

KST Servo Tool #5 Instructions Manual



1. Power input Built-in XT60PW connector, suitable for connection to power sources via XT60 connectors.

1.1. Tool #5 input voltage range: DC 5.0V – 9.0V;

1.2. **CAUTION!!!** Choose your input voltage based on the specifications of your KST servo being programmed. Your input voltage will be passed directly to the servo; do NOT input high voltage without verifying the servo's voltage for compatibility. Example: X10 Pro has a voltage range of 4.8V – 8.4V, so the input voltage for Tool #5 when attached to said servo will be DC 4.8V – 8.4V.

2. Servo output: Used for connecting KST servos. When connecting the servo, make note of the symbols '- + S' and ensure the servos are plugged in in the correct orientation. Typically, the servo wire for 'S' will be orange or white. '-DC- DC negative '+ DC+ DC positive 'S' Signal PWM signal

3. Powering up and settings operations

3.1. Once power is connected, Tool #5 will enter self-testing mode. Once the self-test is completed, the buzzer will sound twice, and midpoint LED will flash red. You may now connect your servo(s) to Tool #5.

3.2. Verify the operating voltage of your servo, then proceed to connect the servo to Tool #5 to one of the '- + S' connectors. Once connected, Tool #5 will recognize the servo and return it to the midpoint (1500us) position. At this time, the LED under 1500us will light up red and enter the midpoint-setting mode.

3.3. Midpoint setting: After entering the midpoint-setting mode, use the Rotary encoder (**Tuning Button**) to adjust the midpoint. Once adjusted to the desired new midpoint position, press 'Enter' or 'Select'. Once programmed successfully, the buzzer will sound shortly once and proceed to enter the endpoint-setting mode.

3.4. Endpoint setting: After entering the endpoint-setting mode, use the Rotary encoder (**Tuning Button**) to adjust the endpoint(s). You can use the select button to switch between the two endpoints. When the LED light corresponding to 1000us is on, it indicates that the angle corresponding to 1000us has being adjusted. When the LED light corresponding to 2000us is on, it indicates that the angle corresponding to 2000us has being adjusted. Once adjusted to the desired new endpoint positions, press 'Enter'. Once programmed successfully, the buzzer will sound once, the midpoint LED will begin flashing, and proceed to enter standby mode.

3.5. When entering the midpoint setting mode or endpoint setting mode and no adjustments are needed, press 'Enter' to skip.

4. Direction settings

4.1. Definitions: **CW** (Clockwise), **CCW** (Counter clockwise)

4.2. To change the servo direction, enter the midpoint setting mode or endpoint setting mode and press '**CW/CCW**', then press 'Enter'. When the Button LED is on, it indicates that the direction of the servo is CCW When the Button LED is off; it indicates that the direction of the servo is CW.

4.3. To change the servo soft start, enter the midpoint setting mode or endpoint setting mode and press 'Soft Start'. When the Button LED is on, it indicates the soft start function of the servo is effective. When the Button LED is off, it indicates the soft start function of the servo is ineffective.

5. Reset

5.1. The '**Reset**' button only resets Tool #5, and does not reset the servo settings.