

# BLUE ARROW

## BA-TS-2.5 Micro Servo Manual

Smallest?!  
Lightest?!  
Standard Servo!

*Declaration: This manual contains general information for Blue Arrow Servos. In order that you can use it correctly and enjoy the new feeling that Blue Arrow BA-TS-2.5 servo brings to you, please read this manual carefully before use.*

*Note: Any modification will make warranty void.*

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### 1. Features

The net weight of Blue Arrow BA-TS-2.5 servo is mere 2.5g. And 2.7g with 50mm wire and ultra small JST plug. The BA-TS-2.5 comes with an ultra small and light JST connector, please carefully check the receiver you have, and connect the servo and receiver after you are sure about it.

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### 2. Torque

The torque of BA-TS-2.5 servo is 0.15kg.cm/4.8V (2.08oz/in) and 0.17kg.cm/6V (2.36oz/in); the torque of the servo is based on considering their strength and durability; they are the best conclusion following the scientific rule of precision and sensitivity.

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### 3. The data of impulse

BA-TS-2.5 servo needs a square-wave impulse with a range of 3-5 V. The length of the impulse amounts from 1.5 ms to 1.9 ms, and the frequency amounts to 50 cycles per second (20 ms).

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### 4. Voltage range

BA-TS-2.5 servo can be operated exclusively with a voltage of 4.8 V~6V! The torque will be changed due to different voltage. The current that provided by the B.E.C of speed controller must be above 1A, it can guarantee that 3pcs servo can work properly. If more servos are used, you should choose a speed controller that can handle higher current.

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### 5. The rotate speed

BA-TS-2.5 servo's speed can reach 0.12sec/60 with no load.

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### 6. Working direction of the Servo

All Blue Arrow Servos turn in the clockwise direction according to the input pulse from weak to strong.

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### 7. Which servo for which application purpose?

The most commonly asked question is: "which servo should I choose for a targeted application...?" We try to give you some notes to this topic.

- 1). If you are not sure of the sufficiency of the torque, you'd better use a servo with somewhat higher torque - thus you are confident.
- 2). on our Website [www.ltair.com](http://www.ltair.com), we give you some information on pre-considered questions for every servo. You must pay much attention to it. You can also send e-mails to [bluearrow@ltair.com](mailto:bluearrow@ltair.com), our engineers will give your reply in time.
- 3). the application of BA-TS-2.5 servo: Micro planes, Micro helicopters ect.





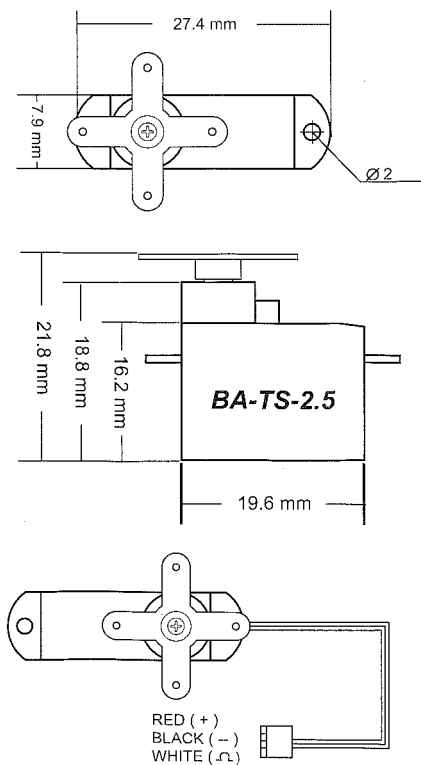
## 8. The correct current recipient in model:

The modern high speed and digital Servos supply enormous adjusting forces and also results in high power inputs. The receiver can work well for the Servo only with the current, which gets from its own accumulator and switch cable. Especially, models with 4 or more such Servos, it can come to a substantial current peak. Make sure that you always use a generously dimensioned, high-quality switch cable and an appropriate accumulator! The average working current for BA-TA-2.5 is 100mA, and it can bear as high as 300mA current, the static state current is only 1mA.

## 9. Trouble shooting:

Here are just some solutions of the problems occur under the situation that used correctly. The solution is not listed here that the servo is damaged by improper use and installation

1. The label is out of place: the temperature can cause label on the servo out of place, it doesn't affect the use of the servo, and you can stick the label on the servo.
2. The heat membrane fall off: we believe that the case of the servo is tight enough to work; we just use it to reinforce the fixture, you can also not use it.
3. The servo slides: please check if the gears have been damaged, if necessary please exchange.
4. The servo trembles: please open the servo and check the lever and gears, make sure they are straight, and add some fat on them.
5. The servo blocks: try to take off the transmission and assemble it again, the gear of umbrella form on the transmission should be put in the front place and make sure it works in the inner gears of the servo when you insert the transmission, then try to turn the horn gently and close the servo if there is no problem.
6. If the transmission makes scratching/clicking noise, please open the servo and exchange the transmission.
7. If the problems still exist or you can't solve it yourself, please return the servo together with the label to the distributor where you bought from, the distributors will return the servo to us for repair or replacement. You can also return it back to us for repair or replacement directly if your pay the postage. We charge free for this work. But please forgive that we don't in charge to repair or replace the servos that with different brand or shabby brand.



*Thank you very much for your selection of this surpassing brilliancy micro servo, it's occurrence and outstanding performance would bring you endless fun for flying, please enjoy it!*