

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 (<u>https://www.gemfanhobby.com/list.aspx?cid=47</u>) 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 (<mark>Blue</mark>

Arrow) And remember to press Save

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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

MAIN >PROFILE FEATURES OSD FC&FIRMWARE MISC SAVE/EXIT	PROFILE PID PROF PID SIMPLIFIED TUNING MISC PP FILT PP RATE PROF FILT GLB DYN FILT + COPY PROF
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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 (<u>https://discord.sgdc.co.uk</u>) or Facebook (<u>https://www.facebook.com/southglosrc</u>)