YGE manual for Governor- Store

Below please find the standard parameters, which also have to be set up with mode - programming.

* Timing = 18°
* Brake = off
* act.-Freew. = on / Gov.-Store = on
* P-Gain = 0,9
* I-Gain = 0,05
* Startup Speed = Heli middle
* PWM-Frquency = 9 kHz
* Start power = Auto (1-32%)

Now we will explain the sequence of programming and the meaning of Gov-Store:

In case your controller does have Mode-programming (See manual of the controller), please select Mode 3 - Gov-Store. During the setup, the throttle endpoints will be learned in automatically. do not program them with the ProgCard! Usually you do not need a ProgCard, because the setup values do fit nearly all helicopters**.** If necessary, you can use the ProgCard later on in order to optimize your setup.

In case your controller does **not** have Mode-programming, you have to learn in the throttle end points with the RC Setup (See www.yge.de) programming the above mentioned parameters with the ProgCard.

Following the Mode-Setup / ProgCard-Setup the max. RPM (100% in the receiver) with blades and 0 Pitch has to be learned in on the ground. Here the main battery should be fully charged (4,2V/ cell). Wait for the small RPM-drop, which can be heard about 2 seconds after the max RPM has been reached. As a check, the LED on the controller will go off once at full throttle and the tail will jerk. Then reduce power to zero, wait until the motor stops completely, disconnect the battery.
- Done -

In case the RPM with 100% is too high, please remove all the blades. Repeat the process with a not quite fully loaded battery (Voltage in idle about 4V per cell).

Following this, for example, set up 2 or 3 different RPM's on a flightmode-switch of your transmitter**,** which can be accessed in flight. We recommend values at about 70% for hovering, acrobatic style at about 80%, and about 85% for 3D.

Operating under 50% throttle opening is not recommended!

Recommended gear ratio 1/9....1/10. In other words, if the 3D-RPM is at 85% throttle opening, the max. RPM should be 15% higher with a fully charged battery, so the controller can speed up enough with a nearly fully discharged battery. As a check-up, you can watch the controller-LED. If it is switched off, the controller has full throttle.

The Gov-Store saves the highest possible RPM and proportions it regarding the throttle opening. In other words, 100% throttle opening = 100% RPM, 70% throttle opening = 70% RPM etc.

In case you are not sure if the controller has saved the correct RPM or you changed the setup (different gear ratio, different motor, etc.) the procedure has to be repeated. To this end, select Gov-Store again on the ProgCard or repeat the Mode-setup. in doing so the old RPM will be deleted. Then again learn in the new RPM with 100% throttle in your transmitter as described above.

The RPM's are used as a reference for the Gov-Store, this has the advantage that always the same RPM's are achieved with the selected throttle openings. The controller undependably makes up for the different battery voltages.

The normal Gov.Mode uses the voltage as a reference and always selects the RPM anew when you start-up again (even after a stopover), so that you will get slightly different RPM's with different good rechargeable batteries. If you call up different RPM's during a flight, you should always start with the highest chosen throttle opening.