Servo Programmer user manual

1: Please download the software from here:http://www.yinyanmodel.com/servo program card driver.rar

2:Expand the Zipped format file and disable the antivirus softwares before you install the software to the computer.

3: Open the file as unzipped before, Double-click the file (named USBXpressInstaller.exe under the folder named Driver) to begin installation.

4: Restart the computor,please do not remove the file even if any warning pops up.

5: Run the software, and you will see the interface as below:
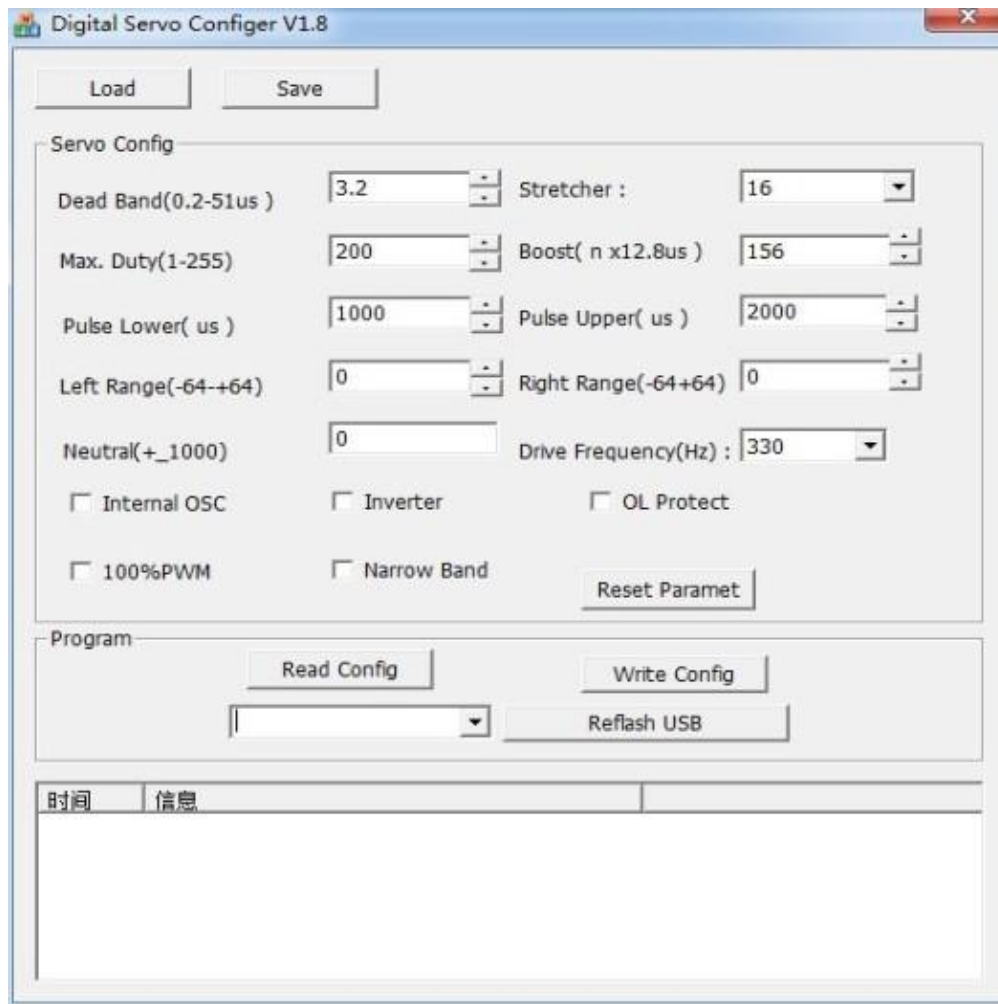
Connect the USB adapter to PC and the Servo Programmer, the servo MUST

be connected to USB adapter correctly. (Please pay attention to the wires.) Click the "REFLASH USB" button, and the PC indicates that the servo is found, and the Green LED is ON. Before you change any programming values, please choose the button "Read config" and you will see the default settings of the servo, click "Save" button to save the defaut settings of the servo. This is useful if there is any problem after any programming values are changed, you can resume the default settings by clicking the "load" button then "Write config" button. (The Green LED is on indicating that the programming goes on smoothly. If the Red LED is on, please turn off the software and check if the wires are connected correctly. If it the Red LED is still on, please re-install the software)

After the software is read, you can set the values according to the following instruction. Clink the "Write config" button to write the program to the servo.

Programmable servos:EMAX ES09D, ES09MD, ES3351, ES3352, ES9256HV, ES9257, ES9258, ES9054, ES9254, ES9255 (more new servos will be added to this list)

Programming:

Dead Band: Dead Band is the range of signal over which the servo does not change position in response to a change in signal. The smaller the value is, the more sensitive the servo is. It will cause vibration or shorten the life for servos if this value is set too low.

Stretcher: Please do not change this value.

Max.Duty: Adjust motor drive torque. Max. 245. Please kindly note that the higher the torque is, the bigger the current is, and bigger current will shorten servo life and cause vibration. Adjusting 100% PWM value together with this value allows you to adjust servo output torque as well.

Boost: The Pulse-Width to start the motor. It makes the servo more smooth by adjusting the values. It will cause the vibration if the value is too small.

Pulse Lower: Recommended value: 900μs, Min. 600μs. Servo travel range angle can be adjusted by changing this value.

Pulse High: Recommended value: 2100μs , Max. 2400μs

Left Range: To set the Max.value. The value is usually set to be 0. The servo travel degree will decrease with the value of -, and increase with the value of +. This feature allows you to change the servo degree in corresponding to the same pulse width.

Right Range： To set the Max.value. The value is usually set to be 0. The servo travel degree will decrease with the value of -, and increase with the value of +. This feature allows you to change the servo degree in corresponding to the same pulse width.

Neutral： This feature allows you to set your Center point. The value is usually set to be 0. Please do not change this value.

Drive Frequency： It allows you to lower the squeaky noise of the servo. Recommended value: 330, 19531. Other value may cause servo malfunction.

Internal Osc： When this feature is chosen, external oscillator is unnecessory. Please don't change this mode or else it will cause servo malfunction.

Inverter： To change the direction of rotation of the servo for a given stick movement direction.

100% PWM： Adjust servo torque.

Narrow Band： When Narrow Band is chosen, IC is set to be Narrow Band mode, the range of signal recognition will be changed. Please do not choose this feature if the gyro doesn't support Narrow Band mode.