

Scorpion Power System

www.scorpionsystem.com

Scorpion Tribunus III Telemetry + FR.SKY S.Port Protocol : User Guide

I.Software

1. Connect Tribunus III ESC to your PC using USB-C Cable (or Vlink II cable + diode cable).

2. Make sure you are using FW 16 or higher



NOTE: FR.SKY S.Port protocol is functional with <u>Scorpion Tribunus III ESCs ONLY</u>

Upload Set defaults A3 BEC voltage 12.1 V (Damage risk) A4 Rotation direction CCW Communication AS Vbar otocol Standard Vbar A6 Fan on temperature A arr Condy 🗊 # 0 0 m C 🖩 0 0 m 4 0 Frsky Smart Port 0 -22 x

3. Select FR.SKY Smart Port in value A5 - Communication Protocol

Make sure your FRSKY remote, is as well updated to the latest FW to ensure proper function !



4. Set the correct pole pair (E3) and gear ratio (E2)

Note: Pole pair is 1/2 of the pole count of the motor (pole count / 2 = pole pairs) Note : If you do not se pole pair and gear ration the electrical RPM will be displayed in the telemetry field rather than mechanical RPM

II.Hardware connection

5. Connect your Tribunus-III ESC to your FrSky RX

- Connection is made with a simple male to male servo extension cable (patch cable)
- Use your Empty port with S.PORT function (ALL) on your FRSKY receiver to connect to ESC PC.PORT.







5.Remove propeller / pinion from the motor, check all connections, and apply suitable battery power to the ESC



III.Transmitter setup

1- Model setup --> RF System-->Scroll down to choose your receiver (In our case TDR10) --> Option assign the pin for the telemetry (in our case pin 8) to S.PORT-->



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2-Telemetry--> discover new sensors ON -->check the telemetry info



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3-Configure screen [+--> choose the format screen --> change--> widget (Value)--> source --> category (Telemetry)--> member(ESC...)





- Set the widgets with your desired values according to your preference
- Values sent by the ESC are : Voltage / Temp / RPM / Current / Consumption

