New features in the FPV System, version 4

Arming motors and servos

The function of arming servos and motors increases safety when operating the model on the ground, and minimizes the risk of damage and injury caused by accidentally starting the engine, and also reduces the risk of damage to the servos.

The function can be enabled or disabled in the OSD menu **Service->Arming**. The available options are:

- **Arming required**: You can select whether the motor and servos are disabled each time the system is powered up and must be explicitly enabled (armed) via the remote control sticks, or are enabled immediately.
- **Disarm Motor and Servos**: Allows the motor and servos to be disarmed immediately until the system is restarted or explicitly armed from the menu or sticks.
- **Servo arming**: allows you to arm (enable) only the servos (engine is off), e.g. to check their operation and autopilot reaction to rolls in stabilization mode
- **Motor and servo arming**: Allows you to arm the motor and servos instantly.

NOTE: *Make sure the throttle stick is in the throttle off position before enabling this option, otherwise the engine will start immediately.*

When the arming option is turned on (motors and servos are locked after turning on the power), then quick arming is active by setting the throttle stick to zero and moving the elevator stick down (as for flying the model up), and the aileron stick to the left (the aileron and elevator sticks must be deflected more than 50% and the throttle must be below 20%) and hold the sticks in this position for 2 seconds. During this time, the screen will display "Arming..." for 2 seconds followed by "Engine Armed!" message.

When the engine is locked, any movement of the throttle stick more than 20% OSD will display "Engines disarmed!" message.

The engine and servos arming status is indicated by the icon of the RC controller in the autopilot operating mode field, and the engine (and servos) disarming status is indicated by the closed padlock icon in this field.

For safety reasons during the flight, after arming the engines and servos, it is not possible to quickly disarm them using the radio sticks. Disarming the motor and servos after the flight is possible only from the OSD menu.

WARNING: Disarming the engine and servos during the flight will result in an immediate loss of control over the model, and as a consequence may lead to the crash of the model and create a threat to people and property.

The disarmed state means that the signal is completely turned off (no pulses) at the servo control output, which "loosen" the servos, and the rudders are set initially (after power up) in random positions.

The control pulses for the motor regulator are not turned off, but set to zero (1000 microsecond pulse), which allows the regulator to initialize correctly, otherwise the ESC will issue “beep” which means pulsed high current consumption through motor windings, which may cause unnecessary heating of the regulator and motor windings.