

CTU setup on Futaba radios

20200615 Digitech/Carsten G

In order to enable telemetry values on a Futaba transmitter you need to assign several sensors to specific slot numbers in the transmitter. Futaba has unfortunately not the possibility to make “custom designed” sensors, so the CTU relies on using some of the more generic built-in sensor types of the Futaba transmitters. The downside to this is that some of the SI units for the values will not be correct (f.ex. battery voltage will be shown as a “temperature”, i.e. 8.4V will be shown as “84 C” in the display. By assigning the correct names to the individual sensors it is not that hard to make it look ok 😊

In the “programmer” PC tool you can set the “start slot number for Futaba” between 1 and 19.

For a single engine setup, you need to set the following sensors (CTU configured as “Master” in “Programmer” PC tool) on your transmitter:

(“start” is the number entered in the “Programmer” PC tool in “start slot number for Futaba” field)

Slot number:	Sensor type:	Value shown:
start+0	RPM	Fuel size in mL
start+1	RPM	Fuel consumed in mL
start+2	TEMP	Fuel left, 0..100%
start+3	RPM	Engine RPM
start+4	TEMP	EGT in degC
start+5	TEMP	ECU battery in x 0.1V (84 means 8.4V)
start+6	TEMP	ECU state (raw number)
start+7	TEMP	G force in x 0.1G (15 means 1.5G)
start+8	TEMP	Altimeter height in x 0.1M (230 means 23.0 meters)

If auto-throttle is enabled in the CTU (using the “Programmer” PC tool):

start+9	TRUEAIRSPD	Airspeed in km/h
start+10	TRUEAIRSPD	Preset airspeed in km/h
start+11	TEMP	Mode for auto-throttle (0=off, 1=armed, 2= active)

For a dual engine setup, you need to set the following sensors on the second CTU (CTU configured as “Slave 1” in “Programmer” PC tool):

start+0	RPM	Fuel consumed in mL
start+1	TEMP	Fuel left, 0..100%
start+2	RPM	Engine RPM
start+3	TEMP	EGT in degC
start+4	TEMP	ECU battery in x 0.1V (84 means 8.4V)
start+5	TEMP	ECU state (raw number)