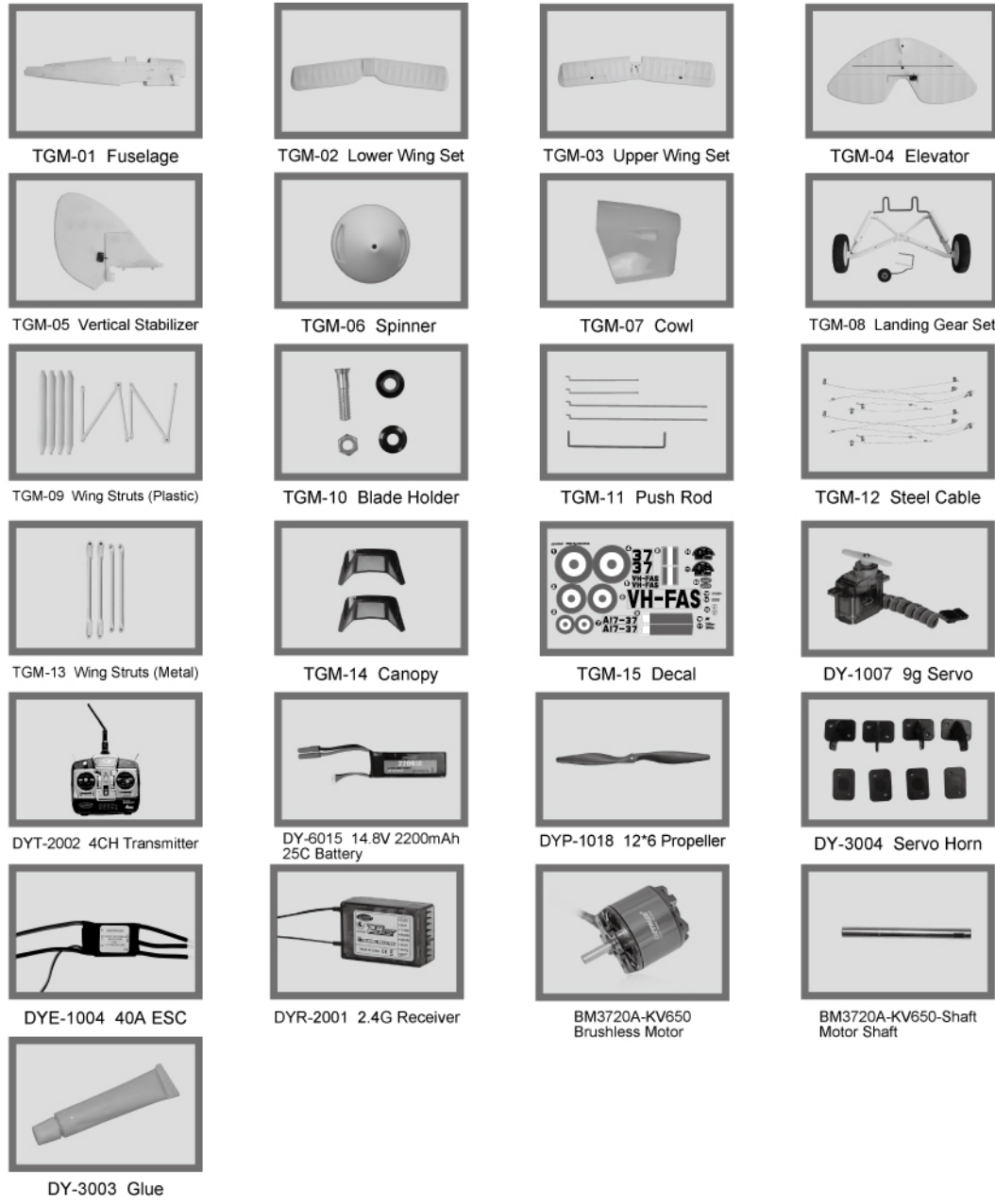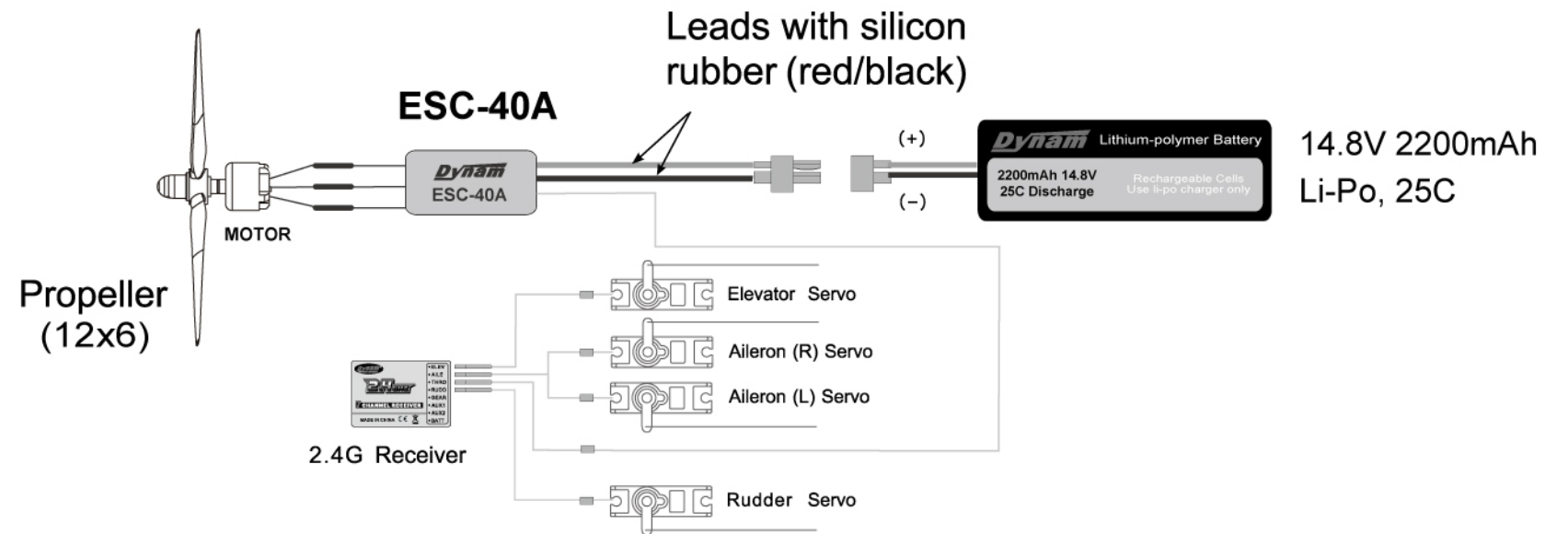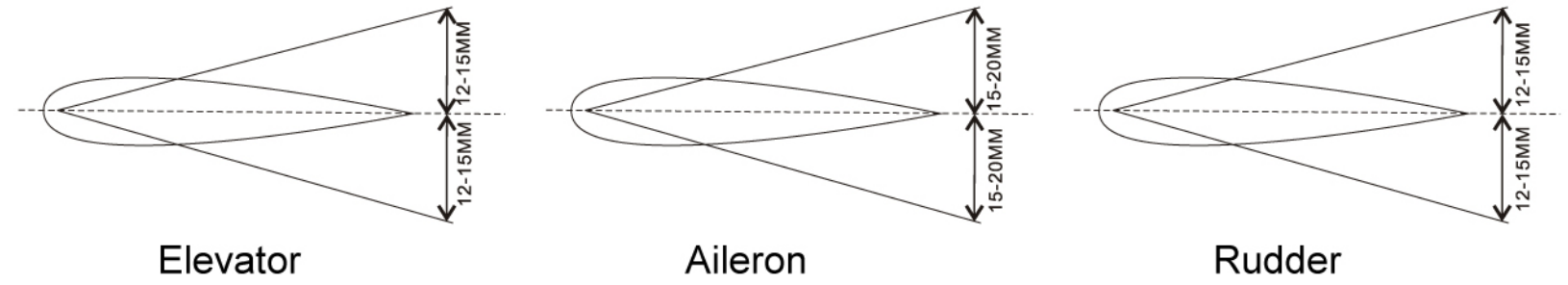# Dynam®

Wingspan : 1270mm (50in)
Length : 1050mm (41.3in)
Flying Weight : 1450g (51.2oz)
Wing Area : 25dm²
Wing Load : 41g/dm²
Radio System : 4 Ch TX and 7 Ch RX
Power : Brushless System
Battery : LIPO, 2200 mAh, 14.8V
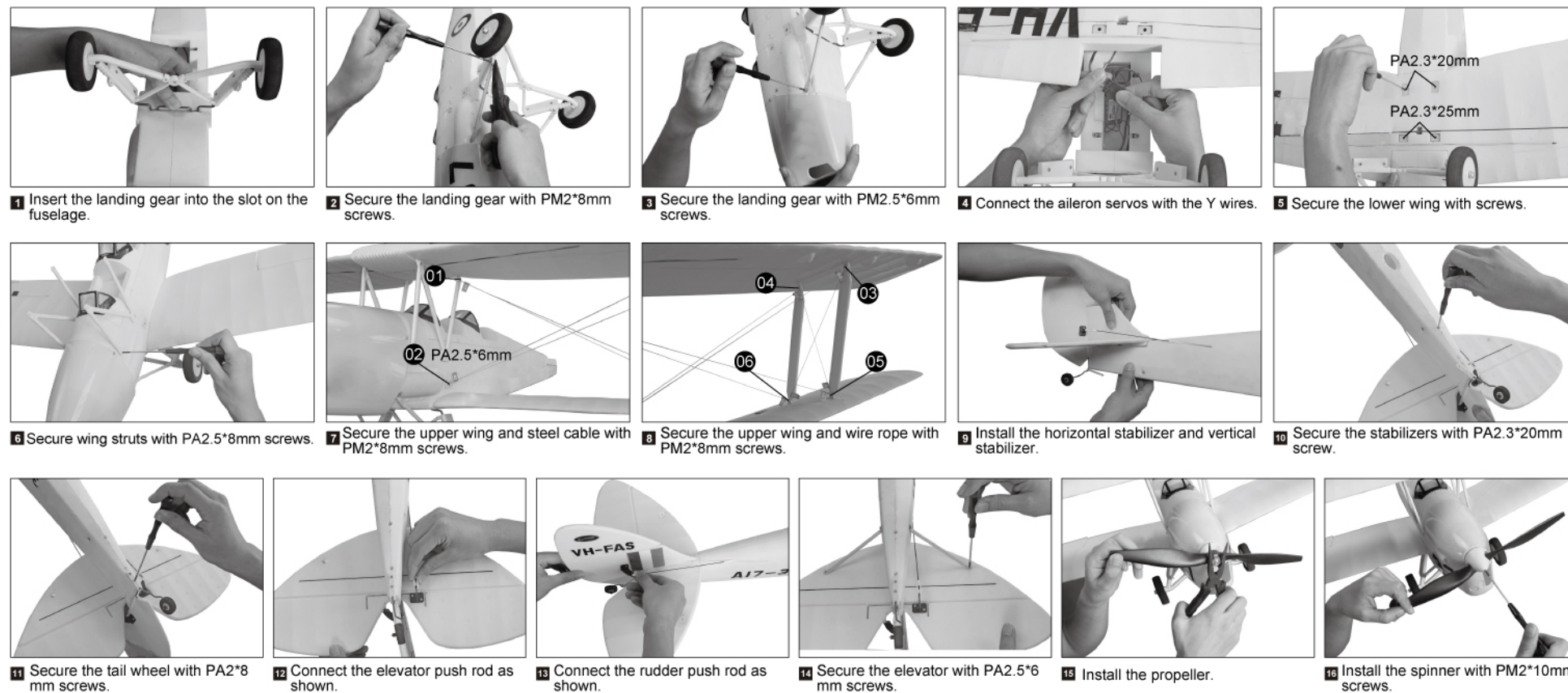
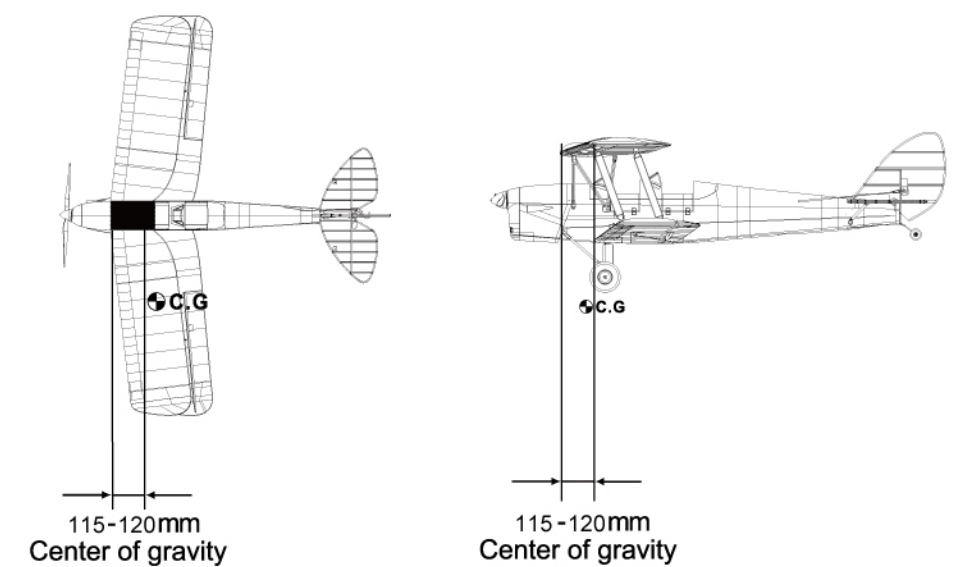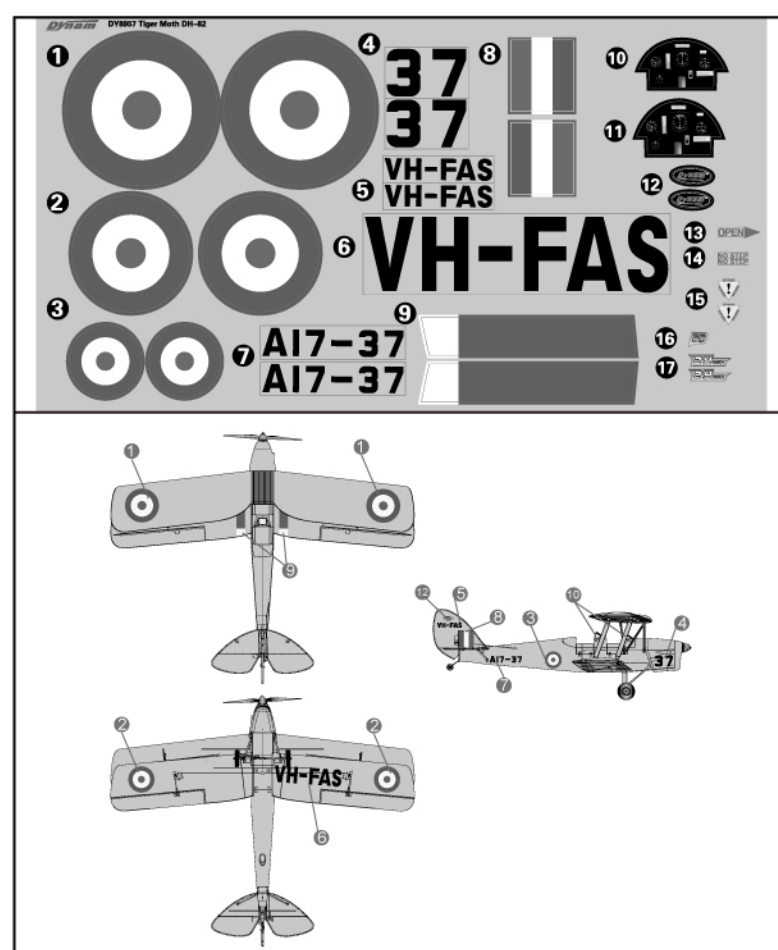## DIRECTIONS FOR ASSEMBLY AND ADJUSTMENT

SPARE PART LIST:

TGM-01 Fuselage	TGM-02 Lower Wing Set	TGM-03 Upper Wing Set	TGM-04 Elevator
TGM-05 Vertical Stabilizer	TGM-06 Spinner	TGM-07 Cowl	TGM-08 Landing Gear Set
TGM-09 Wing Struts (Plastic)	TGM-10 Blade Holder	TGM-11 Push Rod	TGM-12 Steel Cable
TGM-13 Wing Struts (Metal)	TGM-14 Canopy	TGM-15 Decal	DY-1007 9g Servo
DYT-2002 4CH Transmitter	DY-6015 14.8V 2200mAh 25C Battery	DYP-1018 12*6 Propeller	DY-3004 Servo Horn
DYE-1004 40A ESC	DYR-2001 2.4G Receiver	BM3720A-KV650 Brushless Motor	BM3720A-KV650-Shaft Motor Shaft
DY-3003 Glue			

Control Throw Setting Suggestion

12-15MM

Elevator

15-20MM

Aileron

12-15MM

Rudder

Leads with silicon rubber (red/black)

ESC-40A

MOTOR

Propeller (12x6)

Dynam ESC-40A

(+)
(−)

Dynam Lithium-polymer Battery
2200mAh 14.8V
25C Discharge
Rechargeable Cells
Use Li-po charger only

14.8V 2200mAh
Li-Po, 25C

2.4G Receiver

Elevator Servo
Aileron (R) Servo
Aileron (L) Servo
Rudder Servo

ASSEMBLY:

1 Insert the landing gear into the slot on the fuselage.
2 Secure the landing gear with PM2*8mm screws.
3 Secure the landing gear with PM2.5*6mm screws.
4 Connect the aileron servos with the Y wires.
5 Secure the lower wing with screws.

PA2.3*20mm
PA2.3*25mm

6 Secure wing struts with PA2.5*8mm screws.
7 Secure the upper wing and steel cable with PM2*8mm screws.
PA2.5*6mm
8 Secure the upper wing and wire rope with PM2*8mm screws.
9 Install the horizontal stabilizer and vertical stabilizer.
10 Secure the stabilizers with PA2.3*20mm screw.

11 Secure the tail wheel with PA2*8 mm screws.
12 Connect the elevator push rod as shown.
13 Connect the rudder push rod as shown.
14 Secure the elevator with PA2.5*6 mm screws.
15 Install the propeller.
16 Install the spinner with PM2*10mm screws.

CENTER OF GRAVITY(C.G.)

C.G

C.G

115-120mm
Center of gravity

115-120mm
Center of gravity

DECAL:

VH-FAS
AI7-37

WARNINGS

● The product is not intended for those under 14 years of age without proper adult supervision. The product is not a toy. It is a precision machine requiring proper assembly and setup to avoid accidents and it is the responsibility of the owner to operate this product in a safe manner as it can cause serious personal injury and damage to property due to carelessness or misuse.

● The spinning rotors on this product can be dangerous! When operating/flying, always be aware of the spinning rotors. Be careful not to let them come close to your body, other people or loose clothing. Keep your hands, fingers and any articles of clothing away from the rotors.

● Do not attempt to disassemble or modify any of the product components without the assistance of an experienced RC user.

● Only use the correct type of battery to operate. Using any wrong type of battery will damage the product and possibly make it dangerous to operate.

● The motor(s) may get hot during use. Always allow 10-15 minutes between each flight for the motor to cool down. This will prolong the life of your product.

● Choose an appropriate operating site consisting of flat, smooth ground, and clear open field. Do not operate near buildings, high voltage cable lines, or trees to ensure safety operation. Operate in safe area only, away from other people. RC models are prone to accidents, failures, and crashes due to a variety of reasons including, lack of maintenance, pilot error, and radio interference. Pilots are responsible for their actions and damage or injury occurring during the operation.

● Do not operate in inclement weather, such as rain, wind, snow and darkness.

● The product is composed of precision electrical components. It is critical to keep the product away from moisture and other contaminants. Do not allow them to get wet. Electrical damage may occur that could affect safe operation.

Dynam RC guarantees this product to be free of manufacturing faults and material defects. This product has been checked and fine tuned individually by professional pilot and quality control pilot. The warranty does not cover any component parts damaged by use and modification. Please visit http://www.dynam-rc.cn for updated product information.

This product is not a toy. It is not recommended for children under 14 years old and any minor should be accompanied by an adult when operating. This product is a precision machine that requires proper assembly and setup to avoid accidents. Failure to take caution when operating this product may result in serious injury or property damage. It is the owner's responsibility to operate this product in a safe manner. Manufacturer and its distributors are not responsible in any way for any and all bodily injury(s) and/or property damage that may occur from the use of or caused by in any way of this product.

This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Please recycle.

● After each use, always allow the battery to cool down before recharging. When charging the battery pack, do not overcharge! If batteries get hot during charging, discontinue charging immediately and disconnect the battery from the charger. Never leave battery unattended while charging. If you are unsure of how to charge this battery, please seek the advice of experienced RC users. Never let children charge the battery without adult supervision.

● Always turn on the transmitter before connecting the battery on the model. When turning off the model, always disconnect the battery first, and then turn off the transmitter. If the order is reversed, the model may become uncontrollable and cause serious damage.

● If you are in doubt of your ability to operate the model, we strongly recommend that you seek assistance from experienced RC users or join your local model flying club to gain the required knowledge and skill. As the manufacturer and distributor, we assume no liability for the use of this product.

● Before turning on your model and transmitter, please check to make sure no one else is operating under the same frequency. Frequency interference can cause your model, or other's models to crash. The guidance provided by experienced RC users will be valuable for the assembly, tuning, trimming, and actual first flight.

● Never allow batteries to run low or you might lose control of the model.

● You should complete a successful pre-flight check of your radio equipment and model prior to each flight.

● Plastic is very susceptible to damage or deformation due to extreme heat and cold climate. Do not store the model near any source of heat such as oven or heater. Store the model indoors, in a climate-controlled, room temperature environment.

Charge the Li-Po battery pack

Disconnect the battery from the charger when the charging process completed. Do not charge the battery unattended at all time.
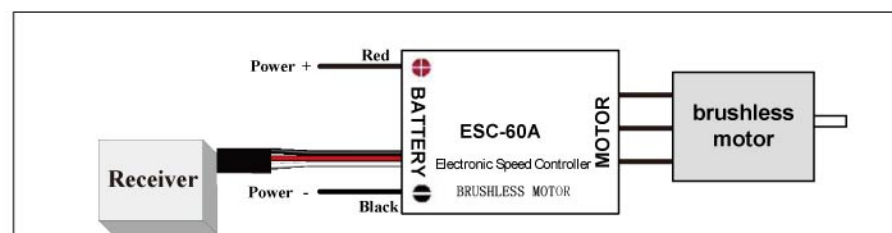
Lithium Polymer (LiPo) Battery Warnings

● Never charge a lithium polymer battery with a charger designed for NiCd, NiMH, or any other type of battery chemistry. Use ONLY charger designed for LiPo battery.
● Do not leave LiPo battery unattended during charging.
● Do not overcharge the battery.
● Always put the LiPo battery inside a charging protection container while charging.
● Do not allow LiPo cells to overheat at any time. Cells which reach greater than 140 Fahrenheit (60°C) will usually become damaged and will catch fire.
● Do not allow LiPo cells on or near combustible materials including paper, plastic, carpets, vinyl, leather, and wood, inside an R/C model or full size automobile.
● Do not over discharge LiPo; doing so will damage the battery.
● Do not expose LiPo cell to water or moisture at any time.
● Do not store battery near open flame or heater.
● Do not assemble LiPo cells or pre-assembled packs together with other LiPo cells or packs.
● Always store LiPo battery in a secure location away from children.
● Always remove the LiPo battery if model is involved in any kind of crash. Carefully inspect the battery and connectors for even the smallest damage. CAUTION: cells may be hot!
● Do not allow the electrolyte to get into eyes or on skin. Wash affected areas immediately if they come into contact with electrolyte. Do not alter or modify connectors or wires of a LiPo battery pack.
● Always inspect the condition of the battery before charging and operating.
● Do not short circuit the LiPo battery.
● Do not have contact with a leaky/damaged battery directly.
● Do not charge battery out of recommended temperature rang (0°C-45°C)

- If a special tone " ♪ 567ⅰ2̇ " is emitted after 2 beep tones ("beep-beep-"), means the ESC has entered the program mode, it is because the throttle channel of your transmitter is reversed, please set it correctly;
- If the very rapid "beep-beep-, beep-beep-" tones is emitted, means the input voltage is too low or too high, please check your battery's voltage.

3. "**VERY IMPORTANT !**" Because different transmitter has different throttle range, we strongly suggest you using the "Throttle Range Setting Function" to calibrate throttle range. Please read the instruction on page 4------"Throttle Range Setting".

Alert Tone
1. Input voltage is abnormal: The ESC begins to check the voltage when the battery pack is connected, if the voltage is not in the acceptable range, such an alert tone will be emitted: "beep-beep-, beep-beep-,beep-beep-" (Every "beep-beep-" has a time interval of about 1 second.)
2. Throttle signal is abnormal: When the ESC can't detect the normal throttle signal, such an alert tone will be emitted: "beep-, beep-". (Every "beep-" has a time interval of about 2 seconds)
3. Throttle stick is not in the bottom position: When the throttle stick is not in bottom (lowest) position, a very rapid alert tone will be emitted: "beep-, beep-, beep-". (Every "beep-" has a time interval of about 0.25 second.)

Protection Function
1. Abnormal start up protection: If the motor fails to start within 2 seconds of throttle application, the ESC will cut-off the output power. In this case, the throttle stick **MUST** be moved to the bottom again to restart the motor. (Such a situation happens in the following cases: The connection between ESC and motor is not reliable, the propeller or the motor is blocked, the gearbox is damaged, etc.)
2. Over-heat protection: When the temperature of the ESC is over 110 Celsius degrees, the ESC will reduce the output power.
3. Throttle signal loss protection: The ESC will reduce the output power if throttle signal is lost for 1 second, further loss for 2 seconds will cause its output to be cut-off completely.

Program Example
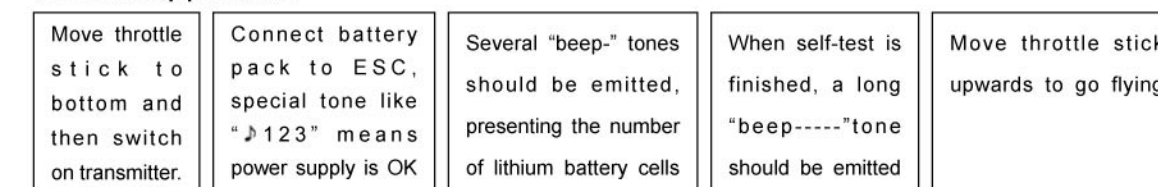Setting "Start Mode" to "Super-Soft", i.e. value #3 in the programmable item #5

1. Enter Program Mode
Switch on transmitter, move throttle stick to top position, connect battery pack to ESC, wait for 2 seconds, "beep-beep" tone should be emitted. Then wait for another 5 seconds, special tone like ♪ 567ⅰ2̇ should be emitted, which means program mode is entered.

2. Select Programmable Items
Now you'll hear 8 tones in a loop. When a long "beep------" tone is emitted, move throttle stick to bottom to enter the "Start Mode"

3. Set Item Value (Programmable Value)
"Beep-", wait for 3 seconds; "Beep-beep-", wait for another 3 seconds; then you'll hear "beep-beep-beep", move throttle stick to top position, then a special tone " ♪ ⅰ5ⅰ5 " is emitted, now you have set the "Start Mode" item to the value of "Super-Soft"

4. Exit Program Mode
After the special tone " ♪ ⅰ5ⅰ5 ", move throttle stick to bottom within 2 seconds.
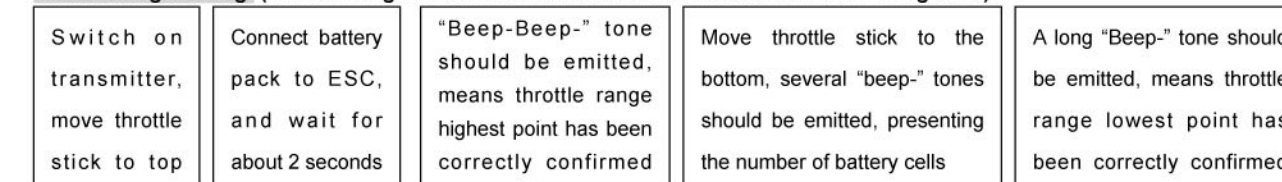
Trouble Shooting

Trouble	Possible Reason	Action
After power on, motor does not work, no sound is emitted	The connection between battery pack and ESC is not correct	Check the power connection. Replace the connector.
After power on, motor does not work, such an alert tone is emitted: "beep-beep-, beep-beep-,beep-beep-" (Every "beep-beep-" has a time interval of about 1 second)	Input voltage is abnormal, too high or too low.	Check the voltage of battery pack
	The balance charge connector is not located properly in BDMP adapter.	Check the connection of the balance charge connector and the BDMP adapter.
After power on, motor does not work, such an alert tone is emitted: "beep-, beep-, beep- "(Every "beep-" has a time interval of about 2 seconds)	Throttle signal is irregular	Check the receiver and transmitter Check the cable of throttle channel
After power on, motor does not work, such an alert tone is emitted: "beep-, beep-, beep- "(Every "beep-" has a time interval of about 0.25 second)	The throttle stick is not in the bottom (lowest) position	Move the throttle stick to bottom position
After power on, motor does not work, a special tone " ♪ 567ⅰ2̇ " is emitted after 2 beep tone (beep-beep-)	Direction of the throttle channel is reversed, so the ESC has entered the program mode	Set the direction of throttle channel correctly
The motor runs in the opposite direction	The connection between ESC and the motor need to be changed.	Swap any two wire connections between ESC and motor
The motor stop running while in working state	Throttle signal is lost	Check the receiver and transmitter Check the cable of throttle channel
	ESC has entered Low Voltage Protection mode	Land RC model as soon as possible, and then replace the battery pack
	Some connections are not reliable	Check all the connections: battery pack connection, throttle signal cable, motor connections, etc.
Random stop or restart or irregular working state	There is strong electro-magnetic interference in flying field.	Reset the ESC to resume normal operation. If the function could not resume, you might need to move to another area to fly.

DYNAM 2.4GHz REMOTE CONTROL SYSTEM

up
down

Status LED

Safty Switch

Power Switch

Channel Direction Switch

Servo Degree Adjustment:
Turn clockwise to increase degree on all servos

INSTALL THE TRANSMITTER BATTERIES

Install 8 new AA batteries into the battery compartment on the back of the transmitter.
Turn on the transmitter. The status LED on the transmitter should indicate the capacity
level of the batteries. Please replace batteries if the color of the status LED is not green.
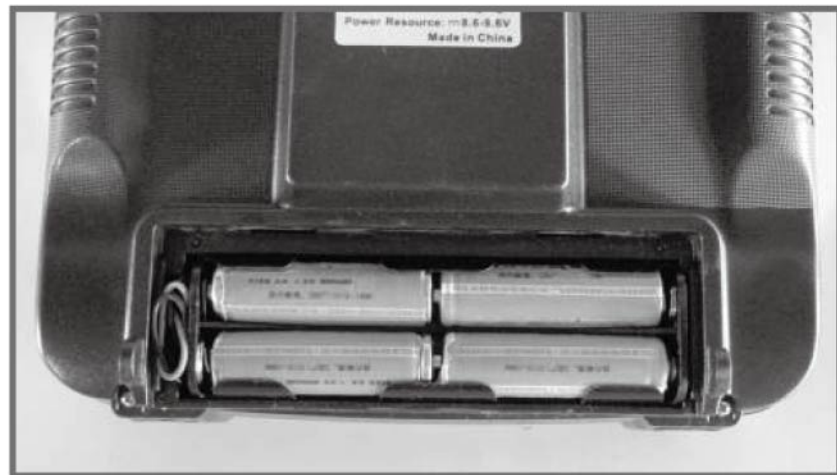
STICK OPERATION

MODE 1	MODE 2	MOVEMENT
THROTTLE		
RUDDER		airplane action / control plane movement
ELEVATOR		airplane action / control plane movement
AILERONS		airplane action / Aileron movement / airplane action