write

Servo On/Off

ON

Current Status

Position

Voltage

Temperature °C

0

sb Components

1 Serial

Serial

Comm Port

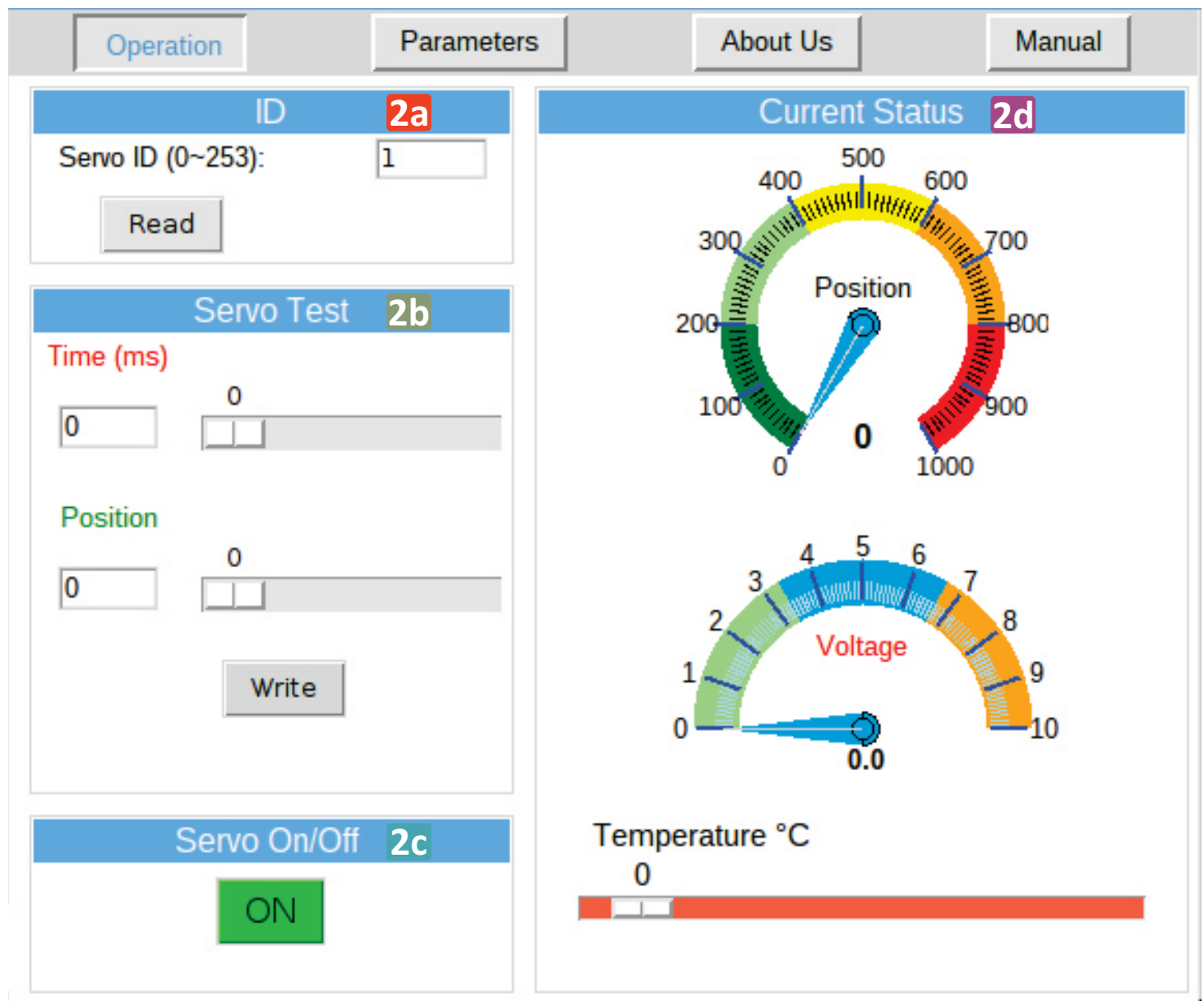
Baudrate 115200

Connect

- ✓ Enter your port no. in this section.
If connected through GPIO, enter **"ttyS0"**
Else if connected through USB, enter **"ttyUSB0"**
- ✓ Baud Rate shall remain constant as **115200 bps**
- ✓ Open or Close Port

- 2

Operation
- The user can read the value of the entered servo motor id, and can see the live data of the parameters like current, position and temperature. You can also test the servo by managing the time and position slider.



ID

Servo ID (0~253):

1

Read

This section holds the ID of the servo you wish to read or test. You must enter the ID manually

Servo Test

Time (ms)

0

0

0

Position

0

0

0

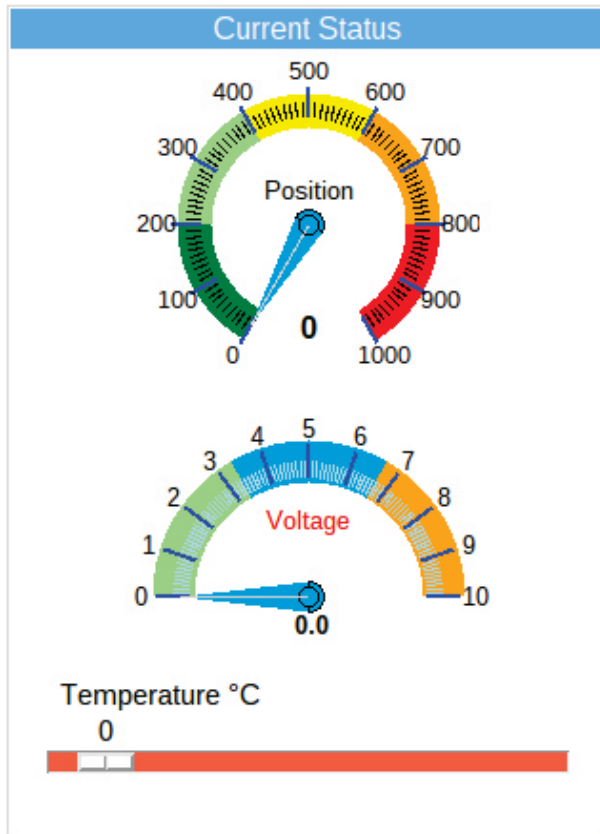
Write

You can change the position of the servos by moving the position slider. While time slider will allow you to manage the time lapse between 2 movements of a motor.

Servo On/Off

ON

This section is used to enable/disable the servo torque.



Displays the position, voltage and temperature of the motor. These parameters are run time entities. They are read once the 'Raed' button is enabled from ID section

3 Parameters

This frame is used to let you know about the servo motor parameters like its ID (if you don't know the motor ID), deviation, angle limit, voltage limit and the temperature limit. You can also write/update the servo parameters.

PiMecha

Serial

Comm Port

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Connect

Operation Parameters About Us Manual

ID 2b

Servo ID: 1

Deviation 2c

0 0

Angle 2d

1000

0

LED Control 2e

ON

☐ Over Heat

☐ Over Voltage

☐ Over Position

Voltage 2f

L 12.0 H

4.5

Temperature (°F) 2g

85

2a Read Write Default

sb Components

Read

Write

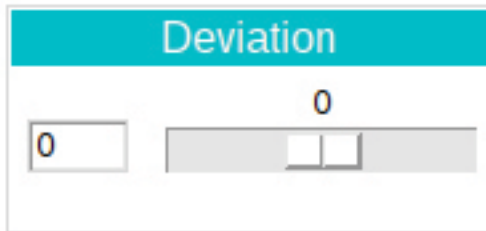
Default

This section contains the 'Read' button, 'Write' button and the 'Default' button. Read button enables you to read the servo configurations. Write button allows you to update the servo configuration set by you. While the Default button will set all the parameters to their default settings.

ID

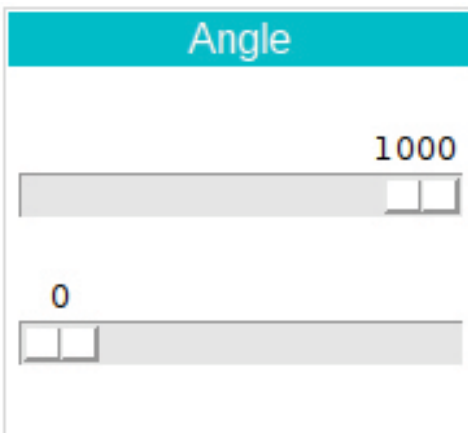
Servo ID: 1

If you press the 'Read' button, the form shall display you the servo ID. Else if you wish to update the servo id, you must enter the ID in the box and press 'Write' button.



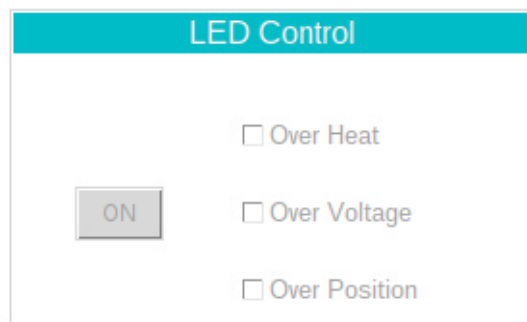
The 'Deviation' interface features a teal header with the title 'Deviation'. Below the header, on the left, is a small input box containing the number '0'. To its right is a horizontal slider bar. Above the slider, the number '0' is displayed. The slider has a small white handle positioned at the center of the bar.

You can slide this bar to change the deviation of the motor. Again, 'Read' button will display you the current deviation of the servo, while if you slide the position of the slider and then press 'Write' button, it will set the new deviation angle of the servo.



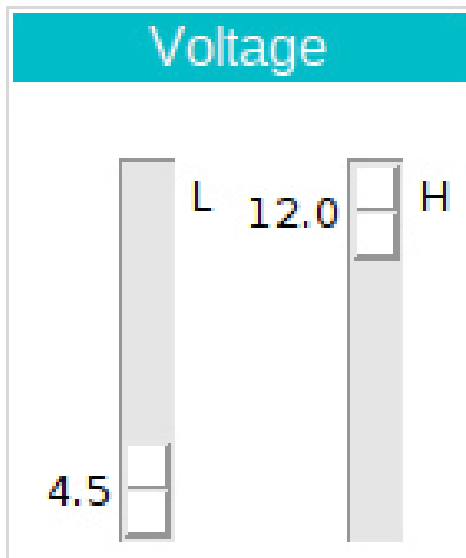
The 'Angle' interface has a teal header with the title 'Angle'. It contains two horizontal sliders. The top slider is labeled with '1000' at its right end and has a white handle near the right. The bottom slider is labeled with '0' at its left end and has a white handle near the left.

This section allows you to make the movements of the servo after you set the limit here. The 'Read' button will let you know about the current angle limit while the 'Write' button will allow you to set the new angle of the servo.

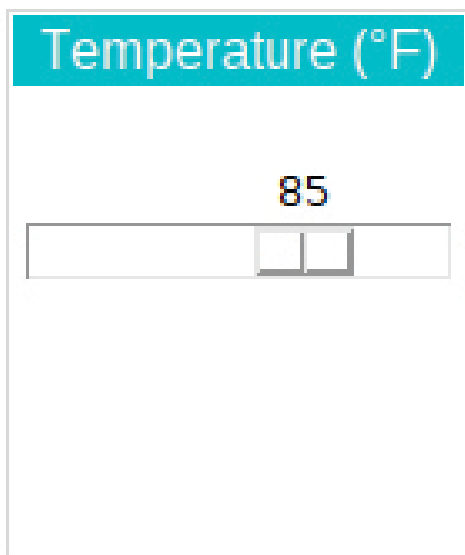


The 'LED Control' interface has a teal header with the title 'LED Control'. On the left side, there is a grey button with the text 'ON'. To the right of this button are three unchecked checkboxes, each followed by a label: 'Over Heat', 'Over Voltage', and 'Over Position'.

This section is disabled in the current version of PiMecha. An updated version is in the pipeline where this section will be used.

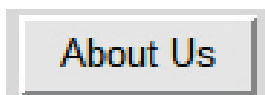


This will let you set the limit for the voltage of the servo. Below the minimum set limit and above the maximum set limit, the servo shall not function.



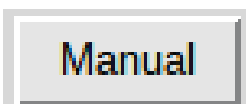
This will let you set the limit for the temperature of the servo. Below the minimum set limit and above the maximum set limit, the servo shall not function.

4 About Us



This button shall contain the information about the PiMecha humanoid

5 Manual



This button would provide you the software manual in PDF form.