

# DURAFLY

## A1 Skyraider OPERATING MANUAL



### WARNING

**WARNING:** Read the ENTIRE instruction manual to become familiar with the features of the product before operating. Failure to operate the product correctly can result in damage to the product, personal property and cause serious injury. This is a sophisticated hobby product and NOT a toy. It must be operated with caution and common sense and enquires some basic mechanical ability. Failure to operate this Product in a safe and responsible manner could result in injury or damage to the product or other property. This product is not intended for use by children without direct adult supervision. This manual contains instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings in manual, prior to assembly, setup or use, in order to operate correctly and avoid damage or serious injury.

### Safety Precautions and Warnings

As the user of this product, you are solely responsible for operating in a manner that does not endanger yourself and others or result in damage to the product or the property of others. This model is controlled by a radio signal subject to interference from many sources outside your control. This interference can cause momentary loss of control so it is advisable to always keep a safe distance in all directions around your model, as this margin will help avoid collisions or injury.

Age Recommendation: Not for children under 14 years. This is not a toy.

- Never operate your model with low transmitter batteries.
- Always operate your model in an open area away from cars, traffic or people.
- Avoid operating your model in the street where injury or damage can occur.
- Never operate the model in the street or in populated areas for any reason.
- Carefully follow the directions and warnings for this and any optional support equipment (chargers, rechargeable battery packs, etc.) you use.
- Keep all chemicals, small parts and anything electrical out of the reach of children.
- Moisture causes damage to electronics. Avoid water exposure to all equipment not specifically designed and protected for this purpose.
- Never lick or place any portion of your model in your mouth as it could cause serious injury or even death.

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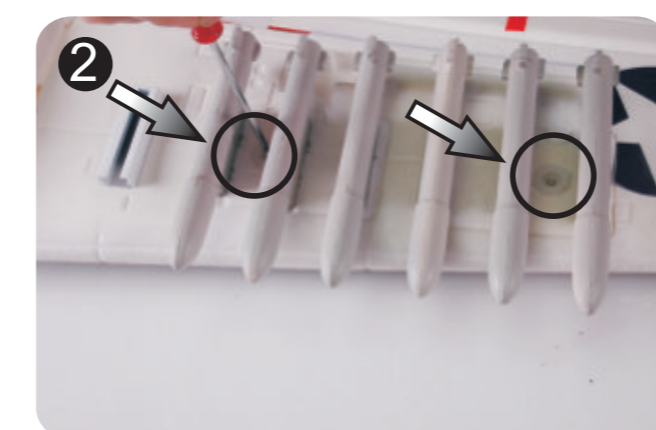
### step1

### Installing the main wing

1. Install the missile.



2. Install the missile using screws as follow. (PA2.6\*10 4PCS)



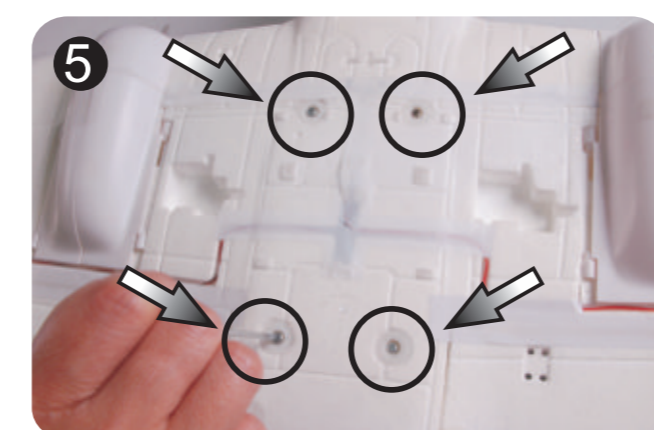
3. Install the oil tank.



4. Install the wing.



5. Install the elevator using screws as follow. (PA2.6\*35 4PCS)



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### step2

### Installing the Elevator

1. Install the elevator.



2. Apply glue on the combined side of the elevator.

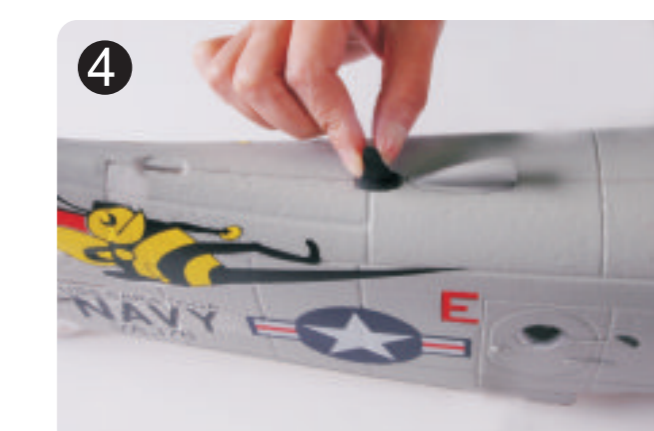


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### step3

### Installing the small parts of the aircraft



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### step3

### Installing the small parts of the aircraft



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### step4

### Installing the propeller

1. Install the shaft shoulder.



2. Install the propeller making sure it is keyed into the motor shaft.



3. Install the middle part of the spinner.



4. Secure the spinner using screw. (PM3\*6 1PC)



5. Install the spinner nut making sure it is tight enough.



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### step5

1. Battery position.



2. Connect power battery, adjust the elevator and rudder.



3. Install the canopy.



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### User Manual of 3A & 6A UBEC

#### Specification Of 3A UBEC :

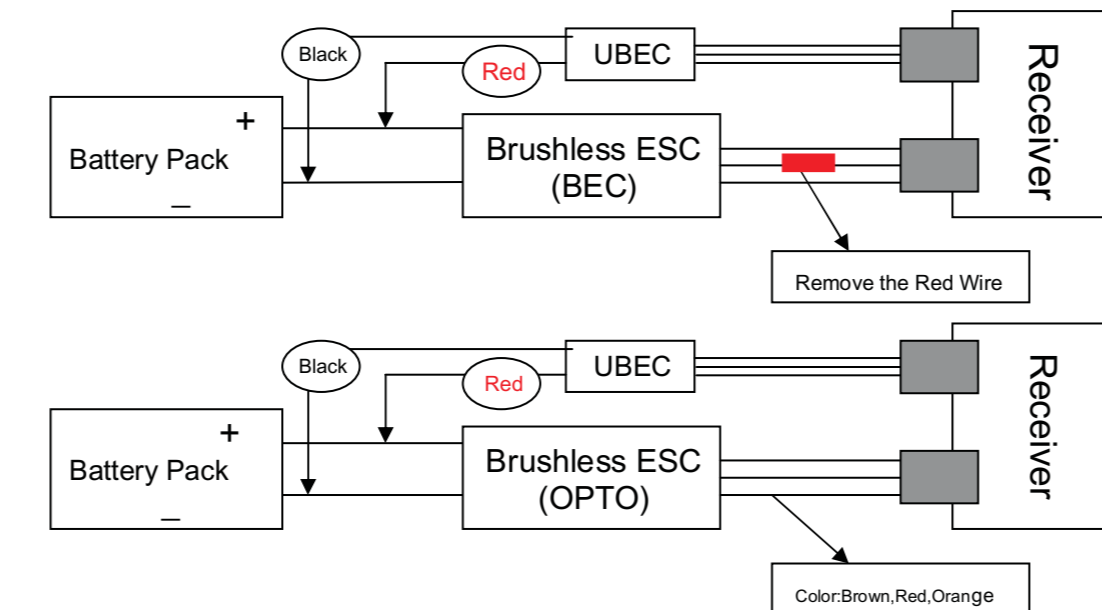
1. Switch Mode
2. Output: 5V/3A or 6V/3A switchable (Changeable with a blue jumper)
3. Input: 6V-25V (2-6S Lipo, 5-18S NiMH/NiCd)
4. Output Current: Continuous Current 3A, Burst Current 5A
5. Size: 30.0mm\*9.0mm\*6.0mm (Length\*Width\*Height)
6. Weight: 7.0g

#### Specification Of 6A UBEC :

1. Switch Mode
2. Output: 5.0V/6A, 5.5V/6A or 6.0V/6A switchable (Changeable with a blue jumper)
3. Input: 6V-25V (2-6S Lipo, 5-18S NiMH/NiCd)
4. Output Current: Continuous Current 6A, Burst Current 10A
5. Size: 45.0mm\*23.0mm\*10.0mm (Length\*Width\*Height)
6. Weight: 18.0g

#### Features:

1. Adopting the USA CPU and decreasing the electromagnetic interference, to be sure that receiver works well.
  2. The working status of UBEC is shown by an indicator (LED). When UBEC works, the blue LED lights.
  3. Battery polarity reversal protection (If the connection is wrong, the UBEC can not work).
- How to Use the UBEC, please carefully look at the connections as follow:**
1. Connecting UBEC with ESC OPTO, you just parallelly connect the input connector of UBEC with the battery pack, and plug the output connector of the UBEC into one of spare channels of the receiver.
  2. Using ESC SBEC, you must remove the red wire of the signal wires of ESC SBEC to receiver before connecting with the UBEC. (the connection with ESC SBEC is same as connection with the ESC OPTO).



**Note:** Because of the weather and ground, please connect the UBEC at least in a distance 5cm far away from the receiver to avoid the electromagnetic interference.

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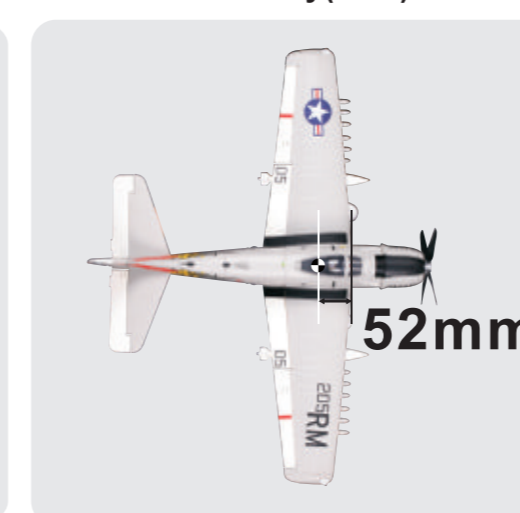


### Main specification

#### Specification

- Wingspan : 1100mm/43.3 in
- Length : 865mm/34.1 in
- Weight : 1100g/38.8 oz
- CG Position : 52mm
- Battery : 11.1V 1800mAh 25C Li-Po Battery
- ESC : 35A
- Motor : 3536-750kv
- Wing Area : 19.8dm<sup>2</sup>
- Wing Load : 55.5g/dm<sup>2</sup>
- RC System : 8 Channel, 6 Servos
- And 1 Brushless ESC

#### Center Of Gravity(C.G.)



#### Spare Parts List

- | Item#  | Description                                  |
|--------|--|
| HG-101 | Fuselage                                     |
| HG-102 | Main Wing Set                                |
| HG-103 | Elevator                                     |
| HG-104 | Canopy                                       |
| HG-105 | Cowl   |
| HG-106 | Missile                                      |
| HG-107 | Oil Tank                                     |
| HG-108 | Spinner                                      |
| HG-109 | Front Landing gear set (with two e-retracts) |
| HG-110 | Tail Landing gear set                        |
| HG-111 | Main Landing Gear Cover Set                  |
| HG-112 | Propeller                                    |
| HG-113 | Stickers (a set of stickers)                 |
| HG-114 | Motor Shaft                                  |
| HG-115 | Motor Board                                  |
| HG-116 | Motor base                                   |

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### Spare Parts List



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### Trouble shooting

Problem	Possible Cause	Solution
Aircraft will not respond to the throttle but responds to other controls.	ESC is not armed. Throttle channel is reversed.	Lower throttle stick and throttle trim to lowest settings. Reverse throttle channel on transmitter.
Extra propeller noise or extra Vibration.	Damaged spinner, propeller, motor or motor mount. Loose propeller and spinner parts. Propeller installed backwards.	Replaced damaged parts. Tighten parts for propeller adapter, propeller and spinner.
Reduced flight time or aircraft underpowered.	Flight battery charge is low. Propeller installed backward. Flight battery damaged.	Remove and install propeller correctly. Completely recharge Flight battery. Remove and install propeller correctly. Replace flight battery and obey flight battery instructions.
Control surface does not move, or is slow to respond to control inputs.	Control surface, control horn, linkage or servo damage, Wire damaged or connections loose.	Replace or repair damaged parts and adjust controls. Do a check of connections for loose wiring.
Control reversed.	Channels need be reversed in the transmitter.	Do the Control Direction Test and adjust controls for aircraft and transmitter.
Motor loses power. Motor power pulses then motor loses power.	Damage to motor, or battery. Loss of power to aircraft. ESC uses default soft Low Voltage Cutoff(LVC).	Do a check of batteries, transmitter, receiver, ESC, motor and wiring for damage (replace as needed). Land aircraft immediately and Recharge flight battery.
LED on receiver flashes slowly.	Power lose to receiver.	Check connection from ESC to receiver. Check servos for damage. Check linkages for binding.

#### Battery Selection and Installation.

1. We recommend the 1.1V 1800mAh 25C Li-Po battery.
2. If using another battery, the battery must be at least a 1.1V 1800mAh 25C battery.
3. Your battery should be approximately the same capacity, dimension and weight as the 1.1V 1800mAh 25C Li-Po battery to fit in the fuselage without changing the center of gravity a large amount.

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### Flying Tips

- Range Check Your Radio System**
- After final assembly, range check the radio system with the A1. Refer to your specific transmitter instruction manual for range test information.
- Take off and landing tips**
1. Take off using full power.
  2. Ensure that you set a timer and land with plenty of battery power in reserve.
  3. Never exceed 3 minutes to fly with the maximum power others.
  4. Never exceed the limited flying weight.
- First Flight Preparation**
1. Remove and inspect contents.
  2. Charge flight battery.
  3. Read this instruction manual thoroughly.
  4. Fully assemble model.
  5. Install the flight battery in the aircraft (once it has been fully charged).
  6. Bind aircraft to your transmitter.
  7. Make sure linkages move freely.
  8. Make sure the rubber ring has been properly slide on the clevis.
  9. Perform the Control Direction Test with the transmitter.
  10. Adjust light controls and transmitter.
  11. Perform a radio system Range Check.
  12. Find a safe and open area.
- Please read the following instructions and fully understand it.**
1. Do not fly in strong wind or bad weather.
  2. Never fly the model in crowded areas, where there are lots of people, automobiles on the road or power lines overhead. Also do not to fly around the airport. Please make yourself enough room for the flying and operating, as the plane can travel at high speed. Remember you are responsible for the safety of others.
  3. Children under the age of 12 should have an adult guide. Never recommend for the children under the age of 14.
  4. Never leave the charger in wet conditions.
  5. The A1 is made from PA and polythene which are flinder. When it meets the heat, transfiguration can easily happen, so you must keep it away from heat.
  6. Do not attempt to catch the A1 while flying, please do not touch the propeller.
  7. Never leave this system unattended around children with battery in the unit, as injury may be caused due to children's turning on the transmitter or the plane.
  8. During the preparation for the flight, please remember to turn on the transmitter before connecting the battery pack.
  9. Close the throttle on the transmitter before connecting battery otherwise the motor may operate.

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