

About trim adjustment

Thank you for purchasing the PLEN.D assembly kit. You have purchased PLEN
We are currently updating the firmware. For this reason, it is necessary for the customer to perform "trim adjustment" after assembly is complete. This manual explains how to adjust the trim.

I'll enjoy having this.

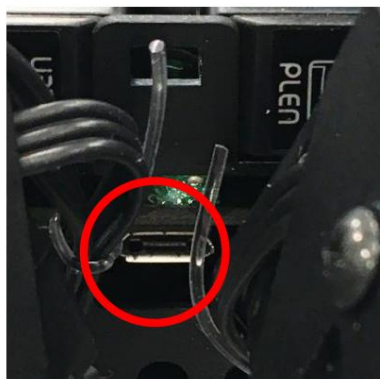
What you need: PLEN, battery, PC, micro B terminal USB cable

(Please note that communication may not be possible if you use a USB cable from a 100 yen store, etc.)

1 Connect PLEN and PC

Connect the USB cable from the bottom of PLEN and connect it to your PC. At this time, connect the battery to PLEN. (However, be sure to turn off the power.) Once the connection is complete, open the device manager and check that the connected port is set to "Arduino Micro." please confirm. If not, install the "Arduino IED" that matches your PC environment from the URL below. and install the device driver.

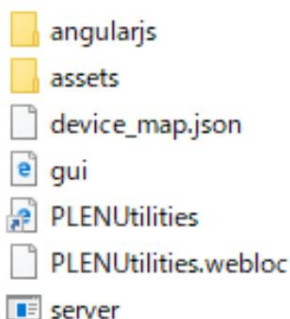
<https://www.arduino.cc/en/Main/Software>



2 Preparing the trim adjustment environment

There is a ``ControlServer_Win_v1.3.0" or ``ControlServer_OSX_v1.3.0" zip file inside the included USB memory, so open it. Open "server" there and open "PLENUtilities".

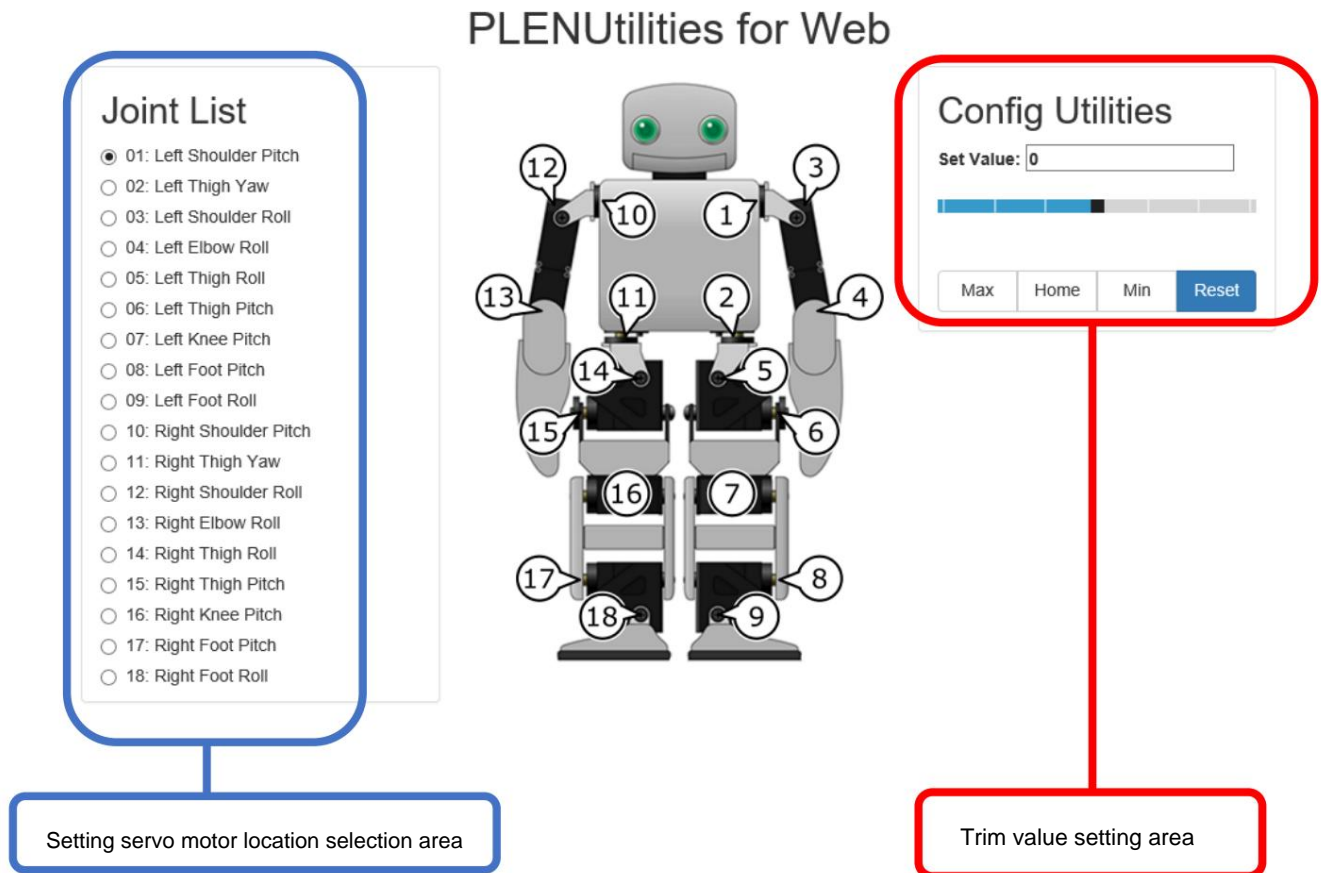
Please.



3 Trim adjustment method

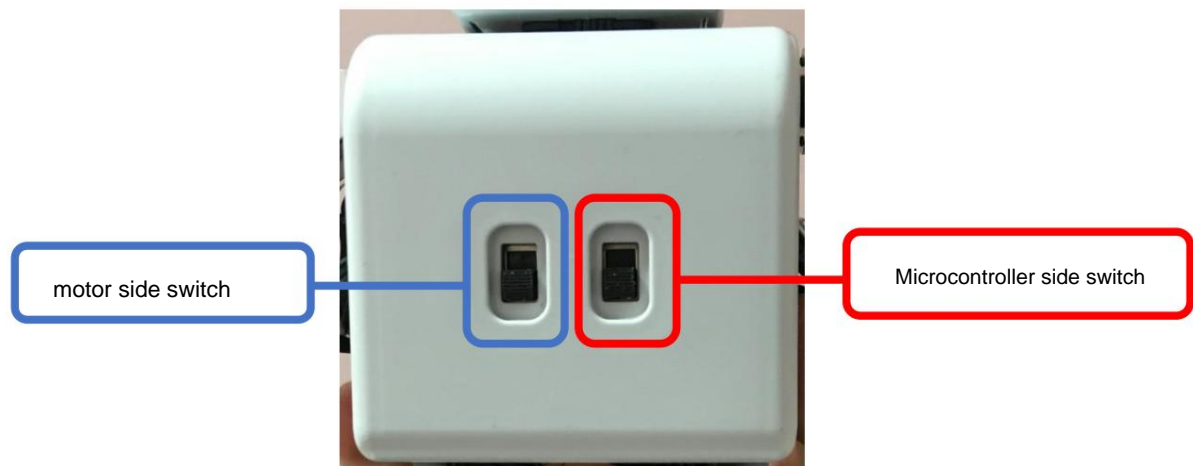
The outline of "PLENUilities" is as follows. (If the page below is not displayed, please check the browser you are using.

Please try changing the type of annoying)



To adjust the trim for the first time after assembly, turn on only the right side of the switch on the back of PLEN.

please. If not, turn both switches ON.



Next, select the location of the motor you want to adjust. The selected part will change.

Joint List

- ☒ 01: Left Shoulder Pitch
- ☐ 02: Left Thigh Yaw
- ☐ 03: Left Shoulder Roll

Once you have selected the location you want to set, change the angle value on the right or adjust the trim using the bar.

Config Utilities

Set Value:

Max

Home

Min

Reset

Once you have changed the value, press the "HOME" button and the trim value will be sent to PLEN. "HOME" button

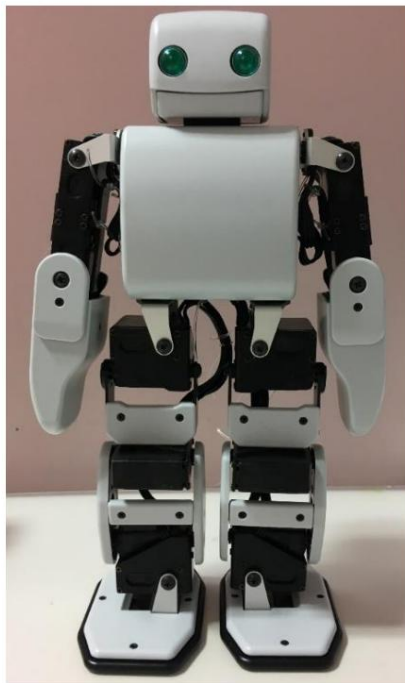
Please note that the changes will not be reflected unless you press the button.

The best trim position is to keep your legs straight and your arms slightly spread apart.

Please refer to the figure for details.

If you are making adjustments after assembling for the first time, first set the values in the table below, then turn on the switch on the left.

Please make fine adjustments.



Number	Servo motor position	Reference value
1	left arm pitch	-100
2	Left leg yaw	240
3	left arm roll	250
4	Left hand roll	-160
5	Left crotch roll	-100
6	Left crotch pitch	-100
7	Left knee pitch	520
8	Left ankle pitch	60
9	Left ankle roll	-60
10	Right arm pitch	100
11	Right leg yaw	100
12	Right arm roll	-340
13	Right hand roll	160
14	Right crotch roll	70
15	Right crotch pitch	160
16	Right knee pitch	-500
17	Right ankle pitch	-140
18	Right ankle roll	100

If you have any questions, please contact us below.

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