STOP

BEFORE FLYING, PLEASE READ & UNDERSTAND THESE INSTRUCTIONS!
and go to *www.knowbeforeyoufly.org*
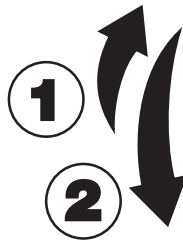
STOP

DROMIDA XL

Radio Controlled **Quadcopter**
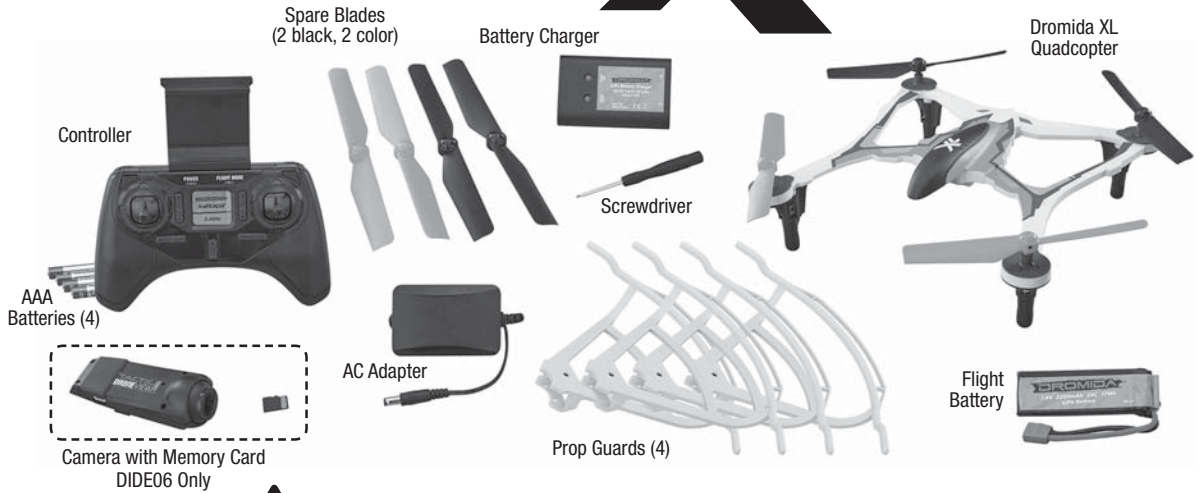
Spare Blades
(2 black, 2 color)

Battery Charger

Dromida XL
Quadcopter

Controller

Screwdriver

AAA
Batteries (4)

AC Adapter

Flight
Battery

Camera with Memory Card
DIDE06 Only

Prop Guards (4)

⚠ **TO PREVENT MOTOR DAMAGE ALWAYS BE SURE THE THROTTLE IS OFF WHEN THE BLADES ARE OBSTRUCTED OR CONTROL IS LOST.**

QUICK START FLYING GUIDE

1
2

POW

Use the left stick to arm the transmitter.

4 **Press for auto takeoff or auto landing.**

AUTO TAKEOFF/LAND
VIDEO

3 **Hold 1.5 s to start or stop motors.**

MOTORS START/STOP
PICTURE

POWER   FLIGHT MODE
MR101
2.4GHz

CLIMB

**5**

ALTITUDE HOLD
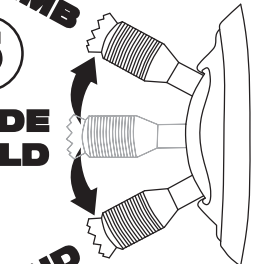
DESCEND

CHARGING

Plug the AC wall adapter into a 120V outlet and connect the balance charger to the wall adapter. The power LED will illuminate solid **RED**. Plug the white balance plug on the battery to the 2S port on the charger. When charging, the charge status LED will illuminate solid **RED**. When charge is complete the LED will change to solid **GREEN**. Typical charge time of a depleted battery is approximately 2 hours. **NOTE:** A blinking red charge status LED indicates a charging error.

- ● **NEVER** leave the battery unattended while charging.
- ● **ALWAYS** unplug the charger from the outlet and the battery when charging is complete.
- ● **NEVER** charge a puffed or damaged battery.

NOTE: It is normal for the charger to get warm during the charging process.

INSTALL BATTERIES IN THE CONTROLLER
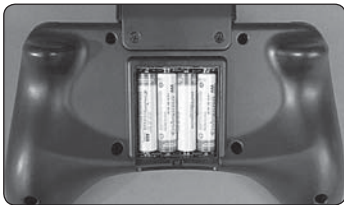
Remove the screw and slide the cover down to insert the included 4 AAA batteries.

PROP GUARDS

NOTE: Prop guards are included to help protect the propellers from accidental contact with obstacles. We recommend they be installed prior to your first flight.

Fit the bottom prop guard retainer over the alignment pin on the motor cover. Press the prop guard in place as shown with the pins in the alignment holes. It should fit snugly over the screw bosses on the retainer. Secure the prop guard and retainer using three screws included in the package. Repeat this procedure for the other three prop guards.

LINKING AND ARMING

Power Switch

1. Turn on the controller.
2. Connect the battery to the Dromida XL and place it on a level surface. The LED on the quad will flash rapidly when the quad is linked to the controller and ready to fly. The LEDs on the quad will then flash slowly until the transmitter is armed.

ALWAYS unplug the battery after flying! Damage to the battery may result if left connected.

3. Arm the transmitter by moving the throttle stick to full throttle and then down to low throttle. The transmitter will beep once confirming that it is now armed.

QUADCOPTER SENSOR CALIBRATION

If the quadcopter is constantly drifting in the same direction or the quad is not maintaining altitude, or any time a new flight control board has been installed, the sensors on the Dromida XL should be calibrated.

1. **Calibrate the sensors before the first flight.** Center all the trim adjustments. To center the trim settings, hold down one side of the trim button until you hear a long beep. If the controller stops beeping, release the trim button and hold down the other side.
2. Place your Dromida XL on a level surface and link the quadcopter with the controller and arm the transmitter.
3. Press and hold the right stick in its lower right corner.
4. Move the left stick down and to the right. When the quad LEDs start to flash, release both sticks. The LEDs will stop flashing when the calibration is complete.

FLYING

MOTOR OFF PANIC BUTTON! In the event of a crash, hold down on the **Motor Stop Button** to disable power immediately.

FLYING BASICS

1. Place the Dromida XL on a smooth, level surface away from yourself, spectators, and obstacles. The quad should be facing away from you.

2. Start the motors by holding the **MOTORS START/STOP** button for 1.5 seconds. Props will automatically spin slowly.

3. Press the **AUTO TAKEOFF/LAND** button and the Dromida XL will climb to an altitude about eye level. The quad will attempt to maintain this altitude as long as the left stick is not moved up or down.

NOTE: You can also take off by moving the left stick up.

4. Move the left stick up or down to increase or decrease altitude.

5. Use the right stick to move left, right, forward, or backward.

6. Use the left stick (left/right direction) to rotate the Dromida XL.

7. Press the **AUTO TAKEOFF/LAND** button during flight and the Dromida XL will decrease in altitude until it detects landing. After landing the motors will stop.

NOTE: You can also land by holding the left stick down until the Dromida XL contacts the ground. Continue holding down until the motors stop.

⚠ **TO PREVENT MOTOR DAMAGE ALWAYS BE SURE THE THROTTLE IS OFF WHEN THE BLADES ARE OBSTRUCTED OR CONTROL IS LOST. PUSH THE BUTTON!**

DUAL RATES

Control sensitivity can be changed by pushing down and releasing the right stick on the controller The default is low rate when the flight mode LED is blue. The controller will make a beep and the flight mode LED will change to orange indicating high rate. This mode should be used when more agility is desired. Pushing down on the right stick again will return the controller to low rate indicated by a beep and the flight mode LED changing back to blue. This mode should be used when learning to fly or smoother video is desired (if equipped with a camera).

The overall controls can be adjusted independently by rate mode:

1. Hold down the right stick until the controller beeps once.
2. Continue to hold down the right stick and advance the throttle to the desired setting.
3. Release the right stick and return the throttle to 0%.

The default setting for low rate mode is when the throttle stick is at 50% (midstick).

ALTITUDE HOLD

The Dromida XL has a barometer built in to the flight control board that detects the surrounding air pressure which enables the quad to maintain a set altitude automatically. After auto-takeoff, the Dromida XL will climb to a height of about 1.5m above its position at takeoff and then will attempt to maintain that altitude. Move the throttle stick up or down to change the set altitude position. When the stick is released back to center, the quad's current height will be the new set altitude.

NOTE: It is normal to see slight deviations from the set altitude. Windy conditions or sensors that are out of calibration may increase the deviation from the set altitude. Recalibrate the sensors if the quad is flying erratically or does not appear to be maintaining altitude.

FLIPS

Your Dromida XL can perform a flip when the left stick is pressed inward and released, followed by moving the right stick in the desired flip direction. This stunt needs lots of room and should be done outside free of obstacles.

NOTE: When the battery voltage is low (flashing LEDs) the flip function is disabled.

LOW BATTERY INDICATOR

The LEDs on the Dromida XL will flash slowly when the LiPo battery voltage is low. Thirty seconds after the lights begin to flash the Dromida XL will begin the auto-land procedure. **Always unplug the battery after flight. The battery needs to be charged before the quadcopter is stored.**

The controller will make five quick beeps when the AAA batteries need to be charged.

MOTOR OVERLOAD PROTECTION

 The Dromida XL is equipped with motor overload protection circuitry that shuts down the motors in the event the propellers become blocked by an obstruction and throttle is applied. In order to reset the overload protection you will need to free the Dromida XL from the obstruction and cycle the power to the transmitter and the quad. If the overload protection is triggered repeatedly or late into a flight then it may prematurely cause the low battery indicator to flash the LEDs. Disconnect the battery and wait several seconds before reconnecting it. If the LEDs continue to flash then you must recharge the battery.

UPGRADING a DROMIDA XL UAV to FPV

Follow these instructions if you purchased the camera and mount separately to convert your Dromida XL UAV to FPV. Part numbers for the camera and mount can be found in the parts list at the end of this manual.
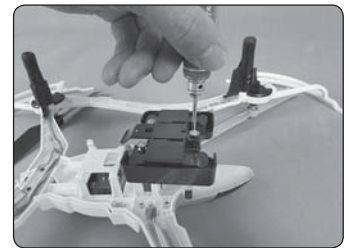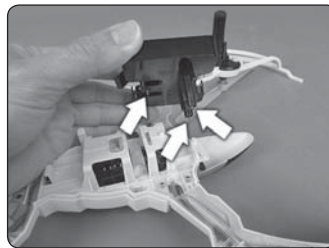

1. Install the camera mount onto the underside of the frame using the three screws included with the mount. Do not over-tighten these screws.

2. Align the rails on the camera with the slots in the camera mounting plate and slide the camera back until it clicks into place. Confirm that the camera is secured.
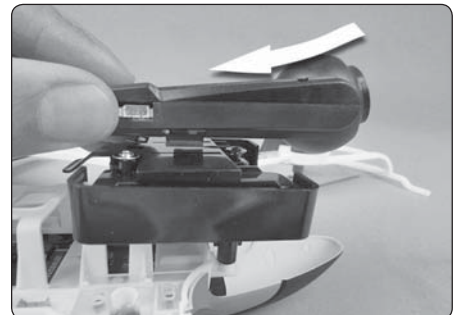
3. Connect the camera wire to the camera and to the quad as shown. The connectors can only fit in one direction. Do not force them.
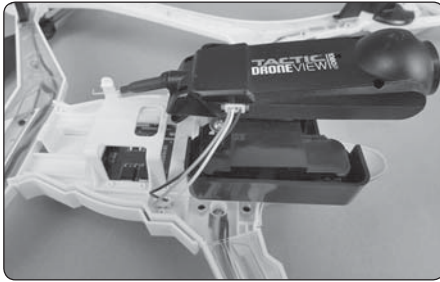
RECORDING VIDEO & PICTURES WITHOUT THE APP
FPV Version Only

1. If you remove or need to replace the memory card in the camera, insert it as shown with the gold contact points facing down, away from the Dromida XL. Push the card in until it clicks

into place. To release the card, push in until it clicks and the card will spring out of position to be removed. **The memory card should never be inserted or removed from the camera when the battery is plugged in.** When inserting the card, be sure to align the card correctly into the card slot.

2. Turn on the controller and connect the battery to the Dromida XL. Before taking pictures or video you must allow the camera 30 seconds to initialize. Pictures or video taken before the camera has initialized may not be saved to the card or the file(s) will be corrupted.
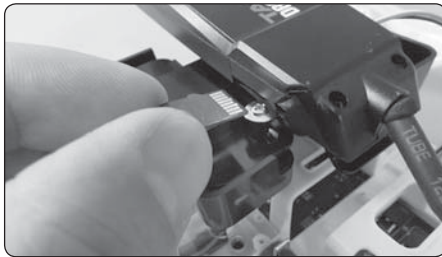
3. Use the PICTURE and VIDEO buttons on the controller to take still images and video recordings. Pressing and releasing the VIDEO button will start video recording indicated by a long 'beeeep' from the controller. Pressing and releasing the button again will stop recording, indicated by a short 'beep' from the controller, and the LEDs on the Dromida XL will flash. Pressing and releasing the PICTURE button on the controller will take a photo indicated by a short 'beep' from the controller. Photos can be taken using the PICTURE button on the controller even if the DroneView camera is recording video. Allow at least 2 seconds after taking a picture before taking another picture.

NOTE: Avoid pressing and holding the video and picture buttons. A quick 'press and release' is sufficient to activate the camera.

> ⚠ BEFORE DISCONNECTING THE BATTERY FROM THE DROMIDA XL AND REMOVING THE MEMORY CARD, YOU MUST ALLOW AT LEAST 30 SECONDS FOR THE DRONEVIEW CAMERA TO CLOSE THE FILES. FAILURE TO DO SO MAY RESULT IN MISSING OR UNREADABLE FILES.

4. Wait at least 30 seconds following the end of the last video recorded. Disconnect the battery from the Dromida XL, THEN remove the memory card from the camera.

5. Insert the card into a memory card reader (not included) for use with a PC, or tablet. Pictures are saved as .JPG files and videos are saved as .AVI files. Pictures and videos can be viewed or edited using software that was bundled with your PC or tablet, or there is a wide variety of software available from third parties both free and for purchase.

NOTE: The DroneView camera's maximum video length is 5 minutes. If video is recorded for longer than 5 minutes the DroneView camera will automatically close the video file and start a new file. There may be a short loss of video footage during this switch to a new file. The DroneView will continue to create new video files every 5 minutes of continuous recording until the memory card becomes full or the battery is disconnected. Corrupt or missing files may result in video recording being stopped in this way.

6. After you have retrieved your files from the memory card (copy the files you wish to keep to a safe location) you can delete the files on the memory card. The DroneView camera will create the sub folders it needs if they are deleted from the card.

USING THE DRONEVIEW APP

The DroneView app is free software for your WiFi-capable Apple or Android device that allows you to connect to the DroneView camera to use the FPV (First Person View) function as well as to take videos and pictures and upload and view them directly to your device.

1. Install the "DroneView" app from Google Play (Android) or the App Store (Apple).'
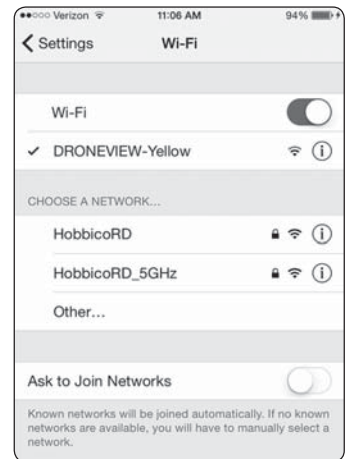
2. Insert the memory card into the camera and connect a charged LiPo battery to the Dromida XL.

3. **iOS Only** - Go to the WiFi setting options in your device and select the DroneView network. The actual name of the DroneView network will vary from the photo shown here. It may take several seconds for the DroneView network to appear in the available network list in proximity to your device. No password is needed to connect to the DroneView network. **NOTE:** Android devices will automatically connect to the DroneView WiFi network when the DroneView app is opened.

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Wi-Fi® are Wi-Fi Alliance® are registered trademarks of the Wi-Fi Alliance.

Pull tabs on phone holder to expand and insert phone

4. Grasp your device as shown and attach it to the phone mount on the controller by pushing up on your phone against the spring loaded top clip until you can fit the other side into the bottom clip.

5. With your device connected to the DroneView WiFi network, open up the DroneView app. It may take several seconds for the app to locate and connect to the DroneView WiFi network.

NOTE: If you're in a populated WiFi environment, it may take longer.

6. Once connected you will see on your device the image seen by the camera (referred to in this manual as the FPV feed). Press anywhere on the screen to pull up the main options.

Picture Button - Press to take a still image. Note: pictures cannot be taken with the app while recording is in progress.

Video Button – Press to start recording (red stop button appears on right when recording).

**File Gallery Button –** Opens gallery to display contents of memory card for viewing, exporting and deleting.

Settings Button – Opens the setting menu.

NOTE: The FPV feed is for the purposes of displaying what the camera is recording to improve the quality and accuracy of videos and pictures with respect to the pilot's intended field of view. We do not recommend attempting to fly the Dromida XL relying solely on the FPV feed. Delays in the FPV feed can cause the image shown in the app to not represent the exact current position of the Dromida XL. Any interruption of the FPV feed will not be present in the recorded video files. *Flying without maintaining line of sight of the quad is unsafe.*

FILE GALLERY

Opening the file gallery displays the contents of the memory card in the camera. Each thumbnail represents a picture or video. Videos have a small camera icon and the length of the videos on the thumbnails.
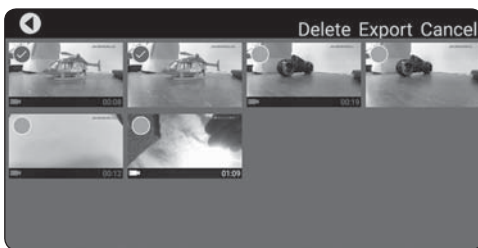
Pictures can be viewed by clicking on the picture thumbnails. In order to view videos, you must first export them by pressing

Select and then pressing each thumbnail that you wish to export. Press **Export** to upload the files to your device. Pictures and videos will be copied to your device's camera roll. They can also be viewed in the DroneView app after the exporting is complete by pressing the thumbnail you wish to view.

NOTE: We do not recommend exporting videos that exceed 3 minutes in length because of the amount of time it will take to export the files. For longer videos or a larger quantity of videos, we recommend removing the memory card from the camera and transferring the contents directly to a PC using a card reader.

When you have confirmed that the files have been successfully transferred to your device's camera roll, press **Select** and choose the files you wish to delete if you no longer want them in the file gallery.

SETTINGS
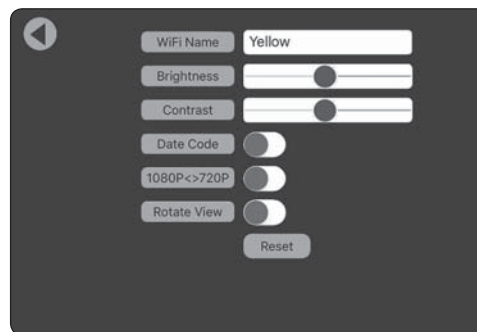
The settings menu allows you to change the WiFi name, adjust brightness and contrast, date code, resolution mode, and rotate camera view.

Changing the WiFi Name will change how the Camera is identified in the WiFi network list.

The **Brightness and Contrast** will adjust the FPV feed display qualities. Video and picture files will have the same display qualities as the feed. You may wish to experiment with these settings depending on lighting conditions and personal preferences. Press reset to return the brightness and contrast to the default values.

Resolution Mode switches the camera output between 1080p @ 30 frames/sec and 720p @ 60 frames/sec. 1080p mode will provide you with a larger field of view from the camera compared to 720p mode. 720p mode has the advantage of smoother video recording which is also more suitable for post editing such as applying slow-motion to video footage.

The **Date Code** will display the current date on the FPV feed when the Date Code is turned ON. The date will also be seen in video recordings and pictures in the same format as seen on the FPV feed. The Date Code is automatically updated to match the date of your device when connected via WiFi network.

Rotate View will rotate the FPV feed and recorded videos and pictures 180°. This feature is needed when the DroneView camera is used independently of the Dromida XL with a separate R/C receiver and is mounted on top of a surface rather than underneath like on the Dromida XL.

If you made any changes in the settings menu then you will be prompted to save when exiting the settings menu. If you select NO when prompted to save then the changes will be discarded. **iOS Only** - If you change the WiFi name then you will need to exit the DroneView app and select the newly named network in the WiFi setting options of your device.

USING TWO DEVICES SIMULTANEOUSLY

The DroneView camera can be connected with up to two devices simultaneously. Two devices will have the ability to connect to the DroneView WiFi network and share the FPV feed from the camera. Both devices will also be able to take pictures and start/stop video recording.

NOTE: Exporting can only be done with one device at a time. Attempting to export files simultaneously from a DroneView camera to two devices may cause the transfer to freeze.

TROUBLESHOOTING

FLYING PROBLEMS

PROBLEM: The Dromida XL will not respond to the controller.
SOLUTION: (1) Charge or change the battery in the Dromida XL. (2) Turn off the controller and disconnect the battery for the Dromida XL. Re-link the Dromida XL and controller.

PROBLEM: Red controller LED light flashing after linking.
SOLUTION: Replace with new AAA batteries.

PROBLEM: Unable to flip.
SOLUTION: Battery voltage too low.

PROBLEM: Stabilization not working properly.
SOLUTION: (1) Battery voltage low. (2) Re-link. (3) Recalibrate the sensors.

PROBLEM: Will not take off.
SOLUTION: Rotor blades incorrectly installed. See Blade Replacement section.

PROBLEM: Dromida XL is shaking.
SOLUTION: Check the canopy, chassis, motors and rotor blades for damage.

PROBLEM: The balance charger charge status LED blinks when attempting to charge the battery.
SOLUTION: The battery voltage is too low to charge. The battery voltage may recover on its own with time in order to be safely charged. Wait 1 hour and try charging again. If the charger LED still blinks then you may need to replace the battery.

PROBLEM: The Dromida XL does not maintain altitude when the throttle stick is in the center position.
SOLUTION: Recalibrate the sensors.

VIDEO PROBLEMS

PROBLEM: There are missing or corrupt files on the memory card.
SOLUTION: Refer to RECORDING VIDEO AND PICTURES WITHOUT THE APP for information regarding camera initialization and closing of files.
SOLUTION: Allow 2-3 seconds between taking pictures.

PROBLEM: The video button on the controller does not work or works intermittently.
SOLUTION: The video button must be pressed and quickly released. The controller will beep when the button works properly.
SOLUTION: The video button on the controller toggles between start/stop video. If using both the app and the video button to control video recording, you may need to press the video button a second time in some instances to get the correct start or stop command.

PROBLEM: The WiFi connection is lost during flight.
SOLUTION: There may be interference in the area. Try flying in a different location.
SOLUTION: You are exceeding the WiFi range of the DroneView camera. Maintain a closer proximity to your device during flight.

PROBLEM: The app does not re-establish connection after the connection has been lost.
SOLUTION: Close the DroneView app and remove it from the background tasks. Restart the DroneView app.

**PROBLEM:** Exporting files was interrupted and the export function cannot be restarted.
SOLUTION: Close the DroneView app and remove it from the background tasks. Restart the DroneView app. Run the export function again.

PROBLEM: You recorded videos/pictures but there are no files on the memory card.
**SOLUTION:** The memory card was incorrectly inserted into the camera. Refer to RECORDING VIDEO AND PICTURES WITHOUT THE APP for instructions on the proper installation of the memory card.

PROBLEM: Horizontal scrolling lines appear in video or pictures.
SOLUTION: Avoid aiming the camera directly into the sun or reflected sunlight.

BLADE REPLACEMENT

1. Remove the screw that secures the rotor blade to the gear shaft.

2. Pull the prop off the gear shaft.

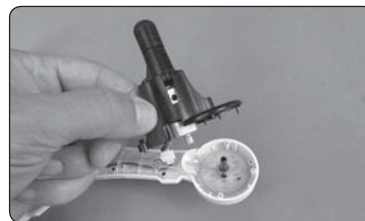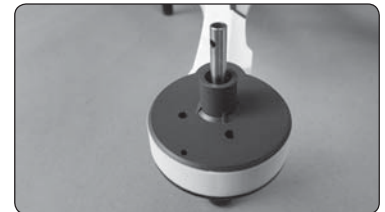3. Install the new rotor blade and secure it with the screw.
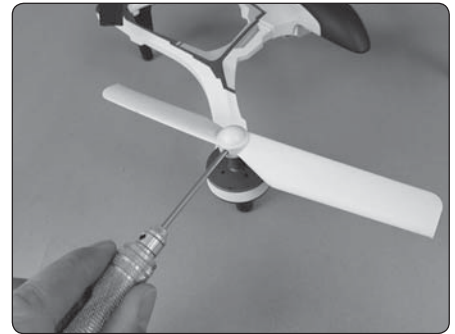
NOTE: The rotor blades have arrows that indicate which direction they rotate. Please refer to this diagram to verify that the correct replacement rotor blade is installed.

FRONT
Color Blades

REAR
Black Blades
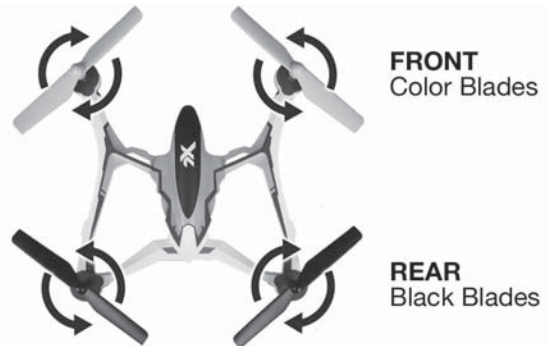
PROP SHAFT REPLACEMENT

1. Remove the rotor blade from the prop shaft.

2. Remove the four screws from the black motor cover and lift it off the frame (if installed, the prop guard will also need to be removed before the motor cover can be removed). You do not need to disconnect the motor wires.

3. Slide the motor shaft out out of the frame. Remove the screw securing the gear to the shaft. Slide the gear off the shaft.

4. Reinstall the parts in the same order in which they were removed.
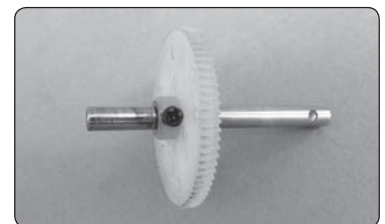
NOTE: While the gear is out, check it carefully for any cracks or damage to the teeth.