

## Blade® 200 SR X Advanced Settings and Setup Guide

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These procedures are only necessary in special circumstances, such as after a crash or if a servo or linkage was replaced. All of the settings are stored in the receiver and are maintained each time you initialize the model.

### Trim Flight

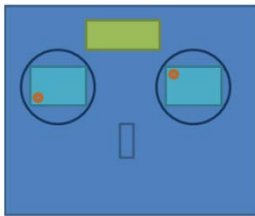
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Perform this procedure if the model is not performing well or has been recently rebuilt from a crash.

The trim flight procedure was performed during the factory test flight and only needs to be performed if you notice the model is not returning to level consistently or if the model does not remain still during stationary pirouettes. The trim flight is used to determine the optimal SAFE™ settings during flight. The trim flight must be performed in calm conditions.

#### Entering Trim Flight Mode

1. Lower the throttle stick to the lowest position. If your transmitter utilizes mechanical trims (like the included RTF transmitter), set the throttle trim to the highest position. Set all other trims to the center position.
2. Power ON the transmitter.
3. Install the flight battery on the helicopter. Secure the flight battery with the hook and loop strap.
4. Connect the battery connector to the ESC.
5. Place the helicopter on a flat surface and leave it still until the motor beeps twice and the blue ESC LED glows solid, indicating initialization is complete.
6. Place the helicopter where you are going to take off.
7. Move and hold the left stick to the bottom left corner and the right stick to the top left corner. See illustration.
8. Press and hold the bind/panic switch until the swashplate smoothly rotates around once.
9. Release the sticks and bind/panic switch.
10. The model is ready for the trim flight.



#### Trim Flight

1. Slowly increase the throttle to lift the model into a stationary hover and make corrections as necessary to keep the model still. Evaluation does not begin until the throttle stick is over 50% and the sticks are centered. Making corrections will not affect the result but a longer flight may be necessary.
2. Try to keep the model stationary in a hover for a total of 30 seconds. Sliding and slow movements are okay. The main goal is to keep the rotor disk level.
3. Once you are satisfied with the trim flight, land the model.

#### Exiting Trim Flight Mode

1. Lower the throttle stick to the lowest position.
2. Press and hold the bind/panic switch for 2 seconds or until the swashplate twitches, indicating the servo positions and attitude values have been recorded and trim flight mode has been exited.

#### Test Flight

After performing the trim flight, test-fly the model to evaluate the leveling characteristics. The model should return to within 1° of level consistently. During takeoff, the model should lift off with minimal corrections. During a hover, small corrections are acceptable, but the control stick should remain close to

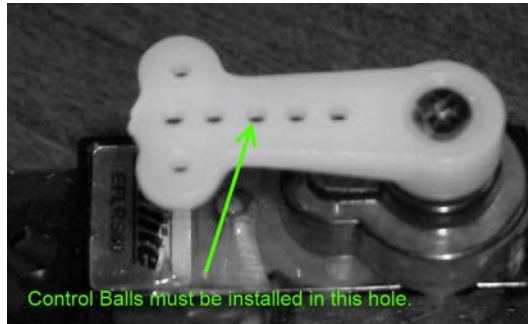
center for the majority of the flight.

It is possible the trim flight may not record the correct values due to excessive vibration, flying in wind or the model not staying level. In certain cases, short hops may work better. Try the 30 second level flight without corrections mentioned above first, then shorten the hops to look for improvements.

If the model performs poorly or does not level properly after the trim flight, retry the trim flight procedure. If the problem persists, inspect the model for damaged components, a bent shaft or anything that may result in increased vibration.

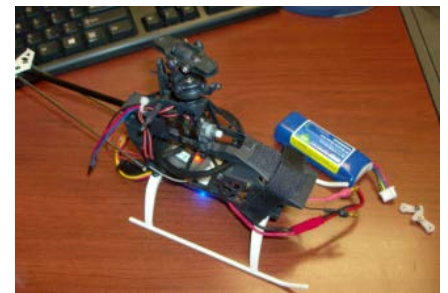
### Servo Arm Linkage Ball

The linkage ball must be mounted in the 3<sup>rd</sup> hole out from center. The linkage ball is installed on the inside of the servo arm for the fore/aft cyclic servo and on the outside of the servo arm on the left/right cyclic servo.



### Servo Calibration and Swashplate Linkage Adjustment

1. Disconnect 2 of the 3 main motor wires and disconnect the tail rotor motor from the ESC.
2. Lower the throttle stick to the lowest position. If your transmitter utilizes mechanical trims (like the included RTF transmitter), set the throttle trim to the highest position. Set all other trims to the center position.
3. Power ON the transmitter.
4. Install the flight battery on the helicopter frame. Secure the flight battery with the hook and loop strap.
5. Connect the battery connector to the ESC.
6. Place the helicopter on a flat surface and leave it still until the motor beeps twice and the blue ESC LED glows solid, indicating initialization is complete.
7. Place a servo arm on the fore/aft servo in any location.
8. Move and hold the left stick to the bottom left corner and the right stick to the bottom right corner. See illustration.
9. Press and hold the bind/panic switch until the fore/aft cyclic servo moves several times.
10. Release the sticks and bind/panic switch.
11. The AR636H is now in servo calibration mode. If the fore/aft servo arm does not move, swap the servo connectors in the receiver before proceeding.
12. Move the rudder stick either full left or full right to reset both servo trims to 0.
13. Install the servo arms on the servos, ensuring they are as close as possible to perpendicular to the servos.
14. Move the elevator/aileron stick up/down then left/right until both servos are as close to perpendicular as possible.
15. The range of adjustment is small. If the arm does not move far enough with the adjustment, remove the arm and rotate it one spline. Move the rudder stick full left or right to reset and try again. Always remember to verify both servos are perpendicular before proceeding.





### Fore/Aft Servo Setup



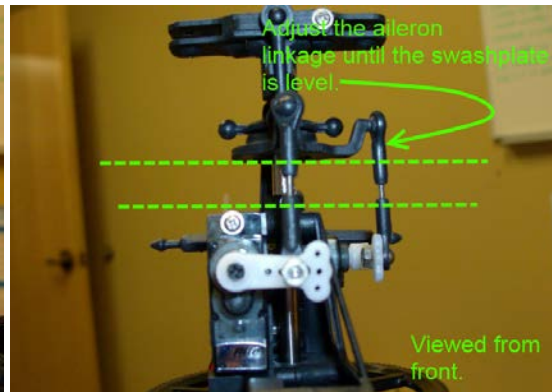
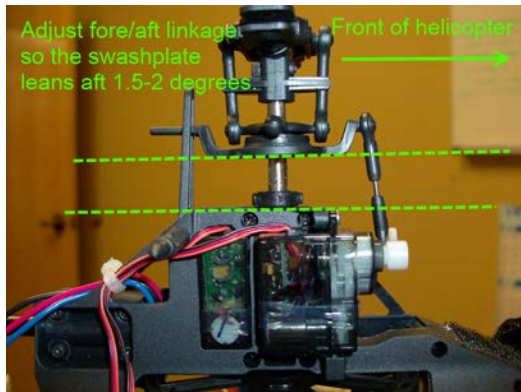
### Left/Right Servo Setup



16. Install both servo arm screws.



17. Adjust the swashplate linkages so the swashplate is tilting aft 2° and is perfectly level in the roll axis. This ensures full travel of the servos. The servo positions are acquired in the trim flight.



18. Press and hold the bind/panic switch until the swash servos move. The values have been saved and servo setup is complete.
19. Disconnect the flight battery.
20. Reconnect the main motor and tail rotor motor to the ESC.



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