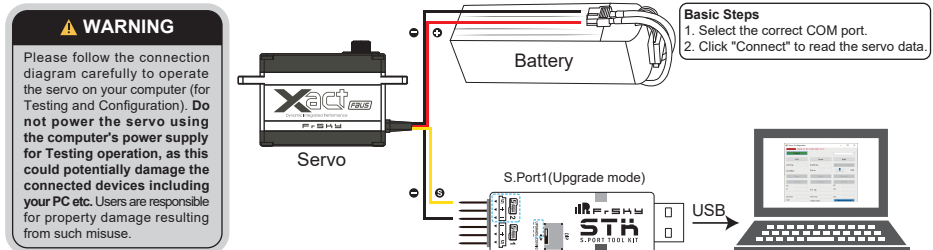## Part 1. How to configure Xact series servo by Servo Configuration on PC.
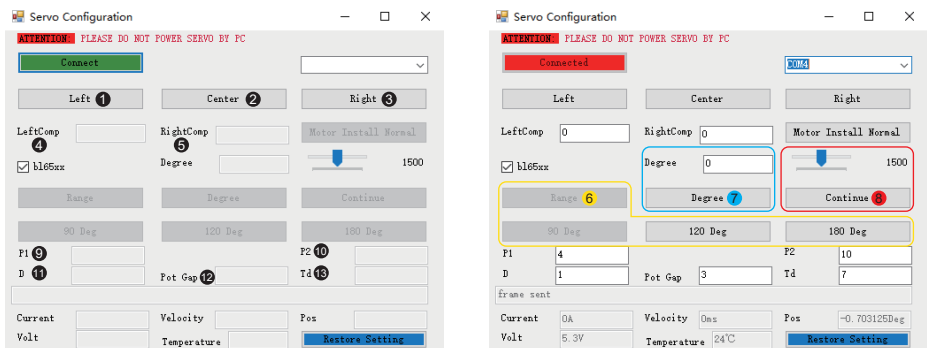
Preparations

- Xact series servo
- Servo Configuration (PC Program)
- STK tool
- Y harness cable

Connection Diagram

⚠ **WARNING**

Please follow the connection diagram carefully to operate the servo on your computer (for Testing and Configuration). **Do not power the servo using the computer's power supply for Testing operation, as this could potentially damage the connected devices including your PC etc.** Users are responsible for property damage resulting from such misuse.

Battery

Servo

S.Port1(Upgrade mode)

USB

Basic Steps
1. Select the correct COM port.
2. Click "Connect" to read the servo data.

Setting Function

❶ Send the control command to move the servo arm to the left edge.
❷ Send the control command to move the servo arm to the center.
❸ Send the control command to move the servo arm to the right edge.
❹ Tune the Left-side edge position by setting the Left Compensation.
❺ Tune the Right-side edge position by setting the Right Compensation.
❻ Range Mode: This mode offers users 3 preset options of angle degrees (90°/120°/180°) for the servo travel range.
❼ Degree Mode: This mode allows users to set the servo travel range with the required angle degrees.
❽ Rotate Mode(6500H series): In this mode, users can use the sliding bar to set the rotation direction and tune the rotation speed.
  - Rotation Direction: Clockwise rotation with setting >1500us, and counterclockwise with setting)
  - Rotation Speed:
    Between 1501us-2159us, the bigger the setting value is, the faster the clockwise rotation speed achieves;
    Between 800us-1499us, the bigger the setting value is, the faster the clockwise rotation speed achieves;
❾ P1: Arm-Locking Strength
❿ P2: This value is used to calculate the P1/P2. It's for tuning the servoarm movement speed.

(Tip: When servo jitter occurs, the situation can be alleviated by decreasing the P1 value or increasing the P2 value. This adjustment reduces the ratio of P1/P2, which helps to smoothen the servo's operation.)

⓫ D1: Adjustment to the P1 value.
⓬ Td: Time differential. It's used as a Filter, it normally does not need to be changed.
⓭ PotGap: Potential Gap. This value should be set very closely to the actual mechnical gap, like 3 means 0.3° When the merchnical gap is 0.3°, then the PG value should be set less than it about 0.2°.

Note: Please remember to click the "Restore Setting" button to ensure that the above settings are written and saved to the servos.