

Parrot[®] MINIDRONES



Piloting, gaming, adrenaline!

- Two new high-tech and playful **Minidrones** enrich the Parrot drone family:
 - **Parrot Swing**: the first plane Minidrone with vertical take-off, quickly switches from quadcopter mode to plane mode for wild races!
 - **Parrot Mambo**: the transforming drone with connected accessories to catch objects, throw projectiles or light up the dark!
- This new generation of miniaturized robots introduces:
 - a **dedicated controller, Parrot Flypad¹**, for precise and long distance piloting.
 - a **dedicated application, FreeFlight Mini²**, offering numerous improvements including off-line access to the **Minidrones** settings.

“A Minidrone is the first contact with the piloting of drones. It is the pleasure to make a quadcopter fly without having any notion of aeronautics or of piloting,” explains Henri Seydoux, Founder and CEO of Parrot. “Today, we enrich our Minidrones range and offer new experiences - richer, more intense, even surprising with the Swing, the first minidrone which takes off and lands vertically and has forward flight.”

Available in September 2016.

For more information on **Parrot Minidrones**, please visit www.parrot.com



@Parrot #ParrotMinidrones #MinidronesBigFun

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¹ Parrot Flypad is included in Swing pack, and proposed as an option for Mambo

² FreeFlight Mini is compatible with Parrot Bluetooth Low Energy Minidrones (ie. Airborne, Rolling Spider)

Parrot[®]

SWING



Technological prowess and guaranteed thrills!

Streamlined, powerful, ultra lightweight (2.6 oz), and very agile, the **Parrot Swing** is the first plane Minidrone which takes off and lands vertically, and has forward flight. The prince of stunt flying, it quickly switches from the quadcopter mode to plane mode and performs aerial tricks at high speed with remarkable stability.

Breathtaking agility

- **The first plane Minidrone takes off and lands vertically**



The X shape of **Swing** enables it to **fly both vertically and horizontally.**

Swing takes off in quadcopter mode, vertically, its four propellers directed towards the sky. It stabilizes in the air and follows the movements indicated by the pilot.

When its propellers turn toward the horizon, it flies horizontally like an aircraft – always in

forward motion with full speed reaching 18 mph! To land, **Swing** transitions automatically to quadcopter mode and carefully lands.

- **Aerial acrobatics at high-speed**

Very responsive and extremely agile, **Swing** shows the full extent of its power when it performs aerobatics at high speed: it turns right, left, does U-turns, half-flips, and loops, all with amazing fluidity and stability!

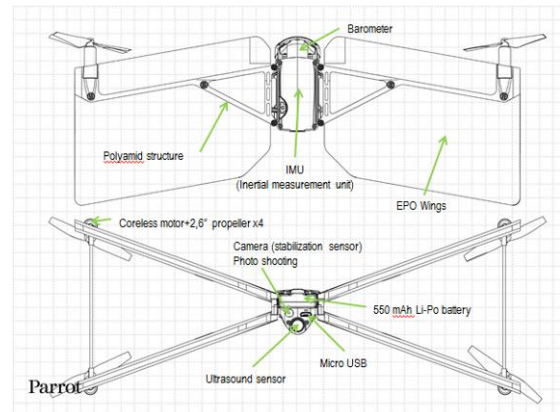
Ironclad stability thanks to a powerful autopilot

Parrot Swing owes its remarkable stability to the high precision sensors embedded in its structure:

- A **3-axis accelerometer** and a **3-axis gyroscope** measure and analyze each movement or inclination of the **Swing** and, thanks to the autopilot, adjusts its position.
- This powerful autopilot keeps **Swing** at a constant altitude when it is in plane mode, without any action required from the pilot.
- In quadcopter mode, a **camera** compares, an image of the ground to the previous one every 16 milliseconds to determine the speed of the Minidrone.

Bonus: the camera also enables it to take pictures³ of the ground or the horizon which are recorded in the Minidrone's 1Gb Flash memory⁴.

- In quadcopter mode, an **ultrasound sensor** analyzes the flight altitude up to 13 ft. A **pressure sensor** controls the Minidrone at higher altitudes.



FreeFlight Mini, the dedicated application for Minidrones

FreeFlight Mini⁵ is the application for setting the parameters and piloting Parrot Bluetooth Low Energy Minidrones.

Its simple and intuitive interface enables the user to customize the command and flight parameters, configure the Minidrone even when it is disconnected, and to perform aerial acrobatic.

FreeFlight Mini also enables the pilot to configure the **Parrot Flypad** remote control to customize its commands.

Parrot Flypad, the high precision piloting remote control for Minidrones



Parrot Flypad is the piloting remote control for Parrot Bluetooth Low Energy Minidrones⁶. It offers a precise piloting thanks to customizable joysticks and buttons.

With **Parrot Flypad**, the user benefits from a stable connection with **Swing** at long distances, extending the reach of Bluetooth Low Energy up to 196ft.

Parrot Swing	Parrot Flypad
<ul style="list-style-type: none"> • Autonomy: up to 8min depending on the piloting mode <i>Fast charge 25 min. (with not included 2.6A charger)</i> • Weight: 2.6 oz 	<ul style="list-style-type: none"> • Autonomy: 6h (Charge 2h) • Smartphones holder 6.3x3.1x0.4 in max • Weight with the Smartphone holder: 10.4 oz
<ul style="list-style-type: none"> • Availability: September • MSRP: \$139 USD (Parrot Swing + Parrot Flypad) 	<ul style="list-style-type: none"> • MSRP: \$39 USD (Parrot Flypad - standalone)

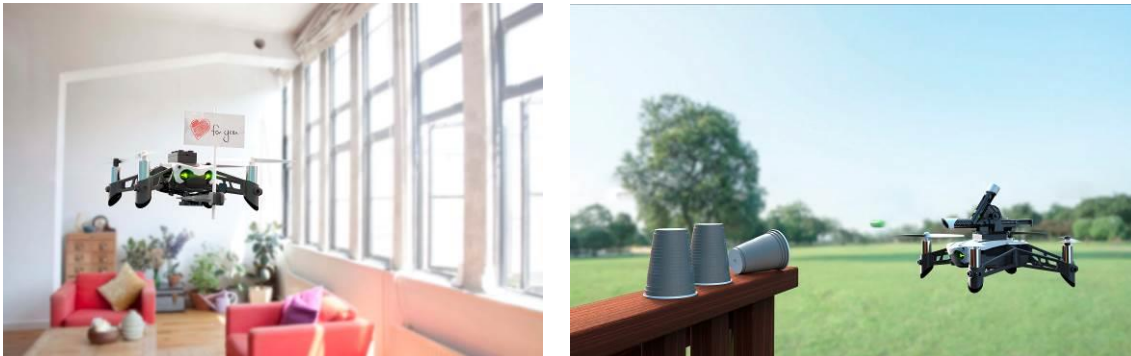
³ Snapshot VGA (480x640) 300,000 pixels

⁴ 300 mo allocated to the recording of photos, approximately 400 photos

⁵ FreeFlight Mini is compatible with Parrot Bluetooth Low Energy Minidrones (ie. Airborne, Rolling Spider)

⁶ Parrot FLYPAD is compatible with Parrot Bluetooth Low Energy Minidrones (ie. Airborne, Rolling Spider)

Parrot[®] MAMBO



Transform your environment into a playground!

Compact, ultra lightweight (2.2 oz⁷), **Parrot Mambo** is the ultimate playful drone!

Indoor or outdoor, it is the adventurous companion for beginner or expert pilots thanks to its connected accessories to play alone or with friends!

Your environment is your playground

Parrot Mambo comes with accessories activated with the **FreeFlight Mini** application for smartphones or with the optional remote control, **Parrot Flypad**. **Parrot Mambo** offers a high-tech and playful universe where imagination and skills reign supreme.



Cannon: Identify the target, aim at a moving object, and fire! Pilots can test their agility with the Mambo projectile thrower!

- Reach: 6.5 ft
- Capacity of the charger: 6 pellets

Included with Parrot Mambo

Grabber: Transport a message, catch a cube of sugar and drop it in a cup ... A world of amazing challenges is offered to you with **Mambo Grabber**!

- Max weight of the objects to be carried: 0.14 oz

Included with Parrot Mambo



Illuminator: For nocturnal missions, **Parrot Mambo** is equipped with two powerful white directional LEDs. From the **FreeFlight Mini** app, the pilot can modify the intensity or send signals with flashing lights.

MSRP: \$15 USD

⁷Weight without the hull or accessory

The adventurous acrobat

Parrot Mambo is a powerful Minidrone which reaches speed of 18 mph and performs aerial acrobatcs. Front, back or side loops, 90° or 180° turns, **Parrot Mambo** is a lively and agile acrobat in the air.

To impress playmates, there's nothing better than the "throw to take-off." With its engines off, Mambo detects when it is tossed into the air and automatically starts its engine to stabilize in the air!

Great flight stability

Parrot Mambo embeds high precision sensors which guarantee remarkable flight stability:

- A **3-axis accelerometer and a 3-axis gyroscope** measure and analyze each movement or inclination of the **Mamabo** and, thanks to the autopilot adjusts its position.
- A vertical **camera** compares an image of the ground to the previous one every 16 milliseconds to determine the speed of the Minidrone.

Bonus: the camera also enables to take snapshots⁸ which are recorded in the Minidrone's 1Gb Flash memory⁹.

- An **ultrasound sensor** analyzes the flight altitude up 13 ft. A **pressure sensor** controls the Minidrone in higher altitudes.

FreeFlight Mini, the application dedicated to Minidrones



FreeFlight Mini¹⁰ is the application for setting the parameters and piloting Parrot Bluetooth Low Energy Minidrones. Its simple and intuitive interface enables the user to customize the commands and flight parameters, configure the Minidrone even when it is disconnected, perform aerial acrobatics, and activate Mambo

accessories.

FreeFlight Mini also enables the pilot to configure the **Parrot Flypad** remote control to customize its commands.

Parrot Flypad, the high precision remote control for Minidrones



Parrot Flypad is the piloting remote control for Parrot Bluetooth Low Energy Minidrones¹¹. It offers precise piloting thanks to customizable joysticks and buttons.

With **Parrot Flypad**, the user also benefits from a stable connection with the **Mambo** at long distances, extending the reach of Bluetooth Low Energy up to 60m/196ft.

Parrot Mambo	Parrot Flypad
<ul style="list-style-type: none">• Autonomy: up to 9 min depending on the piloting mode• Weight: 2.2 oz	<ul style="list-style-type: none">• Autonomy: 6h (Charge 2h)• Smartphones holder 6.3x3.1x0.4 in max• Weight with the Smartphone holder: 10.4 oz
<ul style="list-style-type: none">• Availability: September 2016• MSRP: \$119 USD (with 2 accessories)	<ul style="list-style-type: none">• MSRP: \$39 USD (Parrot Flypad - standalone)

⁸ Snapshot VGA (480x640) 300,000 pixels

⁹ 300 mo allocated to the recording of photos, approximately 400 photos

¹⁰ FreeFlight Mini is compatible with Parrot Bluetooth Low Energy Minidrones (ie. Airborne, Rolling Spider)

¹¹ Parrot FLYPAD is compatible with Parrot Bluetooth Low Energy Minidrones (ie. Airborne, Rolling Spider)

Technical information

Parrot Swing	Parrot Mambo
Flash memory 1GB	Flash memory 1GB
Camera	Camera
Snapshot VGA (480x640) 300,000 pixels	Snapshot VGA (480x640) 300,000 pixels
Specific characteristics	Specific characteristics
2 piloting modes: quadcopter or plane	Customizable with accessories Removable hulls in polyamide
Speed	Speed
Up to 18 mph	Up to 18 mph
Connectivity	Connectivity
Via Bluetooth® Low Energy Range: up to 65ft Range with Parrot Flypad: 196ft	Via Bluetooth® Low Energy Range: up to 65ft Range with Parrot Flypad: 196ft
Application	Application
FreeFlight Mini, free app for smartphones and tablets iOS & Android	FreeFlight Mini, free app for smartphones and tablets iOS & Android
Battery	Battery
Rechargeable Lithium Polymer 550 mAH battery Autonomy: 8 min max (depends on the piloting mode) Fast charge: 25 min (with 2.6 A charger not included)	Rechargeable Lithium Polymer 550 mAH battery Autonomy: 9 min max (depends on the accessory connected to it) Fast charge: 25 min (with 2.6 A charger not included)
OS	OS
Operates under Linux free SDK for developers	Operates under Linux free SDK for developers
Dimensions & weight	Dimensions & weight
12.8x5.0 in depth 2.6 oz	With hulls: 0.71x0.7 in 2.22 oz
Box content	Box content
1 Parrot Swing 1 Parrot Flypad 1 Battery 1 USB/Micro USB cable 1 Quick start guide	1 Parrot Mambo 1 Cannon 1 Grabber 1 set of 4 hulls 1 Battery 1 USB/Micro USB cable 1 Quick start guide