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## FW: 114 Rocketeer A - Two-Step Throttle/Elevator P-MIX3 Mix

1 message

**Tandy Walker** <rdb435021@icloud.com>
To: Trevor Boundy <trevor@boundy39.com>

Fri

Trevor,

From: Tandy Walker [mailto:aerotan1503@outlook.com]

Sent: Saturday, September 17, 2016 12:52 PM

Subject: 114 Rocketeer A - Two-Step Throttle/Elevator P-MIX3 Mix

## Rocketeer A

## September 17, 2016



I received this message from Jay Burkart yesterday.

Tandy, a thought,

Maybe you may have to go to a more progressive (exponential) down elevator mix. When the throttle is advanced slowly and the air speed is thus advanced the elevator effectiveness isn't linear and you may need to progressively need more down elevator when it gets to higher airspeeds. On my Hitec it is called exponential mixing. I'm guessing your Futaba has a choice between linear and exponential mix and when the mix starts.

Jay

In response to Jay's perceptive suggestion, I reviewed the Futaba 7C manual

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and there was no exponential mix function. However, there is a two-step P-MIX3 mix function using the offset feature that is described as follows:

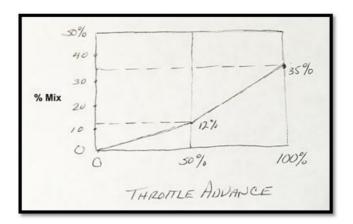
- · Slave the Elevator (Ch2) to the throttle (Ch3)
- · Position the throttle at the mid-point (50%) between off and full on
- $\cdot$  Select the offset (OFS>SET) and hold the dial down for two seconds
- $\cdot$   $\,$  When two beeps sound, the two-step point is established at the mid-point
- $\cdot$  Program +12% for the throttle position from zero to the mid-point
- $\cdot$  Program +12% to +35% for the throttle position from the mid-point to full on

These programming values are shown on the transmitter's display below, except for where the offset is.



Now as the throttle is advanced from zero to the mid-point, the down elevator deflection goes from zero to 12% at the mi-point and then from 12% to 35% from the mid-point to full on as shown below. While this not exponential, it is two linear mixes with a shallow slope first and then a steep slope.

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Of course there is any number of combinations of offset location and % mixes., but I thought I would start with the one shown above on Monday and see how it works......Tandy

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