



Here at SGDC we believe spec racing is the purest form of FPV racing where all that matters is pilot skill but we also understand that building a quad just for one type of racing is not cost effective. Texas Spec lets you use your normal quad whatever it might be 6s,4s,3 inch, 5 inch, freestyle, racing etc transforming it with a simple throttle cap to bring it in line with a low power race quad.

The aim is to bring the performance of every quad as close as possible to each other and to slow down quads this will promote closer racing and more emphasis on lines and not out right power of your quad

### **The Reference spec quad**

3S, 480g, 1960kv Prop: 5.1x3.8

You can revert your quad back to how it was using either method below.

In Betaflight go into **PID TUNING** tab, **Rateprofile** Tab, **Throttle Limit** drop down select **OFF** then **SAVE**

In the OSD go into **PROFILE > RATE > THR LIM TYPE** turn it to **OFF** then **SAVE & EXIT**

## How to set your quad up for Texas Spec

- Please use the Spec calculator <https://sgdc.co.uk/spec/>
- Enter your quads specs in to the calculator **All Parameters must be filled in** (do each Quad individually as it does make a difference)

Quad Weight (g) with Battery

Motor KV

Cell Count

Prop Diameter (in)

Prop Pitch (in)

(Remember Gemfan props **do NOT** have their pitch in the name so 51466 are **NOT** 4.6 pitch, they are 3.6 please go to the Gemfan website (<https://www.gemfanhobby.com/list.aspx?cid=47>) for correct pitch for Gemfan props)

The next step **must be** done in 1 of the following 2 ways only (no setting throttle limit on your transmitter only in betaflight).

## In Betaflight

Connect to betaflight then go to the **PID TUNING** tab (Green Arrow)

Then in the **Rateprofile Tab** go to **Throttle Limit** drop down select **Scale** (Red Arrow) Then in the **Throttle limit %** put in the spec calculators result for that quad (Blue Arrow) And remember to press **Save**

Warning: very high rates can result in delays from rapid decelerations.

	RC Rate	Rate	RC Expo	Max Vel (deg/s)
Micro Rates	0.01	0.00	0.00	0
	0.01	0.00	0.00	0
	0.01	0.00	0.00	0

	RC Rate	Rate	RC Expo	Max Vel (deg/s)
Rates Preview				

Throttle Limit	Throttle Limit %
SCALE	61
Throttle MID	Throttle DPO
0.00	0.00

Throttle Curve Preview  
50% to 50%

**OR** Though your OSD



Enter your OSD with stick commands

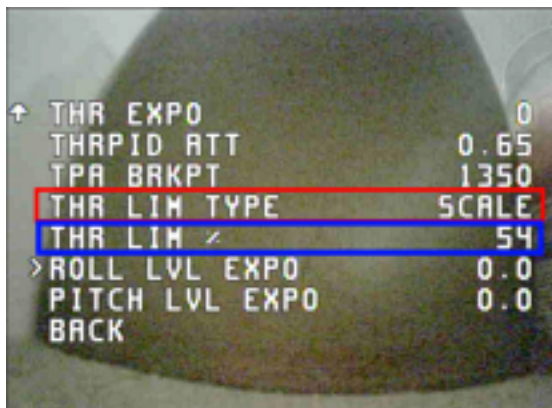
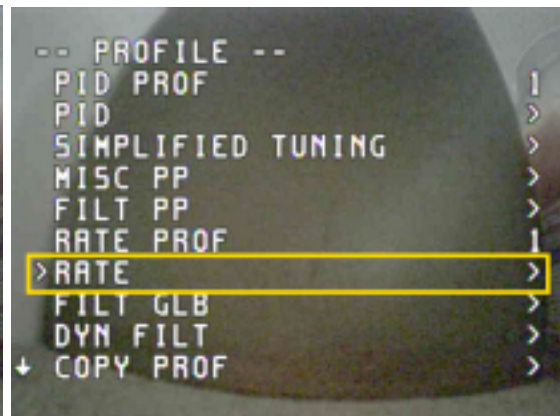
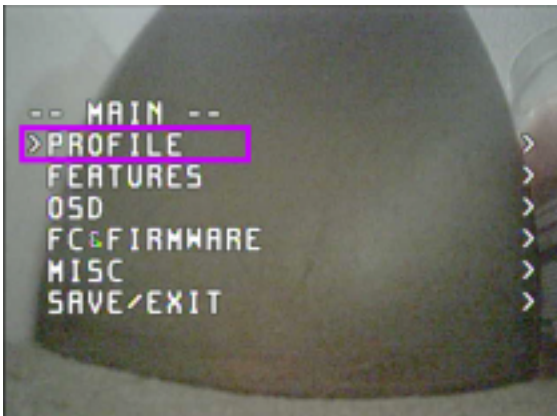
Then go into **PROFILE** (Purple Box)

Go down to **RATE** (Yellow Box)

scroll down to **THR LIM TYPE** turn it on to **SCALE** (Red Box)

Next set **THR LIM %** put in the spec calculators result for that quad (Blue Box)

And remember to **Save & Exit**





**At any time you want to revert your quad back to how it was  
You can use any method even if you used the other to set it up.**

**In Betaflight**

Go into **PID TUNING** tab,,Rateprofile Tab, **THROTTLE LIMIT** drop down select **OFF** then **SAVE**

**In the OSD**

Go into **PROFILE, RATE, THR LIM TYPE** turn it to **OFF** then **SAVE & EXIT**

**Any Questions please message us on Discord (<https://discord.sgdc.co.uk>) or Facebook (<https://www.facebook.com/southglosrc> )**