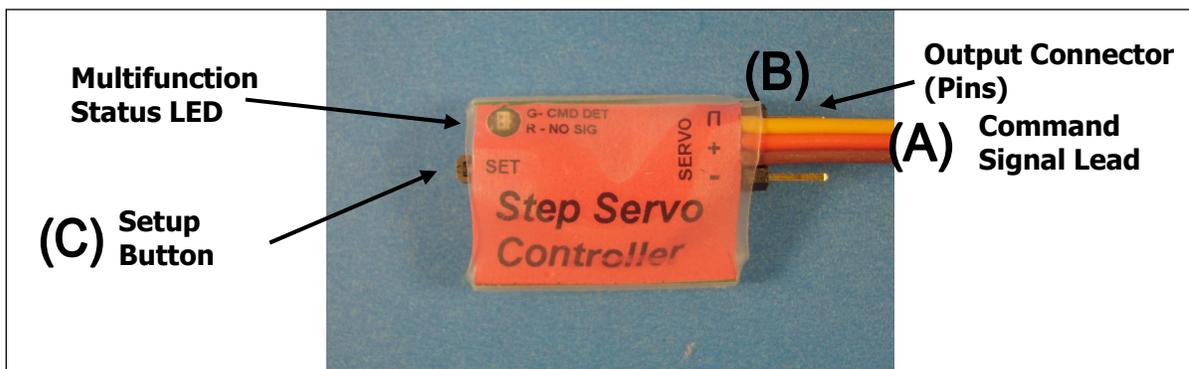


Step Servo Controller

General layout



Device Description

The Step Servo Controller (SSC) is designed to alter the behavior of a channel so that it acts as if it were being controlled from a 2, 3, 4 or 5-position switch. The input device on your transmitter may be a stick, knob, dial or Up/Down buttons, and the "command range" is broken up into three regions: Up/Left, Middle, and Down/Right. The output positions span the full range of servo travel and however many intermediate steps the SSC has been set up to provide.

Each time the input is cycled to "Up/Left" and back to Middle the SSC will move the servo one step closer to the Up/Left end of the range, and for each Down/Right command the SSC will move the servo one step in the Down/Right direction. The power-up starting position may be set to any of the available positions, as well as the commanded position upon loss of radio signal. (SSC may also be configured to HOLD the last commanded position on signal loss.)

Multifunction Status LED

When power is initially switched on both red and green lights will turn as part of a power on self test. During normal operation the Digital Channel Expander will then use the multifunction status LED to indicate:

GREEN	UP or DOWN command received
RED	Signal lost

During setup operation the function of the Multifunction Status LED changes to indicate:

GREEN (blink)	Indicates the current setup step (2, 3, or 4 blinks.)
RED (blink)	Indicates the selected number for the current step

Setup Mode

The SSC has a very simple 3-step setup routine:

1. Upon entering setup, first the desired number of "steps" is set. This may be two, three, four, or five positions.
2. Next, the starting/power-up position that the SSC is set. This may be position 1 up to the maximum number of positions.
3. Finally, set the position that the SSC will go to in the event of signal loss. This setting may be position 1 up to (number of positions + 1). Setting the signal lost position to (number of positions + 1) will command the SSC to HOLD the last commanded position.

By default the SSC ships configured to step between 3-positions, starts at Position 2, and will HOLD the last good position in the event of signal loss.

To enter setup mode turn on your transmitter, press and hold the setup button on the SSC, then turn on your receiver. The GREEN and RED status LEDs will both turn on, then show a solid green to indicate you're ready to enter Setup mode. (You may now release the Setup button.) Press either the UP or DOWN button on your transmitter (for the channel your SSC is connected to) to change the number of blinks for your current setup step. To accept the blink count press and hold the setup button until the GREEN turns on, then release. When all three steps have been set the SSC will automatically exit from setup mode and return to normal operation.

Questions?

- If you have questions or concerns about your Step Servo Controller please contact Kevin McLeod by email at KevinMc.Electronics@gmail.com