

# DF 65 A+ Rig Setup

By Larry Sanders

## Rigging notes

- I used 50lb line for everything except Main and jib sheets they are 80 lb (maybe 100)
- Jib stay should be line vs wire supplied <sup>1</sup>
- Jib tack should be connected with line, not the hook supplied in the kit <sup>1</sup>
- Mast ties should allow 3 mm (1/8 inch) mast to sail. <sup>1</sup> Allow enough at the main uphaul to let the sail sit 1 mm above the downhaul eyelet. <sup>1</sup>
- Triple purchase bowsies at topping lift and main backstay.
- Forestay and uphaul and topping lift bowsies should all tighten when pulled up. I used a ring on the jib stay to accomplish this.
- V5 or lower boats need the bridle stabilizer line added.

## Transmitter hacks

- Set rudder travel adjust for approx. 35 degrees to each side. <sup>4</sup>
- Use the exponential function to reduce rudder sensitivity around the midpoint (Try + 50)
- Use the exponential function to increase the sail servo sensitivity around the midpoint (Try -50)
- Use the Sail servo trim to pull sails in further to point or pinch

## Boom dimensions

- Jib Boom Hook Down Cord should be 50 mm long <sup>6</sup>
- Jib Tach to Jib Boom Hook (Silicone rings) is 73mm <sup>4</sup>
- Jib tack to Jib Sheet eyelet is 160 mm <sup>4</sup>
- Main boom from lower gooseneck bolt to mainsheet guide eye 80mm <sup>4</sup>

## Sail trim cycle – do this at least twice <sup>5</sup>

1. This guide is for A+ rigs only. Mast position is 176 mm from back of jib eye (#2) to front of mast step. This should be the middle of the mast gauge markings
2. Set Back stay and jib stay (there are no jumper stays). This will establish the mast rake.
  - a. Measure from the back edge of the bumper to the to the jib top eyelet. <sup>3</sup>
    - i. Set jib for 963 mm (37 15/16 in) for v6, <sup>3</sup>958 mm (37 3/4 in) for v5.
  - b. This should result in 985 mm from the top of the transom to jib top eyelet on either version.
  - c. Set light tension on back and jib stays and jib uphaul and topping lift. <sup>4</sup> Too much tension may cause puckers at the main sail tie points.
3. Main luff tension and outhaul (fixed) – adjust the Cunningham to barely engaged <sup>4</sup>
4. Adjust main sheet and boom vang
  - a. Using full out position flip sails from left to right. Adjust boom vang to set the main sail headboard to zero twist. Flip sails from left to right Adjust twist on each side.
  - b. Pull sails full in.
  - c. Set main angle approx. 10 degrees (10 – 20) mm boom end to hull centerline.
  - d. Set main bridle position approximately 65 mm on the stabilizer and 45 mm on each side. Set it so the ring is forward of and ~5mm below the main sheet eyelet. <sup>4</sup>
    - i. This can be glued in place once set correctly <sup>1</sup> but this can be used to adjust the synchronization between the main and Jib so maybe you shouldn't glue it.
  - e. Set camber at about 25 - 30 mm main and jib. Reduce main camber to ~15mm for higher winds <sup>1</sup>
  - f. Adjust main twist to 65 - 75 mm center of leach to backstay <sup>4</sup>
5. Adjust Jib Sheet, outhaul and topping lift
  - a. Adjust jib luff tension via jib outhaul. It should be loose <sup>4</sup>
  - b. Set jib sheet to 40 – 45 mm boom end to mast centerline
  - c. Adjust jib twist via topping lift to 50 – 60 mm center of leech to topping lift

### A Plus Rig

	Mast Rake	Camber	off center	twist	Tension
Main	963	25-30	10-20	65-70 more at higher winds	Backstay and cunningham loose
Jib		25-30	40-45	50-60	Uphaul loose

### A Rig lower winds

	Mast Rake	Camber	off center	twist	
Main	785	18-25	37-47	25-35	Match Luff Round and Cunningham loose
Jib		20	Inside plug to 8mm	60-70	Uphaul loose

### References

1. You tube <https://www.youtube.com/watch?v=kABopqOO08k> parts 1, 2 and 3
2. Soch Sails DF65 Rig Tuning Guide - <https://sochsails.files.wordpress.com/2016/01/soch-sails-df65-tuning-manual-v1-3.pdf>
3. Chuck's Quick & Dirty Guide for DF65 A+ Rig Kit Assembly - <http://dragonforce65.us/wp-content/uploads/2016/04/Chucks-DF65-A-Assembly-Guide.pdf>
4. Quicksilver Sails Tuning Guide - DF65 TUNING GUIDE.PDF – [https://drive.google.com/file/d/0ByseHscyN\\_kTcFhpUEp0V3o4eWJ2TDc0V0JIU0p4aE5Iekow/view](https://drive.google.com/file/d/0ByseHscyN_kTcFhpUEp0V3o4eWJ2TDc0V0JIU0p4aE5Iekow/view)
5. The Tuning Cycle by Bob Sterne
6. Dragonforce 65 Instruction Manual