Setting fixed endpoints on Castle Creations electronic speed controls:

As always when working on a plane that will have its battery connected, remove the propeller before doing the following.

1. Using the Castle Link USB programming kit and its PC software, go to the throttle tab and set the throttle type to Fixed Endpoints. (Note, if you've wired a separate BEC in with the ESC, and have disconnected the red wire from the throttle plug, you'll probably get an error message telling you to plug a battery into the ESC so the Castle Link can identify it. After setting the throttle type to Fixed Endpoints, be sure to click "Update", and unplug the battery.)

2. On your transmitter, go to the throttle curve screen and set up a linear curve: 0-25-50-75-100.

3. On the servo setup screen, go to Travel and re-set the throttle travel settings:

    Move the throttle stick to full power, then bring the Travel setting to 25%.

    Move the throttle stick to power off, then bring the Travel setting to 25%.

    If your transmitter won't allow the 25% settings, go as low as you can.

4. Move the throttle stick back to full power, and (with the prop removed), plug in the battery.

5. On the travel adjustment screen, slowly increase the full-power throttle setting from 25 until the ESC beeps, which indicates that the controller and transmitter agree on what full throttle really is. Then increase the setting by two more percentage points. For example, if the ESC beeps at 85%, increase the setting to 87%.

6. Now do the same for the power-off setting. Move the throttle stick all the way down (you'll hear a beep), then slowly increase the power-off percentage setting up from 25 until the ESC beeps again, which indicates that the controller and transmitter agree on exactly what "off" really is, then increase it by two more percentage points.

The procedure is now complete. Supposedly, this is better because the ESC doesn't have to "learn" from the transmitter exactly where its full-on and full-off settings are. Seems like it learns it quite well when the throttle type is set to automatic, but apparently that is not always the case.