

# Hitec Q-Cop 450

*A state-of-the-art camera/video quad that's easy to fly*

BY JOHN REID PHOTOS BY BOB SUTTON & JOHN REID

**H**itec's latest release is a perfect example of a company that takes their time to develop just the right product for the marketplace. The new Q-Cop 450 is a great-looking, nice-flying midsize quad that's perfectly suited to aerial videography and photography. The Q-450 has a built-in camera that can produce HD recordings in 1080p at 30fps or 720p at 60fps. In addition, it can shoot a 16-megapixel still image with the same camera. The camera can be moved to get just the right shot, and the pilot controls the camera through the transmitter. This quad just looks nice, with a perfect integration of battery, camera, controls and features in a slick design that will meet the needs of most operators. The great thing about this mid-sized quad is that everything is included (except for the micro SD card), and it's easy enough to fly that even someone with no flight experience can be successful. Let's look a little deeper at this cool quad.



## SPECIFICATIONS

**Model:** Q-Cop 450  
**Manufacturer:** Hitec (hitecrd.com)  
**Type:** Quadcopter with camera  
**Length:** 17.5 in.  
**Weight:** 3 lb., 4 oz.  
**Radio incl'd:** 9-channel  
**Price:** \$699.99

## HIGHLIGHTS

- + 22-33mph cruising speed
- + 90-degree vertical camera control
- + Up to 25-minute flights
- + Auto return-to-home feature



**Left:** The WiFi-Repeater amplifies the signal from the Q-Cop 450 to your smartphone. **Center:** The three center buttons control the camera, the left is video start, center is the shutter button and the right is for video stop. **Right:** The blade guards and props are the only two things to assemble. **Far right:** Not only do the red and green LED lights help with orientation, but they also signal alerts such as low battery warning.



## UNIQUE FEATURES

The first thing you notice when you get the Q-Cop 450 is that it comes in a very durable box with custom-cut packing material inside. The box can be used to store and transport the Q-Cop 450. One of the things that surprised me was just how big the quad is; it's a rather beefy flying machine. The quad comes just about fully assembled; you only need to install the props and prop guards. The legs come attached and the camera housing is mounted below the unit ready to use. The flight battery has a full charge but the WiFi Repeater will need to be charged and that will take about two hours.

The prop guards are installed by removing two of the bolts holding in the motor and replacing them with longer ones that extend through the guides. Be sure to keep the short bolts so that you can replace them later if you decide not to use the guards. The Q-Cop 450 comes with a nice Phillips-head screwdriver just for these bolts. The props are threaded on to each motor, which have threads going in the opposite direction in which the motor

spins. This is an excellent idea for two reasons; the first is that it makes it easy to install the props correctly. The other is that the props will continue to tighten while the bird is flying but are still easy to remove for storage. A prop wrench is also included, mainly for removing the props.

Perhaps the thing you will spend the most time on (besides flying this bird) is setting up the Hitec AEE Aerial Photography app that will allow you to see images from the camera and give you some control functions from your smartphone. The transmitter has a mounting bracket for any size smartphone and the WiFi Repeater is also attached to it. The repeater translates the signal coming from the Q-Cop 450 to the smartphone. The app has an assortment of controls and settings for the onboard camera. The start and stop functions for the video and photos can be controlled on the transmitter buttons or on the app. The camera angle can be rotated from straight ahead to pointing directly down.

## 5 AERIAL VIDEO TIPS

The Q-Cop's built-in camera and the ability to control many of its functions from the transmitter makes it a good camera platform for aerial photography. Here are a few tricks to make shooting from the air a little easier.

- 1** Shooting video generally looks good if it is done with a smooth and gradual transition from one direction to another. The best way to accomplish this is by making subtle directional changes and by keeping the multirotor moving.
- 2** Take the multirotor out of GPS flying mode. This mode is great for learning and general flying, but it causes the quad to stop rather abruptly when the sticks are moved to the center, and this translates to jerky movement in the video.
- 3** Fly with very deliberate and slow stick movements; this renders a very smooth flight with gradual transitions.
- 4** A neck strap or a tray-type transmitter also smooths out my stick movements by giving my hands a solid resting foundation.
- 5** Finally, I like to practice the flight pattern before actually shooting the video. I was doing a video shoot with a mountain biker and before I had him ride the trail we were going to shoot him on, I practiced flying down that trail a couple of times. After that, it only took us three takes to get the final video shots we needed. Try these tips and I guarantee your video aerial photography will show some improvement!

## FLIGHT REPORT

The Q-Cop 450 can take off from just about any type of surface as long as it is level and flat. Of course, it's much easier to work off of asphalt or cement because there is less dust and dirt flying around hitting the camera lens. When I did lift off from dirt, I moved the camera lens up 90 degrees and punched it out rather quickly to help reduce the debris. The Q-Cop 450 throttle stick is not a ratchet-type and it returns back to center stick when released. Center stick on the throttle equals level flight, so takeoff requires a little above center throttle stick. Once in the air, the Q-Cop is relatively easy to fly and all the other control sticks follow standard multirotor operations and direction.

### General Flight Performance

**Stability:** The Q-Cop 450 feels very solid in the air and whenever you experience an issue, just release the sticks and the quad will stabilize almost immediately. In GPS mode it wants to quickly level and lock in 3D space, and this will cause it to make some quick movements.

**Tracking:** This bird is easy to control and track along the sky. It holds its heading well and this makes it easy to follow a ground target. I found that it had very little drift from side to side during forward and reverse flight. The Q-Cop can scoot along at a very good clip and you can make some quick turns and change the heading rather fast when slamming the sticks. To keep it smooth, just make small and slow movements on the control sticks. I recommend using the neck strap to give the transmitter a little more stability.

**Landing:** During landing it at first seems a little strange to feel the tension as you lower the throttle stick from center. After just a few flights, however, I was comfortable with the setup. I found that I land much more softly with this type of throttle setup than I do with the standard ratcheted systems on my other radios.

### Pilot Debriefing

Overall, you should not have any problems flying this quad, and the nice thing is if you do get into trouble just release the sticks and it will immediately level itself. I enjoyed flying this quad and was able to place it in the exact spot that it needed to be for the photographs. The Q-Cop is a very solid, stable-flying multirotor.

**BOTTOM LINE** The Q-Cop 450 is easy to assemble and operate, and it can create some very dramatic aerial photography. It takes very little time to get this bird in the air and once there you will enjoy the stability and the variety of photo opportunities it has to offer. Add to that its 20–30mph cruising speed, up to 25-minute flights, and various recording options, and it is easy to see how the Q-Cop makes a great photographic platform. ✈️