- ◆ 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-, 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
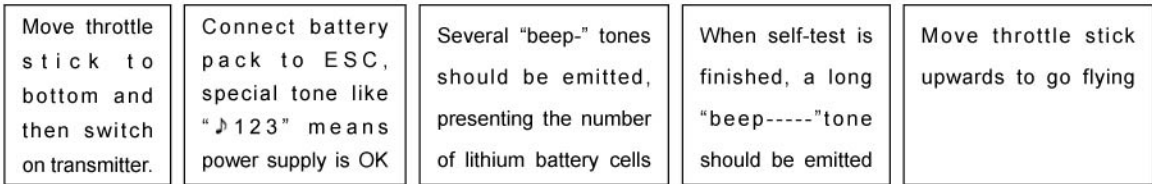
1. Enter Program Mode
Switch on transmitter, move throttle stick to top position, connect battery pack to ESC, wait for 2 seconds, "beep-beep" tone should be emitted. Then wait for another 5 seconds, special tone like '♪ 567i2̇" should be emitted, which means program mode is entered.

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 " ♪ i5̇i5̇" is emitted, now you have set the "Start Mode" item to the value of "Super-Soft"

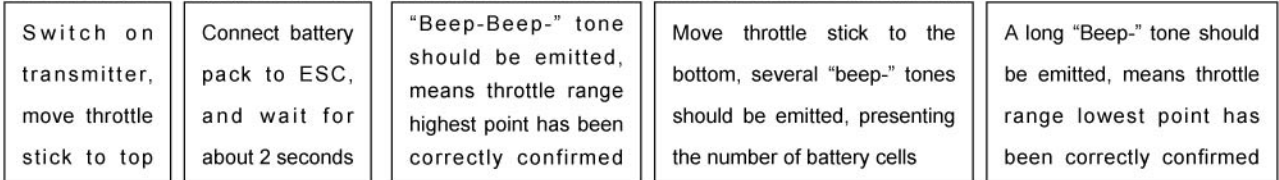| **4. Exit Program Mode** |
|---|
| After the special tone " ♪ i5̇i5̇", move throttle stick to bottom within 2 seconds. |

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. The balance charge connector is not located properly in BDMP adapter.	Check the voltage of battery pack 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.

Manual of Brushless Motor Speed Controller

Normal startup procedure:

Move throttle stick to bottom and then switch on transmitter.	Connect battery pack to ESC, special tone like "♪123" means power supply is OK	Several "beep-" tones should be emitted, presenting the number of lithium battery cells	When self-test is finished, a long "beep-----"tone should be emitted	Move throttle stick upwards to go flying

Throttle range setting: (Throttle range should be reset whenever a new transmitter is being used)

Switch on transmitter, move throttle stick to top	Connect battery pack to ESC, and wait for about 2 seconds	"Beep-Beep-" tone should be emitted, means throttle range highest point has been correctly confirmed	Move throttle stick to the bottom, several "beep-" tones should be emitted, presenting the number of battery cells	A long "Beep-" tone should be emitted, means throttle range lowest point has been correctly confirmed

Program the ESC with your transmitter (4 Steps):

1. Enter program mode
2. Select programmable items
3. Set item's value (Programmable value)
4. Exit program mode

1. Enter program mode

1) Switch on transmitter, move throttle stick to top , connect the battery pack to ESC

2) Wait for 2 seconds, the motor should emit special tone like "beep-beep-"

3) Wait for another 5 seconds, special tone like " ♪ 567i̇2̇ " should be emitted, which means program mode is entered

2. Select programmable items:

After entering program mode, you will hear 8 tones in a loop with the following sequence. If you move the throttle stick to bottom within 3 seconds after one kind of tones, this item will be selected.

1. "beep" brake (1 short tone)
2. "beep-beep-" battery type (2 short tone)
3. "beep-beep-beep-" cutoff mode (3 short tone)
4. "beep-beep-beep-beep-" cutoff threshold (4 short tone)
5. "beep-----" startup mode (1 long tone)
6. "beep-----beep-" timing (1 long 1 short)
7. "beep-----beep-beep-" set all to default (1 long 2 short)
8. "beep-----beep-----" exit (2 long tone)

Note: 1 long "beep-----" = 5 short "beep-"

3. Set item value (Programmable value):

You will hear several tones in loop. Set the value matching to a tone by moving throttle stick to top when you hear the tone, then a special tone " ♪ i̇5i̇5 " emits, means the value is set and saved. (Keeping the throttle stick at top, you will go back to step 2 and you can select other items; Moving the stick to bottom within 2 seconds will exit program mode directly)

Items \ Tones	"beep-" 1 short tone	"beep-beep-" 2 short tones	"beep-beep-beep" 3 short tones
Brake	Off	On	
Battery type	Li-ion / Li-poly	NiMH / NiCd	
Cutoff mode	Soft-Cut	Cut-Off	
Cutoff threshold	Low	Medium	High
Start mode	Normal	Soft	Super soft
Timing	Low	Medium	High

4. Exit program mode

There are 2 ways to exit program mode:

1. In step 3, after special tone " ♪ i̇5i̇5 ", please move throttle stick to the bottom position within 2 seconds.

2. In step 2, after tone "beep-----beep-----"(ie. The item #8), move throttle stick to bottom within 3 seconds.
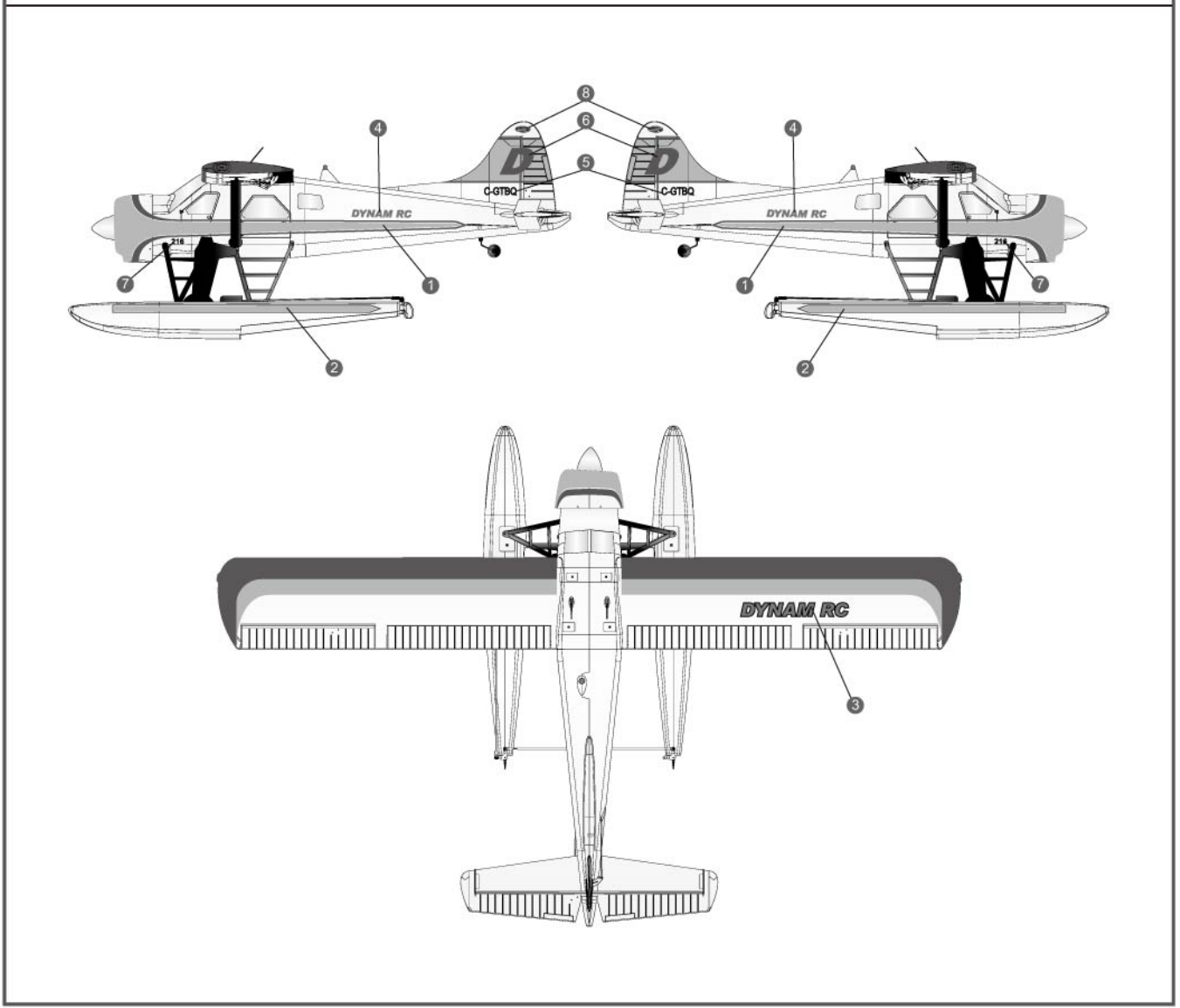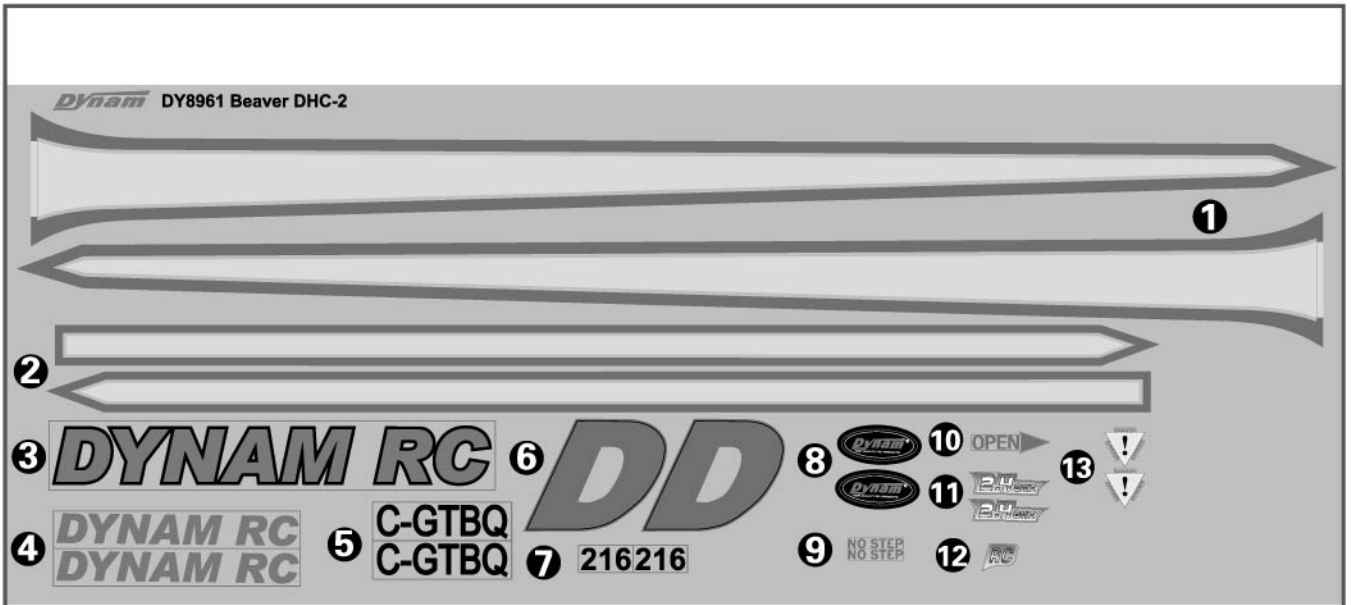
How To Programming The ESC With The Dynam Radio

How to enter the programming mode of the Dynam's brushless ESC with the Dynam 2.4Ghz radio system:

(Warning: Please disconnect the motor from the ESC before starting the following procedure)

1) Turn on the transmitter, then connect battery to the receiver, let the normal auto binding process completed. (Both LED lights on transmitter and receiver should flash rapidly at the same time for this process to succeed)
2) Disconnect the receive power; **do not turn off the transmitter.**
3) Move the throttle stick to the top position.
4) Toggle the safety switch (on the upper left hand corner of the transmitter). Then make sure the safety switch is at the off position (the tip of the switch is set toward the back of the transmitter)
5) Connect battery to the receiver; now you are ready to enter the programming mode (please see the ESC manual for programming instruction).
6) If unable to enter the programming mode, please repeat the above procedure again.

Decal

DY8961 Beaver DHC-2

1

2

3 DYNAM RC

4 DYNAM RC
DYNAM RC

5 C-GTBQ
C-GTBQ

6 DD

7 216 216

8

9 NO STEP
NO STEP

10 OPEN

11

12 RC

13

Install the Transmitter Batteries

Install 8 new "AA" batteries in the included transmitter. Check the power level of the batteries and operation of the transmitter by switching the power switch on (upward). The status LEDs at the top of the transmitter will indicate the power level of the batteries . If at any time the status LEDs no longer show green,it will be necessary to replace the batteries with new ones.

Parts List
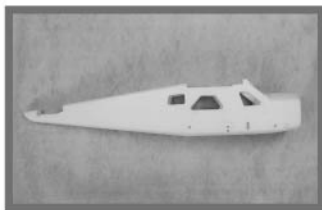
DHC2-01 Fuselage

DHC2-02 Wing
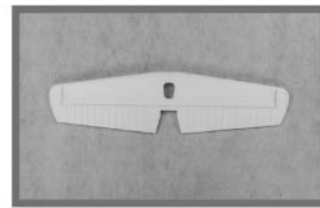
DHC2-03 Elevator

DHC2-04 Vertical stabilizer
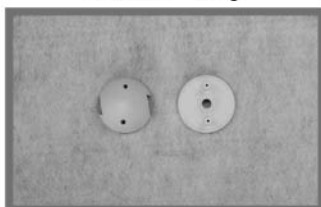
DHC2-05 Spinner
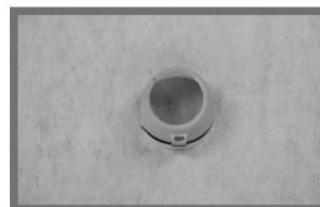
DHC2-06 Cowl

DHC2-07 Landing gear set

DHC2-08 Float brackets
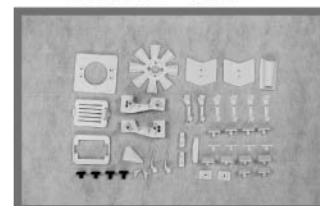
DHC2-09 The fuselage plastic parts

DHC2-10 Blister Parts
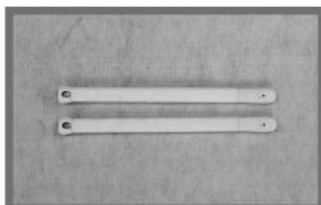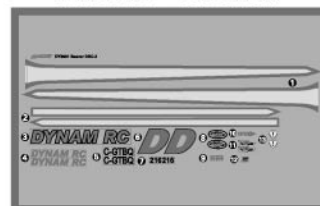
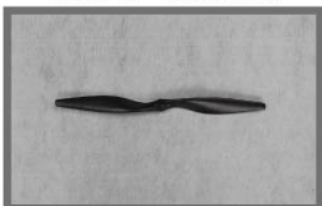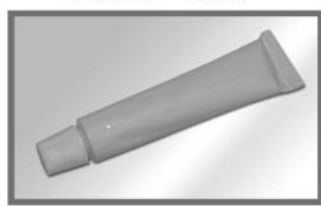DHC2-11 Wing Struts
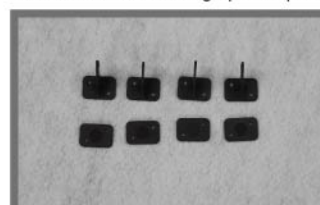
DHC2-12 Servo Horn
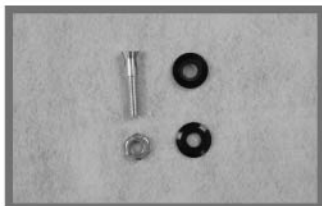
DHC2-13 Blade holder
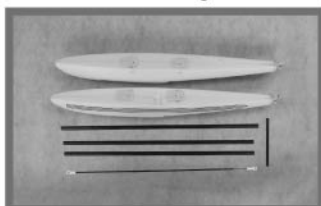
DHC2-14 Floats

DHC2-15 Decal

DYP-1019 13*6 Propeller

DY-3003 Glue

DY-6015 14.8V 2200mAh 25C Battery

DY-1007 9g Servo

DYE-1017 50A ESC

DYR-2001 2.4G Receiver

DYT-2002 2.4G Transmitter

Brushless Motor BM3720A-KV650

BM3720A-KV650-Shaft motor shaft

HAWKER TEMPEST

Specification:

Wingspan: — — — — — — .1250mm (49.2in)
Overall Length: — — — — 1018mm(40in)
Wing Loading: — — — — 49.5g/dm²
Servo: — — — — — — — 9gx4pcs
Battery: — — — — — — — 14.8V 2200mAh Li-Po,25C
Speed Controller: — — — 40A Brushless
Motor Size: — — — — — BM3720A-KV500 Brushless Outrunner
Flying Weight: — — — — 1500g(53oz)

Albatros DVa

Specification:

Wingspan: — — — — — — .1270mm (50in)
Overall Length: — — — — 1055mm(41.5in)
Wing Loading: — — — — 60g/dm²
Servo: — — — — — — — 9gx4pcs
Battery: — — — — — — — 14.8V 2200mAh Li-Po,25C
Speed Controller: — — — 40A Brushless
Motor Size: — — — — — BM3720A-KV600 Brushless Outrunner
Flying Weight: — — — — 1600g(56.5oz)

SMART

Specification:

Wingspan: — — — — — — .1500mm (59.06in)
Overall Length: — — — — 1300mm(51.2in)
Wing Loading: — — — — 54.5g/dm²
Servo: — — — — — — — 17g x4pcs,9gx1pcs
Battery: — — — — — — — 14.8V 2600mAh Li-Po,25C
Speed Controller: — — — 40A Brushless
Motor Size: — — — — — BM3720A-KV600 Brushless Outrunner
Flying Weight: — — — — 1800g(63.6oz)

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