NATA ESC

Feature：NATA is suitable for R/C modeling airplanes and features a middle loading DC carbon brushes motor **with over-heat output power locked** and **brake**(without reverse) function. Special setup function and status LED shows. 3.4kHz PWM for smooth speed control.

Operation Voltage：DC 3V~12V (NiCd、NiMH battery pack 3~8 cells).

Setup Mode LED function：
  ※**LED flashes quickly (ON/OFF 0.2S/0.2S)**：**Control stick is in neutral.**
  ※**LED always ON**：**Control stick is set to forward or reverse, not in neutral.**
Operation Mode LED function：
  ※**LED always ON**：**Control stick is set in forward full speed or full braking.**
  ※**LED flashes slowly (ON/OFF 0.1S/0.9S)**：**Control stick is set in neutral.**
  ※**LED OFF**：**Without signal or control stick is set between neutral point and full speed.**

Installation：To reduce noise, solder the capacitors to motor polarities and shell (one pin to polarity and the other pin to shell). Connect NATA ESC between Receiver throttle and motor, and fix with double side foam tape. Never remove heat sink of ESC. Disconnect motor before Setup.

Setup：
  1.Turn Transmitter throttle control switch to"NOR"(It is possible need to change the motor polarity connections because of different installation).
  2.Put throttle stick to neutral and turn Transmitter to ON.
  3.Turn Receiver to ON and turn OFF Transmitter and then ON immediately, LED will flash quickly, that means ESC enter SETUP mode.
  4.Push stick to forward full speed and then pull stick to reverse full speed (LED will be always ON when stick is not at neutral.
  5.Put stick at neutral, LED will flash slowly after about 3 seconds, that means ESC completed SETUP and saved in memory.
  6.NATA can memory setup, no need to setup again after out of power except R/C system change.

Test and Operate：
  1.Turn Transmitter ON, connect ESC to motor and battery. Turn ESC ON, push control stick forward and check if motor runs(ensure motor wires are not shorting and motor is not locked before test).
  2.If motor runs, push stick to full speed and check if LED turns ON.
  3.Pull stick to braking full speed and check if motor slows down immediately and LED turns to ON.
  4.If motor does not run when braking instead of forward, modify Transmitter throttle control switch and setup again. If everything is correct, enjoy the fun.

Over-Heat Lock：
  ※**MOSFET over-heat will stop and lock motor output.**
  ※**When output is locked, pull stick to full braking point can unlock 30 seconds(depending on signal frame rate) for landing.**