Theta Servo Program Box User Guide
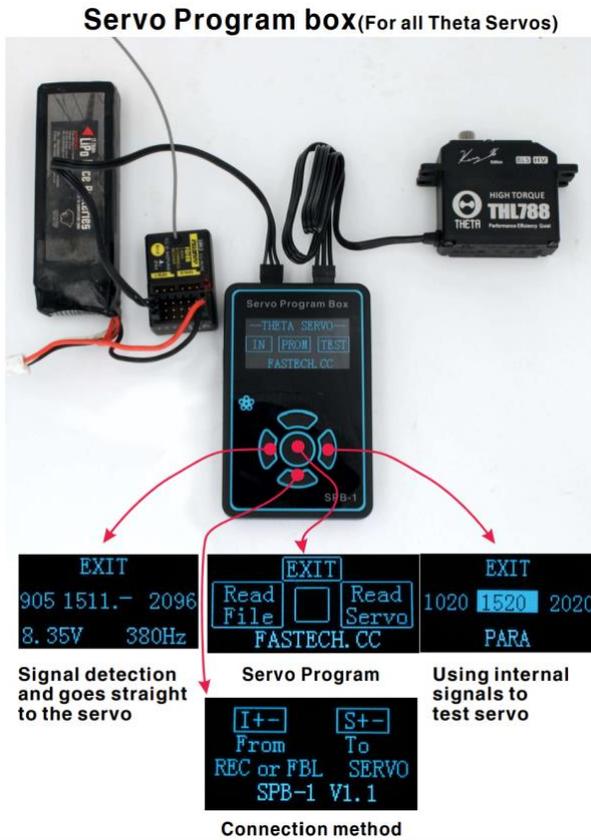
Basic setup from using RX or FBL system
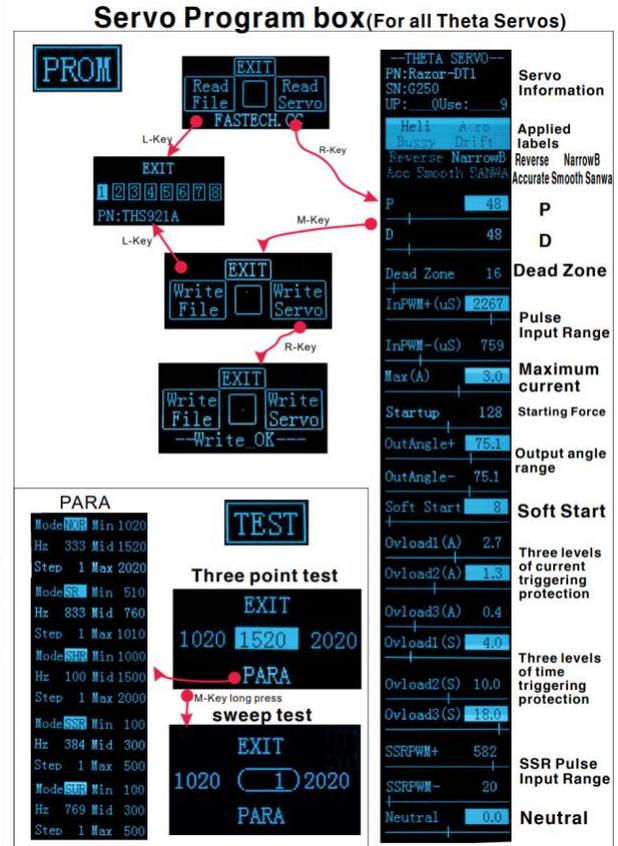
Configuration options

Think of the 5 buttons on the program box as "hot buttons" meaning that when you click on a button, it follows what is displayed on the screen. For example, when you first power up, you have three options "IN", "PROM" and "TEST". These options correspond to left (L-Key), center (M-Key) and right (R-Key) buttons. As you move through the menus, the center button executes a function while the up and down buttons scroll through options and the left and right buttons change options.

Important Parameters:

Some of the available parameters do not usually need to be modified. We advise you proceed with caution when modifying advanced parameters. Most common settings to modify are aircraft type, reverse, narrowband (if required), neutral and current.

Reverse: Reverses the movement of the servo.

Narrowband: Switches from 1520 pulse width to 760. When narrowband is highlighted, it means the servo is set to 760 center pulse. Use this setting with caution.

Neutral: Modifies the center point of the servo eliminating the need to do it with trim or subtrim on the transmitter.

P & D: Part of the control loop, we advise against modifying this unless you know what you are doing.

Dead Zone: Decreases sensitivity when an input is detected creating a "dead band" section within the frequency spectrum. Think of this as expo, but applies to any input throughout the entire frequency range and instead of slowing down the response, it eliminates the response. This is useful when using very fast servos on aircraft with large control surfaces to reduce or eliminate fluttering.

Output Angle: Changes the maximum deflection of movement in each direction. Very useful if you don't want to do this via your transmitter's end point adjustments. Typically not useful in helicopter applications.

Max Current: Increases response and acceleration, but also increases the servo's current utilization. If you increase this setting, make sure your power source (BEC or receiver pack) is capable of handling the current.

Modify Servo Parameters

Plug servo & power

When you Power up you see the home screen, **select Program by pressing the center button**

Right button to read servo program

Servo information displayed

Use up/down buttons to select value you want to change.

Use left/right to change values and **press center button to enter change**

Use right button to write to servo. It will say "Write OK" Press top **Button to "EXIT"**

View Servo Live Info

Instead of simply supplying power to the program box with a lipo battery, plug that side of the program box into the port/channel on your receiver or FBL system that corresponds to the servo you are monitoring. Then plug the servo to the program box.

Press Left button to select IN (TX/FBL input)

This is now a direct feed from TX or FBL system, used to verify /test changes. **Press top button** to EXIT and go back to home screen.

Photo Credits: Bob Schmidt