Parrot **Bebop Skycontroller Bundle**

High-quality video and FPV in one flight-ready package BY MATT BOYD PHOTOS BY PETER HALL

JUDGING BY THE DESIGN, construction and marketing of the Bebop, Parrot envisions its flagship multirotor less as a drone with a camera than as an aerial video camera with its own builtin flight system. That is not at all a critique—the impression of "togetherness" this package imparts gives immediate confidence, both in its flight capabilities and in its ability to generate top-notch aerial video while making remarkably few technical demands of the pilot. Beginners can depend on its stability and its automated functions to get them up, flying and filming very quickly.



HIGHLIGHTS

The Bebop can be purchased as just the aircraft/camera, or as the package you see here with the aircraft plus the Skycontroller and various accessories. If you forgo the Skycontroller, you control your Bebop with a WiFi-equipped tablet or even a smartphone (both Android and Apple iPad/iPhone devices are supported) using the freely downloadable Freeflight 3 software app. The Bebop generates its own WiFi hotspot on both 2.4 and 5GHz! The Skycontroller gives better control feel, so that's the preferred setup.

The Bebop comes completely assembled and flight-ready, needing only a charge of the LiPo flight battery using the included charger. That battery is encased in the same impact-resistant, fiber-reinforced ABS as the main structure, and in fact snaps in to form the back half of the fuselage. The Bebop has a rubber-isolated double-plate chassis to protect against both vibration and crash impact, and it feels admirably sturdy. The camera and electronics are mounted on a magnesium internal shelf that doubles as a heat radiator and electromagnetic

The camera—a 14 megapixel/1080p unit with 3-axis image stabilization and 180 degrees of viewing arc (adjustable via a joystick on the SkyController)—is encased in the foam nose section. It too is connected through the onboard WiFi, allowing any Freeflight 3 equipped tablet or phone to display the onboard video in real-time. The novel construction of the

Skycontroller allows those devices to be mounted on the controller between the grips, yielding a very comfortable FPV configuration requiring no additional hardware! Video is recorded on 8GB of onboard flash memory, accessible and downloadable to any computer through a mini-USB port with its own supplied cable—your computer simply sees it as a flash-storage device. (Apple users may need to download an additional piece of viewing software, but it is free on Parrot's site).

Connecting the Bebop and Skycontroller to your tablet is fairly straightforward, although the exact sequence for linking them can vary a bit. With my Android tablet, I found that turning on the tablet, then the Bebop. then launching the Freeflight app and linking the WiFi, then turning on the Skycontroller last worked best for me. In addition to the components mentioned, the Bebop kit comes with sun shades and a tablet mounting tray for FPV use. removable EPP foam bumper hulls for indoor flying, a charger, four batteries (the Skycontroller and the Bebop conveniently use the exact same packs!) an AC charger, a set of replacement props and a couple connecting cords. The instruction pamphlet is rather skimpy, but there is an extensive set of instructional videos accessible online and from within the Freeflight app on your tablet—very handy when you are on-site!



- + Excellent integrated camera
- + WiFi-based FPV on virtually any mobile device
- + Skycontroller offers comfort and precision
- Stability a boon to novice aerial videographers

SPECIFICATIONS

Name of drone: Bebop Manufacturer: Parrot (parrot.com) Distributor: Best Buy (bestbuy.com) Type: integrated HD video sport quad Size: 300mm

Weight: 14.1oz. (14.8oz. with bumper hullsl

Motors: 4x brushless outrunner (included)

Battery: 3S 1200mAh LiPo (3 included) Speed controls: included

fortable feel, more range and a mount for your mobile device.

Flight controller: Parrot P7 dual-core CPU, quad-core GPU, 8Gb flash memory (included)

Radio: Parrot Skycontroller (included) Price: \$899.99 (499.99 without Skycontroller)

AERIAL RECAP

Do yourself a favor and familiarize yourself with the various button icons on the controller (and/or the virtual buttons in the Freeflight app). Parrot markets the Bebop for multiple language markets so the controls do not have verbal labels of any sort. Most useful are the 'take-off/landing' function (up/down arrow) and the 'return home' button (house), as these automate the more anxiety-inducing tasks for novices.

The tri-blade props offer plenty of lift, and since a high-quality camera comes built-in you really won't need additional load capacity (although the Bebop could probably handle it). What I would like is more battery capacity. The 1200mAh packs are only good for eight minutes or so in my test flights—but because they are encased and have proprietary attachment clips and connectors, upgrading is not as easy as with some other quads. (There is a 1600mAh extended capacity battery available from a third party online, but I did not test it).

Flight manners for those eight minutes are excellent. The Bebop's GPS holds station and altitude very stably—even in winds too strong to prudently fly. The sticks on the Skycontroller are smooth,



responsive, and have a confidence–inspiring quality feel. And the battery meters for both flight and controller keep you well–informed of remaining flight time. The blue color sometimes blends into the sky background though, so one of the brighter colors is a better choice than the blue I tested.

LAST WORD

Clearly Parrot had aspiring aerial videographers in mind when they designed the Bebop, and they made sure that even pilots with limited experience could use it successfully. The inherent stability, intuitive feel, and simple pilot assist functions of this complete and fully assembled package make for a forgiving and satisfying aerial video platform for virtually anyone.