Pantone Red 032
Pantone Black

ARES neonX PLUS

INSTRUCTION MANUAL

Vital Safety Information

CAUTION!
This flying model is not a toy. It can cause injury to persons/animals and/or property if not used correctly. It is unsuitable for persons under the age of 14. You should take care and observe the principles of safety when flying this model.

DANGER — Do not wear loose clothing or ties!
DANGER — Keep well clear of rotating propellers!
DANGER — Never operate near children or animals!

About the Flying Area Required
The Neon-X plus is suitable for flying indoors, or outside if there is no wind. If you have never flown before, we recommend seeking help from an experienced pilot. Do not fly near people, animals, buildings, power lines, water or trees. Protect the Neon-X Plus from direct sunlight and heat.

Training, Crashing and Spare Parts
This model has been designed to be strong and has many built-in safety systems. However, they are not invulnerable and most people will break parts during their flying career. This is quite normal. Spare parts are available from your supplier. Crash damage is not covered by warranty.

AZ502851 Propeller Set - Green
AZ502852 Propeller Set - Orange
AZ502853 Upper Canopy - Green
AZ502854 Upper Canopy - Orange
AZ502855 Lower Canopy

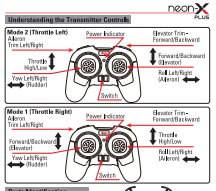
FCC Statement
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subjects the following two conditions:
(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

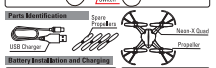
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

MADE IN CHINA

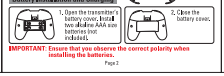
Understanding the Transmitter Controls



Parts Identification

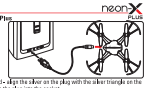


Battery Installation and Charging



IMPORTANT: Ensure that you observe the correct polarity when installing the batteries.

Charging the Neon-X Plus



The Neon-X Plus is charged using the supplied USB charger. Connect the charge lead to the quad - the charge socket, located above the ON-OFF switch. Note that this lead can only be connected one way round - align the silver on the plug with the silver triangle on the Neon-X Plus socket. Once the plug is in place, push it home.
Now connect the USB plug on the charging cable to a USB port on a computer or similar USB socket. Mobile phone chargers or car USB ports are also suitable. The light in the USB charger will illuminate when charging and extinguish when the battery is fully charged. Charging is complete in around 30-38 minutes.

Lithium Battery Safety Guide

Never dispose of Li-Po batteries in a fire or store in hot places. Use the supplied charging lead to charge the battery. The use of a different charger can lead to the permanent damage of the battery as well as physical injury! Never use a charger designed for NiCd/NiMH batteries! Always ensure that you charge on a fireproof surface. Do not leave the battery unsupervised during the charging process. Never disassemble or alter the battery contacts. Do not damage or puncture the battery as there is a risk of explosion! Extinguish fires with sand. If something goes wrong and your battery catches fire, always have sand from a fire bucket at hand to put out the flames. Do NOT use water! Keep the Li-Po battery out of reach of children. Allow the battery to cool before recharging to prevent damage to the battery. Warning: The Li-Po battery can become warm during charging. It should become hot and/or you notice a change in the Li-Po battery's appearance, immediately discontinue the charging process!

- Do not modify/change any part of the battery or connector. Do not remove its protective covering. Removal or modification may damage the battery and will invalidate any warranty claim.
- Do not place Li-Po batteries near fire or anything with high temperatures.
- Do not charge batteries while you are driving and do not store batteries in any type of motor vehicle.
- Do not let the battery get wet or become submerged in any type of liquid.
- If you should get electrolyte from the cells on your skin, wash thoroughly with soap and water. If in your eyes, rinse thoroughly with water. Seek medical assistance.

Pairing the Neon-X Plus to the Transmitter

The correct starting sequence is as follows. Note that a Mode 2 transmitter is shown here. The throttle is on the right hand stick on a Mode 1 transmitter.

Step 1.
Pull the transmitter throttle stick to its lowest position. Do not switch on the transmitter yet.

Step 2.
Switch on the Neon-X Plus by sliding the switch on the side of the quad as shown. The LEDs will begin flashing.

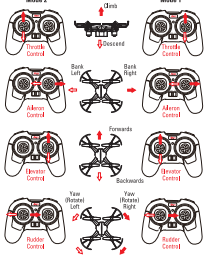
Place the quad on a level surface and do not move it.

Step 3.
Switch on the transmitter by sliding the switch as shown. The power indicator LED on the transmitter will flash.

Step 4.
When the transmitter emits a double 'BEEP' sound, move the throttle to its highest position. The transmitter will emit a single 'BEEP'.

Step 5.
Reduce the throttle stick to its lowest position. The transmitter will again emit a single 'BEEP' and the power indicator LED will illuminate with a steady red light. The quad's LEDs will also stop flashing and emit a steady light. The Neon-X Plus is now ready to fly.

Operation and Control



Control Sensitivity Setting

The Neon-X Plus has three control settings: Low - Intermediate - Advanced. As your flying skills improve, the control can be increased to make the Neon-X Plus more manoeuvrable. Don't rush into Advanced mode before you are ready, the control is up to 70% more than normal!

To increase the control response, press down on the throttle stick until you feel a click. You will hear 'Beep', 'Beep' to confirm you are in Intermediate control mode and sensitivity is increased by 50%. If you press down on the throttle stick again, you will hear 'Beep', 'Beep', 'Beep' to confirm you are in Advanced control mode and sensitivity is increased by 70%. To return to the normal Low mode, just press down on the throttle stick again. You will hear a single 'Beep' to confirm you are in Low control mode.

Performing Aerobatics

The Neon-X Plus can perform aerobatic manoeuvres! It can flip through 360° to the left or to the right and can perform somersaults forwards and backwards.

⚠ When carrying out aerobatic manoeuvres, it is important to have sufficient space around the Neon-X Plus. Make sure that you are climbing prior to an aerobatic flip or somersault so that you can maintain height after the manoeuvre.

To prepare the Neon-X Plus for a manoeuvre, press the right-hand joystick down until you feel a click. You will hear a single 'Beep' from the transmitter to confirm the model is primed and ready.

Flips to the Left

Once you have pressed down on the elevator joystick and hear a continuous 'Beep, Beep' you should climb to a safe height and move the aileron control fully to the left. The Neon-X Plus will flip through 360° to the left. Release the aileron stick.

Flips to the Right

Once you have pressed down on the elevator joystick and hear a continuous 'Beep, Beep' you should climb to a safe height and move the aileron control fully to the left. The Neon-X Plus will flip through 360° to the left. Release the aileron stick.

Forward Flips

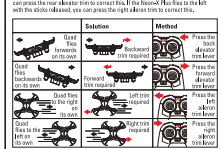
Once you have pressed down on the elevator joystick and hear a continuous 'Beep, Beep' you should climb to a safe height and move the elevator control fully forward. The Neon-X Plus will flip forwards through 360°. Release the elevator stick.

Backward Flips

Once you have pressed down on the elevator joystick and hear a continuous 'Beep, Beep' you should climb to a safe height and pull the elevator control fully backward. The Neon-X Plus will flip backwards through 360°. Release the elevator stick.

Using the Trims

The transmitter is equipped with aileron and elevator trims that enable to you re-centre the controls in the event that the Neon-X Plus tries to fly in one direction when the joysticks are released. If the it flies forwards with the sticks released, you can press the rear elevator trim to correct this. If the Neon-X Plus flies to the left with the sticks released, you can press the right aileron trim to correct this.



Calibrating the Accelerometer

The Neon-X Plus is equipped with gyros and an accelerometer to ensure it has a smooth, stable and predictable flight performance. While the accelerometer is factory calibrated, if the Neon-X Plus does not fly smoothly or it drifts in one direction that cannot be corrected with the trims, the accelerometer may need to be recalibrated. This is a simple procedure.

1. Switch on the Neon-X Plus and place it on a level surface.
2. With the throttle in its lowest position, switch on the transmitter and wait for the audible 'BEEP' sound. Move the throttle to its highest position then back to its lowest. The steady red LED should now be illuminated.
3. Enter the Advanced control mode by pressing down on the throttle stick twice. You will hear a 'BEEP', 'BEEP', 'BEEP' sound to confirm.

4. Now move the joysticks to the following positions and hold them there:

5. The LEDs on the Neon-X Plus will flash for 1-2 seconds. Release the joysticks and calibration is now complete.
6. Return to Normal control mode by pressing down on the throttle stick. The Neon-X Plus is ready to fly again.

Note: If the Neon-X Plus still drifts in one direction, you can calibrate with the model propped up on several sheets of paper under one side to adjust the level of accelerometer bias. Use more sheets under one side as required depending on the degree of drift you need to correct.

Motor Stall Protection

If during the flight there is an impact or crash that causes the blades to stop rotating, the Neon-X Plus will automatically cut power to all motors to protect the delicate electronic components. If this occurs, ensure that all motors are free to turn then switch off the Neon-X Plus and its transmitter. The Neon-X Plus can now be switched back on, if necessary, re-charge the quad before resuming flying.

Troubleshooting Guide

Problem	Solution
Blades do not rotate.	Check that the battery is charged and the LEDs are bright. Re-seat the Neon-X Plus to the transmitter following the instructions on Page 4.
Neon-X Plus does not respond correctly to the transmitter commands.	Check that you haven't replaced a propeller blade with a spare that rotates the opposite way.
Neon-X Plus drifts and does not fly smoothly.	Recalibrate the Accelerometer as described on Page 8.