Parrot

AR.Drone 2.0

User guide

http://ardrone2.parrot.com/support

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Flight

General information

Health and safety precautions

Read the following warning before you or your child play with the AR.Drone. Failing to do so may cause injury.

Seizure warning

Some people (about 1 in 4000) may have seizures or blackouts triggered by light flashes or patterns, such as while watching TV or playing video games, even if they have never had a seizure before; Anyone who has had a seizure, loss of awareness, or other symptom linked to an epileptic condition should consult a doctor before playing a video game. Parents should watch when their children play video games. Stop playing and consult a doctor if you or your child have any of the following symptoms: convulsions, eye or muscle twitching, loss of awareness, altered vision, involuntary movements, disorientation.

To reduce the likehood of a seizure when playing video games:

- ✓ Sit or stand as far from the screen as possible.
- ✓ Play video games on the smallest available television screen.
- ✓ Do not play if you are tired or need to sleep.
- ✓ Play in a well-lit room (indoor) or area (outdoor).
- ✓ Take an 10 to 15 minute break every hour.

Repetitive motion injuries and eyestrain

Playing video games can make your muscles, joint, skin or eyes hurt after a few hours. Follow these instructions to avoid problems such as tendinitis, carpal tunnel syndrome, skin irritation or eyestrain;

- ✓ avoid excessive play. It is recommended that parents monitor their children for appropriate play ;

- ✓ take a 10 to 15 minute break every hour, even if you don't think you need it ;
- ✓ if your hands, wrists, arms or eyes become tired or sore while playing, stop and rest them for several hours before playing again ;
- ✓ if you continue to have sore hands, wrists, arms or eyes during or after paly, stop playing and see a doctor.

Magnets

Not suitable for children under the age of 14. This product contains small magnets. If swallowed, the magnets may stick together in the intestines and cause serious injury. Consult a doctor immediately if the magnets are swallowed.

Use and maintenance

AR.Drone is not suitable for use by children under 14 years of age.

To fly the AR.Drone 2.0 indoors install the hull with guard rings in order to protect the AR.Drone 2.0 in case of collision with any object.

You should keep the Parrot AR.Drone 2.0 in sight at all times when operating it, in order, among others, to avoid injuries or damages to people, animals or property.

The use of the AR.Drone 2.0 is some public areas (for instance train stations, trains, airports, aircrafts, etc.) may be prohibited. You should check whether the use of the Parrot AR.Drone 2.0 is permitted before using it in public areas or public transport.

Always use your Parrot AR.Drone 2.0 bearing in mind other people's privacy.

When rotating, the propellers of the Parrot AR.Drone 2.0 could cause injury to people, animals and property. You should not touch the Parrot AR.Drone 2.0 when propellers are rotating and should wait until the propellers have completely stopped before handling the Parrot AR.Drone 2.0.

You should ensure that no-one is standing nearer than 1 meter (1 yard) from the Parrot AR.Drone 2.0 when in operation and that at all times you keep a sufficient distance between the propellers and any person, animal or property.

You must keep the Parrot AR.Drone 2.0 away from high voltage power lines, trees, buildings and any other potentially dangerous or hazardous areas.

The Parrot AR.Drone 2.0's performance may be affected or significantly reduced and your Parrot AR.Drone 2.0 irreversibly damaged if:

you use the Parrot AR.Drone 2.0 in unfavourable meteorological conditions (including but not limited to rain, wind, snow, fog, etc) or if visual conditions are not sufficient (e.g. operation of the Parrot AR.Drone 2.0 by night);

- ✓ you use the Parrot AR.Drone 2.0 in wet conditions (e.g. you should not land the Parrot AR.Drone 2.0 on water or on a wet surface);
- ✓ you allow sand or dust to penetrate the Parrot AR.Drone 2.0;
- ✓ you obstruct the engine's air vents;
- ✓ you use spare parts and accessories other than those specified by Parrot, or
- ✓ you use the Parrot AR.Drone 2.0 near strong magnetic fields, radio waves or areas with strong radiations (this may prevent the camera of the Parrot AR.Drone 2.0 from operating correctly). You should also avoid using your Parrot AR.Drone 2.0 in areas subject to Wi-Fi® networks (such as for instance internet Wi-Fi routers or boxes etc.). This may create interferences that could reduce the performance of the Parrot AR.Drone 2.0.

Warning on invasion of privacy

Recording and circulating an image of an individual may constitute an infringement of their image and privacy for which you could be liable. Ask for authorisation before filming individuals, particularly if you want to keep your recordings and/or circulate images on the Internet or any other medium. Do not circulate a degrading image or one which could undermine the reputation or dignity of an individual. The use of the AR.Drone 2.0 for surveillance or espionage is strictly forbidden and could result in your prosecution under the law. Check that your use of the cameras on board the AR.Drone 2.0 complies with the legal provisions on the protection of privacy.

Battery

Warning

Lithium Polymer batteries are extremely hazardous and liable to cause serious injuries to persons or property. The user accepts liability for the use of a Lithium Polymer battery. As the manufacturer and the distributor cannot ensure the battery is used correctly (charging, discharging, storage, etc.), they cannot be held liable for damages caused to persons or property.

In the event of battery leakage, avoid the liquid coming into contact with skin and eyes. In case of contact with the skin, wash copiously with soap and water. In case of contact with the eyes, rinse copiously with cold water and consult a doctor. If you notice a suspicious smell or noise or observe smoke around the charger, disconnect it immediately.

Non-compliance with the instructions below could result in gas being given off, fire, electric shock or an explosion.

Charging

The Parrot battery shall only be used together with the Parrot charger. Examine the charger regularly for damage to the plug, enclosure or other parts. Never use a damaged charger. Never charge a swollen battery, a leaky battery or one which has been damaged. Do not use the AR.Drone charger to charge any other battery than the provided rechargeable battery.

Do not overcharge the battery. When the battery is fully charged, disconnect it from the charger. Do not put the device back in the charger once charging has finished. You risk causing overheating.

Do not charge the battery near inflammable materials or on an inflammable surface (carpet, wooden flooring, wooden furniture, etc.) or conducting surface. Do not leave the battery unattended during charging.

Never charge the device immediately after use while it is still hot. Let it cool down to room temperature. Do not charge the battery while it is still connected to the AR.Drone.

Batteries are only to be charged under adult supervision.

Do not cover your product or its charger while the battery is charging.

Exhausted batteries are to be removed from the item. Rechargeable batteries are to be removed from the item before being charged. Non-rechargeable batteries are not to be recharged.

Recharge the battery at a temperature of between 0°C and 40°C.

Usage and storage

Do not use the battery if the plastic cover has been torn or compromised in any way. Do not insert or remove the battery while the power is on. Do not expose the battery to excessive physical shock. Never use a swollen battery or a leaky battery, or one which is damaged or giving off a unusual odour.

Keep the battery out of the reach of children.

Do not expose the battery to heat or dispose of a fire. Do not allow the battery to come into contact with any kind of liquid. Do not leave your device out in the rain or near a source of moisture. Do not put the battery in a microwave oven or in a pressurised container.

Do not attempt to dismantle, pierce, distort or cut the battery and do not attempt to repair the battery. Do not place any heavy objects on the battery or charger. Avoid dropping the battery.

Do not clean the charger with a solvent, denatured alcohol or other inflammable solvents.

It is essential to avoid short circuits. Avoid direct contact with the electrolyte contained within the battery. The electrolyte and electrolysis vapours are harmful to health.

Keep your device at ambient temperature. Do not expose your device to extreme temperatures. Do not subject your device to large temperature variations. Do not place your product near a source of heat.

Remove the battery when you are not using the device.

Disconnect the charger when you are not charging the battery.

Battery disposal

Discarding batteries in your general household waste can be harmful to the environment. Damaged or unusable batteries must be disposed of in a container specially reserved for this purpose. When disposing of the battery, follow appropriate local guidelines and regulations. For further information contact your local solid waste authority.

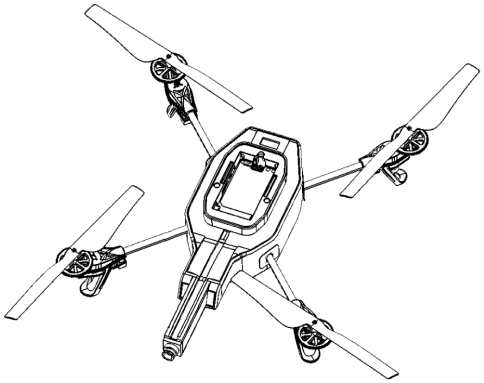
Domestic animals

Avoid using the AR.Drone 2.0 around domestic animals, particularly pet dogs. The AR.Drone 2.0 incorporates an ultrasound altimeter (emission frequency: 40kHz). Ultrasonic waves are known to disturb certain domestic animals, most especially dogs. Using the AR.Drone 2.0 in the company of a dog may lead to it behaving erratically or perhaps even dangerously.

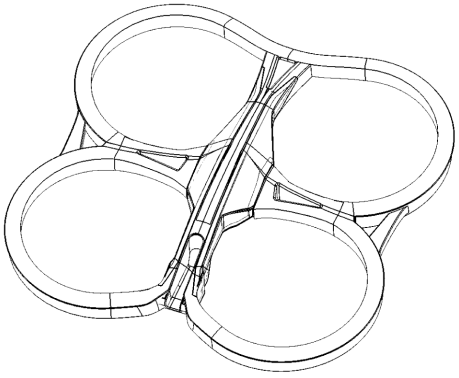
Before you begin

Note : For the purposes of readability, the compatible telephones or tablet PCs shall be designated by the term «Smartphone» in this manual.

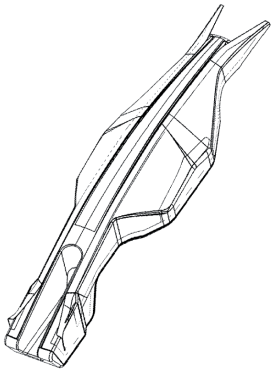
Contents of the packaging



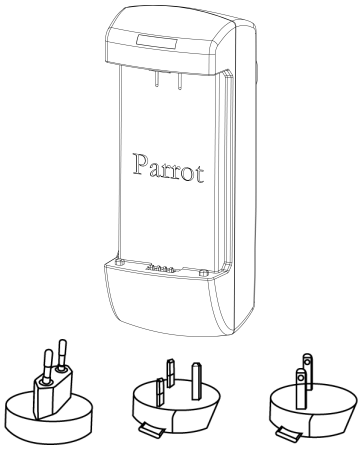
AR.Drone 2.0



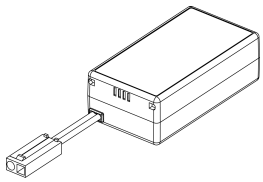
Hull with guard rings (for indoor use)



Hull without guard rings (for outdoor use)



Charger



Battery

Note : Remove the protective adhesive covers from the AR.Drone 2.0, the camera and the 2 hulls.

Detection target

Keep the provided detection target. You will need it to play AR.Drone and AR.Rescue 2.

Downloading the application

Login to the Google Play™ and download the free application *AR.FreeFlight 2.0*.

Battery

Recharging the battery

1. Select the adapter corresponding to your country and connect it to the charger.
2. Connect the battery to the charger and then plug the charger into the main power supply.

The charging time for the battery is 1 hour 30 minutes.

Note: The AR.Drone 2.0 batteries work with the AR.Drone and the AR.Drone batteries work with the AR.Drone 2.0. However, the AR.Drone 2.0 charger does not allow the batteries of the AR.Drone to be charged, and the AR.Drone charger does not allow the batteries for the AR.Drone 2.0 to be charged.

Installing the battery

1. Insert the battery into the appropriate compartment.
2. Make sure that it is correctly secured by using the attachment mechanism.
3. Connect it to the AR.Drone 2.0.

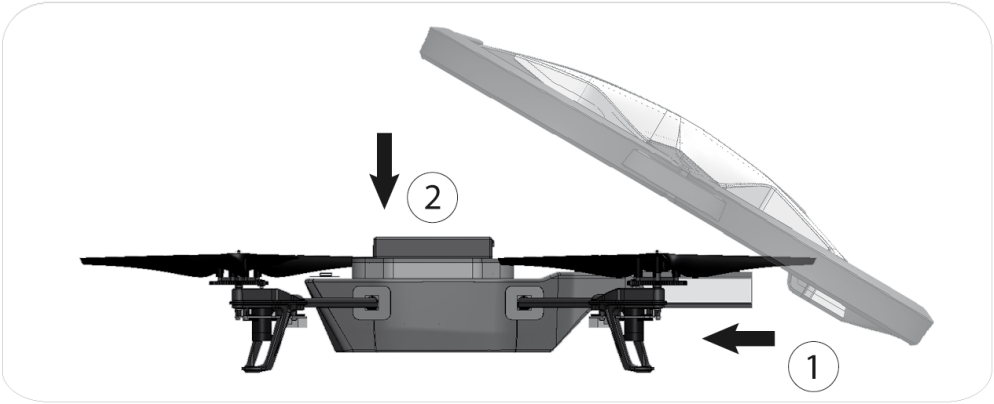
Checking the battery charge of the Smartphone

In order to use the AR.Drone 2.0 under optimal conditions, make sure that your Smartphone's battery is fully charged. A weak or medium battery charge can lead to poorer performance of the AR.Drone 2.0 (responsiveness to commands, quality of the video feed, etc.).

Indoor usage

Warning: Avoid flying the AR.Drone 2.0 close to young children, animals or fragile objects.

- Install the hull with the guard rings in order to protect the AR.Drone 2.0 if it collides with another object.



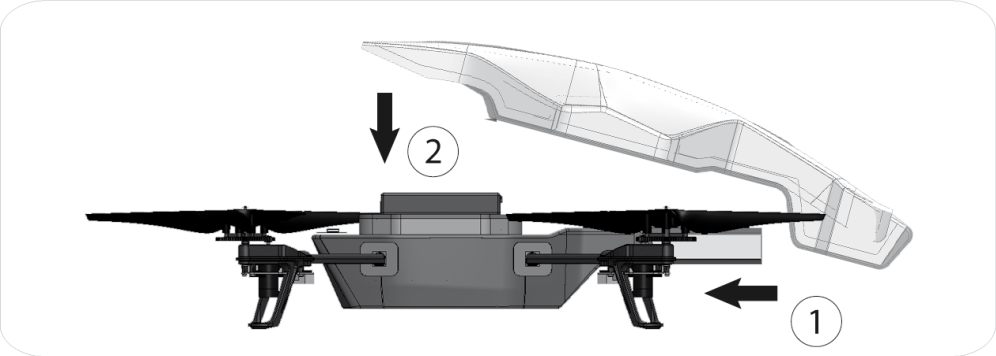
- Place the AR.Drone 2.0 in the middle of a room (4m x 4m minimum) without obstacles. Step back to a distance of 1 metre behind the device (the front of the device is easy to identify because of

the camera).

- In the Settings panel of the *AR.FreeFlight 2.0* application, deactivate the Outdoor Hull and Outdoor Flight options.

Outdoor usage

- Install the hull without the guard rings.



- Set the AR.Drone 2.0 on a flat dry surface in an area without any obstacles. Step back to a distance of 1 metre behind the device (the front of the device is easy to identify because of the camera).
- In the Settings panel of the *AR.FreeFlight 2.0* application, activate the Outdoor Hull and Outdoor Flight options.

- Do not use the AR.Drone 2.0 in unfavourable meteorological conditions (rain, strong wind, snow) or if visibility conditions are inadequate (at night). Although the automatic pilot can compensate for some turbulence caused by wind, avoid flying the AR.Drone 2.0 in wind conditions of over 15 km/h.

  Note: Keep in mind that the wind strength that you encounter where you are piloting the

AR.Drone 2.0 may well be different from the wind strength where the AR.Drone 2.0 is actually flying. This may explain any unexpected changes in trajectory.

Connection

Connecting the Smartphone to the AR.Drone 2.0

1. Remove the hull and insert the battery in the AR.Drone 2.0. Make sure the battery belt is fastened and connect the battery to the AR.Drone 2.0.
2. Wait until the motors initialise.
3. On your Smartphone, perform a search for available Wi-Fi® networks. To do so, select Settings > Wireless & Networking > Wi-Fi.
   > The list of available Wi-Fi networks is displayed.
4. Select “ardrone2”.
5. Wait for your Smartphone to establish a connection with the AR.Drone 2.0 Wi-Fi network. This connection is usually indicated by the appearance of the Wi-Fi logo on the screen of your Smartphone.
6. Launch the *AR.FreeFlight 2.0* application.
   > The welcome screen appears. You are connected.

Note : Once the connection between your Smartphone and the AR.Drone 2.0 has been established, the two devices are automatically paired. Only the smartphone that you have used to make the connection can be used with that AR.Drone 2.0. To use the AR.Drone 2.0 with another Smartphone, please refer to the Using the AR.Drone 2.0 with another Smartphone section.

Using the AR.Drone 2.0 with another Smartphone

If you wish to use the AR.Drone 2.0 with another Smartphone than the first one connected to it, you need to make sure that the Pairing option is deactivated.

If the Pairing option is activated, the connection between the AR.Drone 2.0 and any other Smartphone will not be possible.

To deactivate the Pairing option:

1. Launch *AR.FreeFlight 2.0.*
2. Tap the Piloting mode button and press TAKE OFF.
3. Press the  button.
4. Deactivate the Pairing option.

LED colours

The LED lights (light emitting diodes) are the little red or green lights on the device. There are 2 types of LED on the AR.Drone 2.0:

- the 4 motor LEDs located close to the propellers
- the system LED located on the belly of the AR.Drone 2.0.

Motor LEDs

LED behaviour	Meaning
The 4 LEDs are red	Power is connected A problem has occurred
Each LED flashes red one after the other	The motors are starting up.
The 4 LEDS flash green	The AR.Drone 2.0 is currently taking off or landing.
The 2 front LEDs are green The 2 rear LEDs are red	The AR.Drone 2.0 is currently flying. These colours make it easy for you to distinguish the front and the rear of the AR.Drone 2.0 (when at a distance from the device).

System LED

Wait for 20 seconds after having connected the battery to the AR.Drone 2.0, then check the colour of the system LED.

Note: Avoid turning the AR.Drone 2.0 upside down when you check the colour of the system LED. It is better to simply raise it high enough to look underneath.

If the LED is green, you can take off.

If after 20 seconds the LED is either red or orange, disconnect then reconnect the battery.

In the event of problems

Checking the IP address of the AR.Drone 2.0

Check that the IP address appears on the AR.Drone 2.0 network. To do this, select Settings > Wireless & Networking > Wi-Fi Settings and select the network “ardrone2”.

An IP address starting with 192.168.1.X should appear in the IP field.

If the IP address starts with 169, it will not be possible to establish a connection between the Smartphone and the AR.Drone 2.0.

This incorrect IP address may be due to several problems (AR.Drone 2.0 already in use with another Smartphone, Wi-Fi signal disturbed...). Refer to our FAQ for more information.

Deactivating the Pairing option

If you wish to use the AR.Drone 2.0 with another Smartphone than the first one connected to it, you need to make sure that the Pairing option is deactivated.

If the Pairing option is activated, the connection between the AR.Drone 2.0 and any other Smartphone will not be possible.

To deactivate the Pairing option:

1. Launch *AR.FreeFlight 2.0.*
2. Tap the Piloting mode button and press TAKE OFF.

3. Press the button.

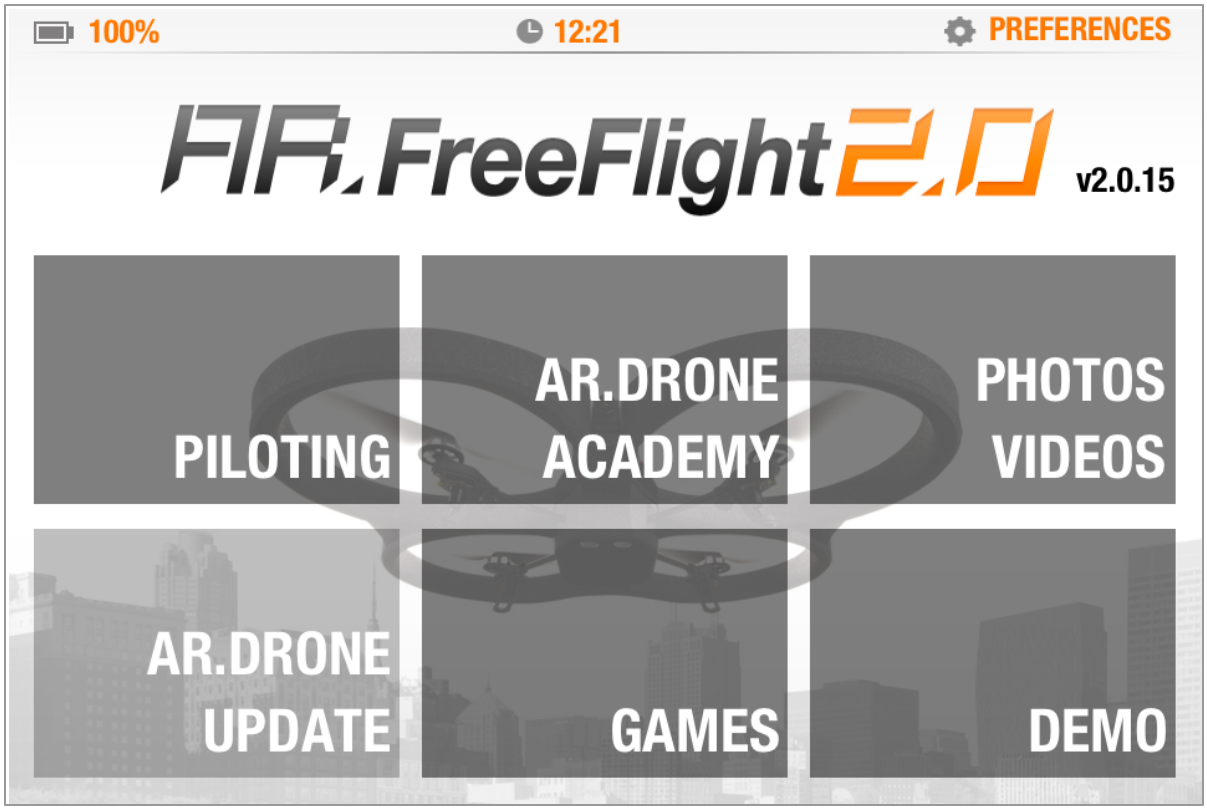
4. Deactivate the Pairing option.

Restarting the AR.Drone 2.0

To restart the AR.Drone 2.0, just disconnect and reconnect the battery. Wait until the system LED turns green.

Flight

AR.FreeFlight 2.0 is the basic application: it allows you to control the AR.Drone 2.0 from your Smartphone. It will help you learn how to perform basic movements (up, down, turn, back, forward, etc.).

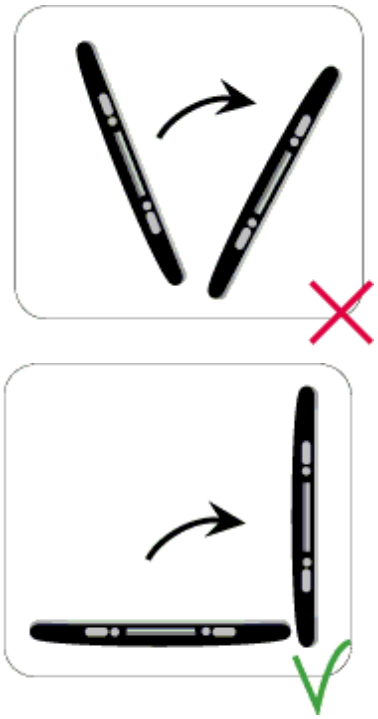


Note: Make sure that you have connected the battery to the AR.Drone 2.0 engines and that the LEDs are green before you connect your smartphone to the AR.Drone 2.0 Wi-Fi and launch an application.

Before you begin

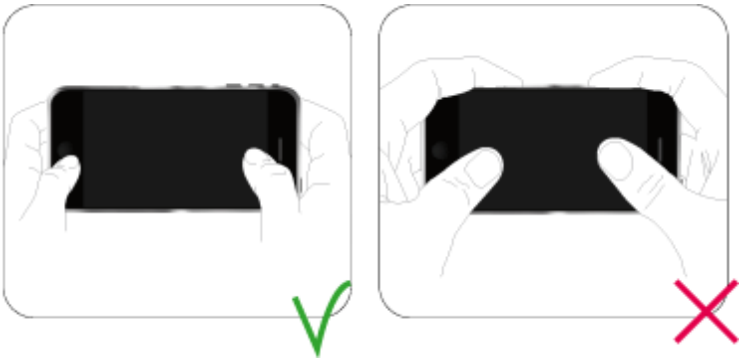
Positioning the Smartphone

Beyond a certain threshold point (~90° compared to horizontal), movements are not recognised by the Smartphone's accelerometer.
We recommend that the Smartphone be held in a position close to horizontal in order to avoid an uncomfortable or ineffective position if you should need to move the AR.Drone backwards quickly.
The position of the Smartphone at the moment when you press on the left button is taken as its reference position.



Hand positions on the Smartphone

The position of your hands on the Smartphone may have an effect on the strength of the Wi-Fi signal.



LEDs colours

Check the colour of the system LED located on the bottom side of the AR.Drone 2.0.

Settings

1. Run *AR.FreeFlight 2.0* and press PILOTING.
2. Press the  button.
3. Make sure that the AR.Drone 2.0 is settled on a flat surface before pressing on  .
4. Select the hull that is currently installed on the AR.Drone 2.0 (indoor or outdoor) and then the type of flight (indoor or outdoor) that you wish to make.

Piloting

Run *AR.FreeFlight 2.0* then press PILOTING to use the AR.Drone 2.0 in free flight mode.

> The video feed from the AR.Drone 2.0's forward-facing camera will appear on the screen of your Smartphone.

Interface

Joypad mode

ON

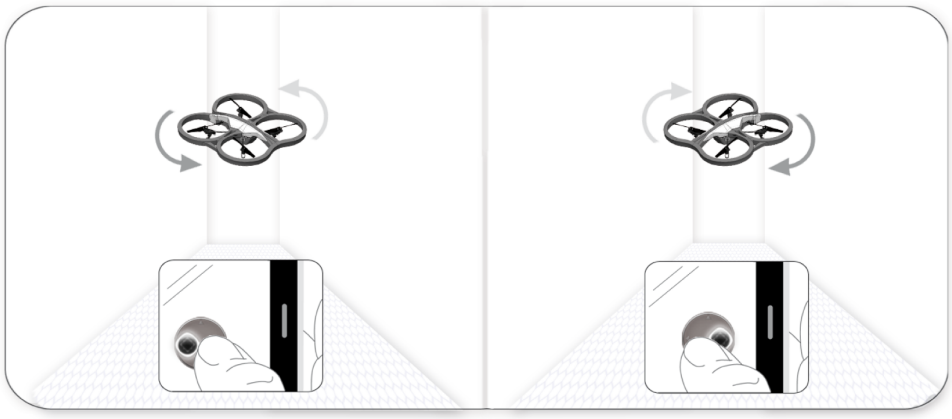
1 - Taking off

Press the TAKE OFF key.

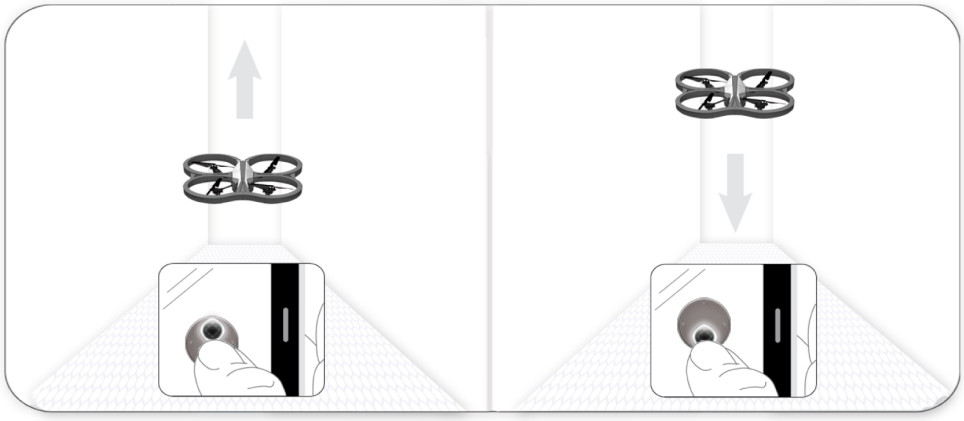
The motors will start and the AR.Drone 2.0 will automatically position itself at an altitude of between 50 cm and 1 m.

2 - Movements

Slide the joystick to the right to pivot the AR.Drone 2.0 to the right. Slide the joystick to the left to pivot the AR.Drone 2.0 to the left.



Slide the joystick up to make the AR.Drone 2.0 climb. Slide the joystick down to make the AR.Drone 2.0 descend.



Other movements depend on the setting of the options Joypad mode and Absolute control.

3 - Homepage

Press the button to return to the main menu. The AR.Drone 2.0 will automatically stabilise.

Press on PILOTING to regain control of the AR.Drone 2.0.

4 - Battery level

The battery charge indicator indicates the remaining charge on the AR.Drone 2.0 battery. Battery life is around 12 minutes.

The indicator will display red when the battery is weak. When the battery charge is too weak,

you are invited to land the AR.Drone 2.0. If you do not, the AR.Drone 2.0 will land itself automatically.

Warning : In order to avoid inadvertent contact of the AR.Drone 2.0 with any person, domestic animal or other object, we recommend that you manually land the AR.Drone 2.0 as soon as the battery charge indicates a low level of charge.

5 - Settings

Press the  button to access AR.Drone 2.0 settings. Refer to the Settings section for more information.

6 - Network status

The  icon shows the status of the Wi-Fi connection between your Smartphone and the AR.Drone 2.0. The number of bars displayed is proportional to the quality of the connection.

7 - Emergency button

Press the 

button only in case of emergency ! If you press the 

button, the engines will shut off and the AR.Drone 2.0 will fall out of the air. In most cases, landing the AR.Drone 2.0 is a better solution.

8 - Switching cameras

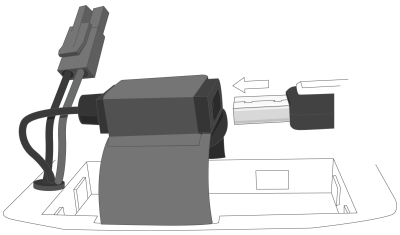
Press the  button to change the view of the AR.Drone 2.0 and switch between the front camera and vertical camera.

9 - Video

Press the  record video button. Videos can be recorded in your Smartphone's memory or on a USB flash drive connected to the AR.Drone 2.0.

Note: To maintain a good quality Wi-Fi connection, we recommend recording videos on a USB flash drive.

To record your videos on a USB flash drive:



1. Connect the USB flash drive to the AR.Drone 2.0. Ensure the USB flash drive connected to the AR.Drone 2.0 has more than 100MB of free space: video recording cannot take place if the space available is less than 100 MB.

   Note: A 128 MB USB flash drive can hold about a 30-second recording.

2. In the settings for *AR.FreeFlight 2.0*, enable the USB recording option.

   > The recorded videos will then be stored on your USB flash drive in .mp4 format.

The counter at the side of the USB logo shows the recording time remaining. The counter changes to red when there is only 30 seconds' recording time left. An error message is displayed when there is not enough free space on the USB flash drive connected to the AR.Drone 2.0 to record a video.

To record videos on your Smartphone: disable the USB recording option in the settings for *AR.FreeFlight 2.0*.

You can afterwards recover videos recorded in the Smartphone memory by selecting PHOTOS VIDEOS from the main menu. Refer to the Managing photos and videos section for more information.

Note: You can also retrieve these videos in .mov format by connecting your Smartphone to a computer.

10 - Photo

Press the  button to take a photo.

You can then retrieve these photos by selecting PHOTOS VIDEOS from the main menu. Refer to the Managing photos and videos section for more information.

11 - Altitude

The  icon shows the AR.Drone 2.0 altitude.

12 - Speed

The  icon shows the AR.Drone 2.0 speed.

Landing

Make sure that the AR.Drone 2.0 is directly above a flat, dry and unobstructed surface and then press on the button 

.

Autopilot

- If you remove your finger from the Smartphone screen, the autopilot fixes the AR.Drone 2.0's position and keeps it in hover flight.
- If you receive a phone call or an SMS while you are using the AR.Drone 2.0, the AR.Drone 2.0 will automatically land. If you accept the phone call or open the SMS, the flight application will close. If you refuse the call or do not open the SMS, you may continue using the AR.Drone 2.0.
- If the distance between the AR.Drone 2.0 and the Smartphone becomes too large (approximately over 50 metres, depending on the Wi-Fi environment), then the two devices may disconnect from each other. If this happens, do not close the application on the Smartphone but move closer to the AR.Drone 2.0.

Error messages

Refer to our FAQs for more information on error messages for the AR.Drone 2.0.

Settings

Press the  button to access AR.Drone 2.0 settings. Refer to the Settings section for more

information.

Pairing

If you want to use your AR.Drone 2.0 with a Smartphone other than the initial one connected to the AR.Drone 2.0, the Pairing option must be disabled. If the Pairing option is enabled, no other Smartphone may connect to your AR.Drone 2.0.

Network name

The option AR Drone network name lets you change the name by which the AR.Drone 2.0 will be known by your Smartphone and other Wi-Fi peripherals.

Note: The AR.Drone 2.0's network name may contain only letters, digits and underscores ("_"). It must not exceed 32 characters in length.

Interface opacity

The option Interface opacity lets you change the transparency levels of the AR.Drone 2.0 controls on *AR.FreeFlight 2.0*.

The lower the opacity level, the less visible the controls will be.

USB recording

The option USB recording lets you define where video recordings will be stored.

Note: To maintain a good quality Wi-Fi connection, we recommend recording videos on a USB flash drive.

Enable the USB recording option to record your videos on the USB flash drive connected to the

AR.Drone 2.0. Disable the USB recording option to record videos on your Smartphone.

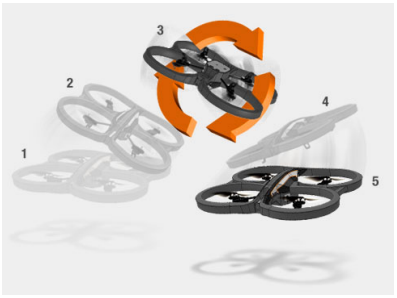
Note: Ensure that the USB flash drive connected to the AR.Drone 2.0 has at least 100 MB free space available. If the USB flash drive does not have as much as this, videos will be automatically recorded in your Smartphone's memory.

Automatic recording

The Auto Record option, activated by default, allows you to automatically record a video each time the AR.Drone 2.0 takes off.

Flip enabled

To use the Flip function of the AR.Drone 2.0, press twice on the screen of your Smartphone. The Flip enabled option must be enabled.



Note: Make sure that the AR.Drone battery level is above 30%.

Flip orientation

To select the Flip orientation according to the camera axis, press the button.

Altitude limit

The option Altitude limit restricts the maximum altitude the AR.Drone 2.0 may reach. When the AR.Drone 2.0 is on the point of exceeding this limit, it will automatically return to the selected height.

Max vertical speed

The option Max vertical speed lets you define the maximum speed with which the AR.Drone 2.0 can travel vertically upwards or downwards. Slide the cursor to the right to increase this speed.

Max rotation speed

The option Max rotation speed lets you define the speed of rotation of the AR.Drone 2.0. Slide the cursor to the right to increase this speed.

Max tilt angle

The option Max tilt angle lets you define the maximum tilt angle which the AR.Drone 2.0 can assume when moving forwards or backwards.

If this value is high, the pitch of the AR.Drone 2.0 will be larger. If this value is low, the pitch of the AR.Drone 2.0 will be smaller.

Note: This setting influences the acceleration behaviour. If the pitch is large, the AR.Drone 2.0 will gain speed much faster.

Outdoor hull

The option Outdoor hull lets you select the hull installed on the AR.Drone 2.0. Enable this option if you have installed the outdoor hull (without guard rings) on the AR.Drone 2.0.

Outdoor flight

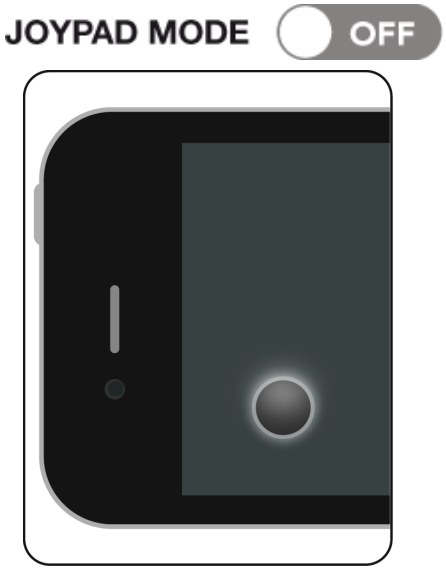
The option Outdoor flight lets you select the type of flight that you wish to make with the AR.Drone 2.0. Enable this option if you wish to use the AR.Drone 2.0 outdoors, especially if there is any wind.

Joypad mode

The option Joypad mode lets you enable/disable the use of your Smartphone's accelerometer for controlling the AR.Drone 2.0.

If the Joypad mode option is disabled, and if your Smartphone has an accelerometer you can use the accelerometer button to move the AR.Drone 2.0. If the Joypad mode option is enabled, a 2nd joystick replaces the accelerometer button.

- Slide the joystick upwards to direct the AR.Drone 2.0 forwards.
- Slide the joystick downwards to direct the AR.Drone 2.0 backwards.
- Slide the joystick to the right to direct the AR.Drone 2.0 to the right.
- Slide the joystick to the left to direct the AR.Drone 2.0 to the left.

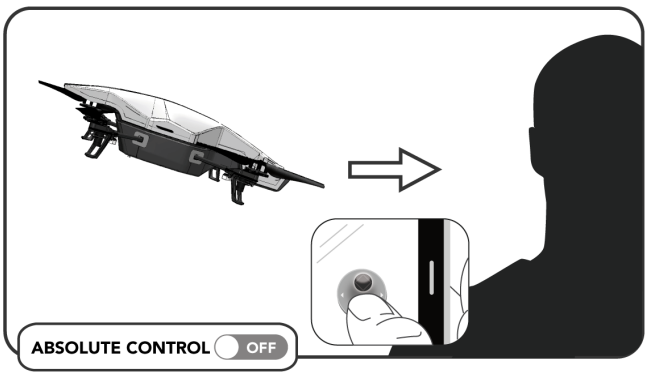


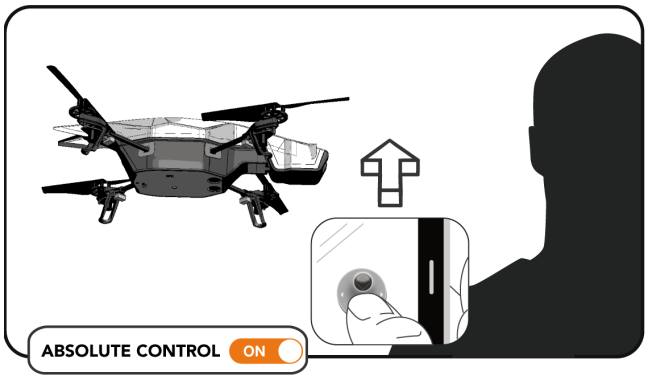
- Hold down the Accelerometer button on the bottom right and tilt the Smartphone forwards to direct the AR.Drone 2.0 forwards.
- Hold down the Accelerometer button on the bottom right and tilt the Smartphone backwards to direct the AR.Drone 2.0 backwards.
- Hold down the Accelerometer button on the bottom right and tilt the Smartphone towards the right to direct the AR.Drone 2.0 to the right.
- Hold down the Accelerometer button on the bottom right and tilt the Smartphone towards the left to direct the AR.Drone 2.0 to the left.

Note: The direction taken by the AR.Drone 2.0 also depends on the status of the absolute control option.

Absolute control

The option Absolute control lets you activate absolute reference control mode. This control mode places you as the reference point: whatever the direction the AR.Drone 2.0 is facing, it will go in the direction you tilt your Smartphone (if Joypad mode is disabled) or in the direction you slide the joystick (if Joypad mode is enabled).





When absolute control is enabled, with you facing the AR.Drone 2.0 (Joypad mode enabled):

- Slide the joystick upwards to move the AR.Drone 2.0 away from you.
- Slide the joystick downwards to move the AR.Drone 2.0 towards you.
- Slide the joystick to the right to direct the AR.Drone 2.0 to your right.
- Slide the joystick to the left to direct the AR.Drone 2.0 to your left.

Press the Calibration button to reinitialise the magnetometer of the AR.Drone 2.0.

Left-handed mode

The option Left-handed mode lets you reverse the controls on your Smartphone.

Max tilt

The option Max tilt angle lets you define the sensitivity of the Smartphone's accelerometer. If this value is high, you will need to tilt your Smartphone a lot to control the AR.Drone 2.0. If this value is low, then only a slight tilting will be necessary to control the AR.Drone 2.0.

Note: If Joypad mode is enabled, the Max tilt angle option lets you define the sensitivity of the joystick.

Managing photos and videos

Viewing

Select PHOTOS VIDEOS to access the photos and videos taken with the AR.Drone 2.0 and recorded in your Smartphone's memory.

Press on to display photos only.

Press on to display videos only.

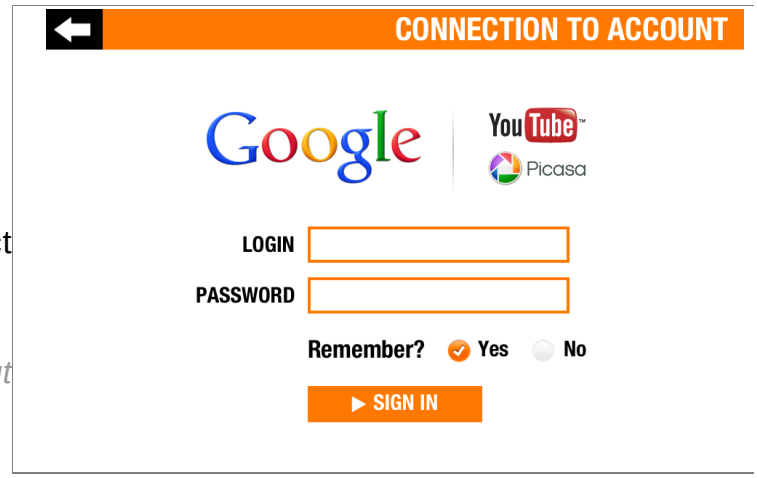
Registering

Before sharing your photos or videos, you can identify yourself for the whole of your session on *AR.FreeFlight 2.0* to avoid having to enter your identifiers each time you share.

To do this:

1. From the main menu, click Options.
2. Press Sign in.
3. Enter your Google identifiers, select Remember and press Sign in.

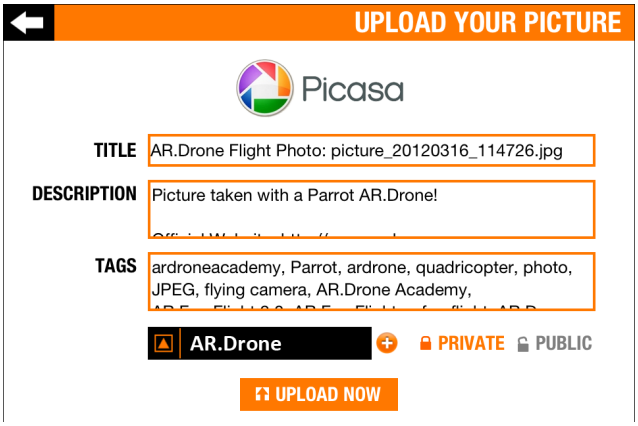
Note: The identification is valid throughout your game session on AR.FreeFlight 2.0.



Sharing

You can share your photos and videos on the YouTube and Picasa hosting sites. To do this, you must identify yourself using the Google identifiers associated with your YouTube or Picasa accounts. To do this:

1. Select your photo or video.
2. Enter the required descriptions.
3. Define the visibility level of your photo/video: private or public.
4. Click Upload now.



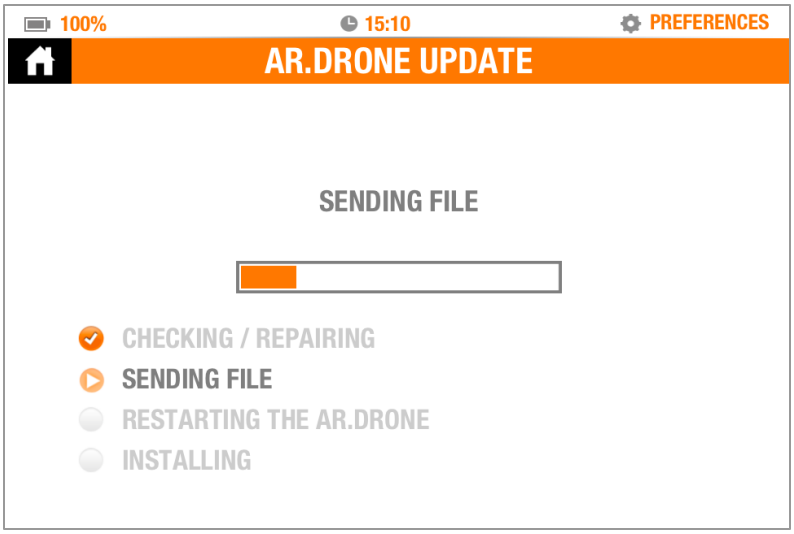
Updating

Note: Before starting, disconnect your USB flash drive from the AR.Drone 2.0 if necessary.

From the main menu, select: AR.DRONE UPDATE.

The update starts automatically. At the end of the update process, the AR.Drone 2.0 reboots automatically.

Check the system LED is green. Then exit *AR.FreeFlight 2.0* and check whether the connection between the AR.Drone 2.0 and your Smartphone has been established.



Note: If you carry out an update on a 1st generation AR.Drone, you must manually reboot the AR.Drone by disconnecting and reconnecting its battery.

AR.Games

From the main menu, select GAMES to access the list of games available for AR.Drone or AR.Drone 2.0.

Select a game and press Download to download it.

General information

Warning

You should use the AR.Drone 2.0 safely and responsibly at all times, so as to avoid any damage or harm being caused to any person, animal or property next to which you are flying the AR.Drone 2.0. In this respect you should ensure that you always operate the AR.Drone 2.0 in compliance with this Quick Start Guide and our Safe Use of the AR.Drone 2.0 instructions. Parrot also reminds you that you should not use the AR.Drone 2.0 for any unauthorised or unlawful purposes, as you will otherwise be fully liable for any loss or damage caused as a result of such unauthorised use.

In particular, you should comply with any applicable data protection laws and refrain from operating the AR.Drone 2.0 in any way that could interfere with any other person's privacy. PARROT shall not be responsible for any consequences arising from the use of the product or the use of this guide, nor shall Parrot be responsible for any damage or accidental loss of data resulting directly or indirectly from the use of the product or the information contained in this guide.

Warranty

Without prejudice to any applicable statutory warranty, Parrot warrants that the AR.Drone 2.0 will be free from defects in material and workmanship for a period of 12-months from the initial date of purchase (excluding consumables which are warranted during 6 months from the initial date of purchase) upon presentation of proof of purchase to the retailer or to Parrot (including the date and place of purchase, product serial number). Return to retailer is not applicable in the USA - return shall be made to Parrot.

During the contractual warranty period, any defective product should be returned in its original packaging to the retailer's or Parrot's after-sales service. After inspection of the product, Parrot will, at its sole discretion, either repair or replace the defective part or product, excluding any other indemnification of any nature.

Parrot's warranty does not cover:

- ✓defects due to damage caused by an accidental collision or fall;
- ✓defects due to abnormal use of the product or if spare parts have been installed without following the recommendations and instructions provided by Parrot in this guide or on www.parrot.com or if the AR.Drone 2.0 has been customised by the end-user;
- ✓defects caused by repairs carried out by the end-user or an unauthorised third party, except spare parts provided by PARROT;
- ✓defects due to the use of spare parts not provided by PARROT in the original packaging.the use of spare parts not approved by Parrot, in particular, the use of batteries not approved by Parrot (genuine Parrot batteries can be identified by their hologram);
- ✓defects caused by any reason other than a defect in material or workmanship
- ✓the gradual power loss of the Parrot rechargeable battery (086x) over time, which does not constitute as a defect in material or workmanship,

If upon technical tests being carried out any product is found non defective (in particular an analysis of the flight data from the last 30 seconds of flight - results available upon request) we reserve the right to return such product to the sender at the sender's cost and to levy a charge to cover Parrot's technical test fees. Upon expiration of the 12-month warranty period or if the defect is not covered by the warranty, any defective product can be returned to Parrot's after-sales service in order to be repaired or for a defective part to be replaced at the sender's costs. Repair will be carried out only after acceptance of the corresponding quotation.

Except in relation to consumables, spare parts are subject to a 12 month warranty and are subject to the same terms and conditions as those described above.

The warranty does not cover: damage to non Parrot products, including devices used to operate the AR.Drone 2.0.

Modifications

The explanations and specifications in this guide are given for information only and may be modified at any time without prior notice. The latest version of this Quick Start Guide will however be

available from our website at www.parrot.com. The explanations and specifications contained in this guide are deemed to be correct at the time of printing.

Although the utmost care has been taken when writing this guide, in order to provide you with information which is as accurate as possible. Parrot shall not be held responsible for any consequences resulting directly or indirectly from the use of the information herein.

Parrot reserves the right to amend or improve the product design or user guide without any restrictions and without any obligation to notify users. As part of our ongoing objective to upgrade and improve our products, the product that you have purchased may therefore differ slightly from the model described in this guide.

Disposal of this product at the end of its life

At the end of this product's life, please do not dispose of this product in your general household waste. Instead, in order to prevent possible harm to the environment or human health from uncontrolled waste disposal, please dispose of this product separately in accordance with your local laws and regulation.

For more information on the separate collection systems for waste electrical and electronic equipment that are available for consumers, near your home, free of charge, please contactyour local municipality authority. You can also contact the retailer from which you purchased your AR.Drone 2.0 – he might have put in place recycling services or he may be part of a specific recycling scheme.

This product will be then treated in an environmentally sound manner at a licensed recycling plant and its components will be recovered, recycled or reused in the most efficient manner, in compliance with the requirements of the Directive on Waste Electrical and Electronic Equipment (2002/96/EC) of 27 January 2003 (as subsequently amended or replaced).

Declaration of Conformity CE

Parrot SA, 174 quai de Jemmapes, 75010 Paris, France, declare under their sole responsibility that the product described in this user guide complies with

technical standards EN 301489-17, EN300328, EN71-1, EN71-2, EN71-3, EN62115 following the provision of the Radio Equipment, Telecommunication

Equipment directive (1999/5/EC R&TTE), and of the General Safety directive (2001/95/EC).

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The Wi-Fi Alliance Member Logo is a logo of the Wi-Fi Alliance.

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Parrot

AR.Drone 2.0