



Scorpion Power System
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Using Scorpion Tribunus ESC with Futaba Telemetry

Futaba Tx/Rx Support:

- Please check if your Futaba Tx and its latest firmware support telemetry function with Scorpion Tribunus ESC.
- Please make sure your Futaba Rx supports telemetry with your Tx.

Scorpion Tribunus ESC models supported (as of May, 2021):

- Scorpion Tribunus II 14-300A ESC SBEC
- Scorpion Tribunus II 12-130A ESC SBEC
- Scorpion Tribunus II 12-80A ESC SBEC
- Scorpion Tribunus II 06-120A SBEC

Scorpion Tribunus ESC models NOT supported:

- Scorpion Tribunus II 14-200A ESC SBEC
- Scorpion Tribunus 14-300A ESC SBEC
- Scorpion Tribunus 14-200A ESC SBEC
- Scorpion Tribunus 06-120A ESC SBEC
- Scorpion Tribunus 06-80A ESC SBEC
- And other older models

Preparation:

- Make sure you have installed the latest firmware for your Futaba Tx and Scorpion Tribunus ESC.
- Select "Futaba SBus2" as the communication protocol in the Sproto program.
- Connect Scorpion Tribunus ESC (with ESC power up) from ESC's PC Port to the 3-pin sensor port on the back of the Futaba Tx using a patch cable.
- On the Futaba Tx, under "Linkage" menu (or following pages), select "Sensor".
- Under "Sensor", go to the page 2 (or last page), select "Reload" and select "Yes" to confirm. When reloading configuration succeeded message appears, select "Close".

- The "Scorpion" sensors should appear from Slot 16 to Slot 23.
- Under "Sensor" again, go to page 2 (or last page), select "Register" and select "Yes" to confirm. When same sensor as connected been successfully registered message appears, select "Close".

- Now under Telemetry, several Scorpion ESC telemetry data will appear, e.g., RPM, BEC temperature, Voltage, Motor Current, BEC Current, Discharge, Temperature, PWM*.

For details, please also refer to your Futaba Tx manual under the section "Telemetry".

Physical Connections:

- Scenario 1: Connection from Scorpion Tribunus ESC** to a Futaba Rx:
 - o Connect Master to Channel 3 or Throttle port on the Futaba Rx
 - o Connect Slave to a free port on the Futaba Rx for secondary BEC output (MUST remove signal wire pin from the connector before doing so). If you are not using Tribunus ESC as governor and using an external governor, e.g. on a gyro provided governor, connect Slave to the gyro instead.
 - o Connect PC Port to SBUS2 port on the Futaba Rx
- Scenario 2: Connection from Scorpion Tribunus ESC to a Futaba CGY760 series***:
 - o Connect Master to Throttle port on Futaba CGY760 series
 - o Please separate the signal wire from the Slave cable connector. You may install a new separate connector to the signal wire. Plug the vcc/ground connector into Ele2 port for secondary power and connect only the signal wire connector into the RPM port.
 - o Connect PC Port to SBUS2 port on Futaba CGY760 series

* Please note the PWM % may not be the same as throttle %.

** Assume using Scorpion Tribunus ESC as governor, ESC's internal governor.

*** Assume using gyro's governor.

