# DRONE BUYING GUIDE

> A BEGINNERS GUIDE BY OUT DRONING <

WWW.CRAZYSHOTDRONES.COM.AU

# THE AUTHOR

#### OUT DRONING

Award-winning drone photographer

OUT DRONING, his monicker on Instagram (where he has over 20,000 followers), is a regular Guest Blogger on our Drone Community Blog "Stories from the Sky" and an Award-winning aerial photographer from Sydney.

He has been flying drones for years and has tried all the different DJI models, from the P3 Standard to the top of the line Inspire 1 & 2. His expert knowledge and impartial approach makes him the ideal author for this guide.

To read more articles by Out Droning, subscribe to our blog here. To follow his work on Instagram, tag @out droning



# THE BASICS

# 6 THINGS YOU NEED TO KNOW BEFORE BUYING YOUR FIRST DRONE

So, you've finally decided to take the plunge and purchase your first camera drone. Perfect!

Camera drones are the hottest thing on the market right now and they are taking the photography world by storm! However, there are a few things you need to consider before you jump head first into the hobby. This is not an exhaustive list by any means, but it covers the basics so you have the confidence and knowledge you need before you purchase your first drone.



### 1# ACCESSORIES

#### CAN MAKE OR BREAK YOUR FLIGHT

It's important you think of the items you'll need with your drone purchase to make your life easier.

The biggest one is an additional battery or two. Most drones come with one battery which gives anywhere from 15 - 25 minutes of flight time. This isn't nearly enough time for anyone, especially a beginner who is just starting out.

Grab a few on checkout, you'll thank me later.

A mobile or tablet device is usually required to act as the monitor for the camera on your controller. Most drones don't come with a monitor, so you're up for some additional cash outlay ranging anywhere from \$100 to upwards of \$600. I suggest finding the brightest mobile device or tablet you can find. The brighter the screen, the easier it is to see what's going on when you're standing in sun light or glare.

Filters are a great addition when first starting out. They'll give you the ability to fly your drone in all different weather conditions and still produce quality pictures. Filters can range anywhere from \$40 to \$250.

There's also other item's like spare propellers, a backpack to fit your Drone inside (very handy), propeller guards (great for beginners), a charging dock, etc.



## 2# KNOW THE LAWS

#### DON'T RISK A FINE

It's important you understand the laws in regards to where you can and cannot fly. The Civil Aviation Safety Authority (CASA) has some pretty basic laws which need to be abided by in Australia or you'll be up for some costly fines. Some of those laws include flying below 120 metres, not flying your drone further than your eyes can see it, keeping your drone 30 metres away from people and property and not flying within 5.5km of an airport.



YOU CAN READ UP ON ALL THE LAWS HERE: WWW.CASA.GOV.AU/MODELAIRCRAFT



#### IF IT'S TOO WINDY, DON'T RISK IT!

Be careful when flying your drone in strong winds.

Although the wind may not appear to be strong on the ground, 50-100 metres in the air, the wind can be triple in strength.

Drones are very stable, but wind gusts can cause them to steer off their intended path and out of range from your controller. The last thing you want is your \$1000+ drone drifting off never to be seen again!

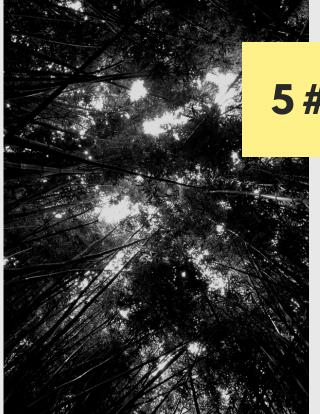


#### AND THEIR QUESTIONS

Be prepared to be bombarded with questions about your drone.

People still believe drones are an invasion of privacy and they won't hesitate to give you a piece of their mind about it. Be prepared by reading the local laws and informing them you're doing everything as per the law.

Which leads us into...



## 5# RESTRICTED AIRSPACE

#### BE CAREFUL WHERE YOU FLY

There are a lot of places around Australia that are considered 'restricted airspaces'. These areas are no fly zones for the recreational drone user. Big, big fines apply if you're found to be breaching these zones.

There are a number of apps that you can download which give you an indication if you can fly in that area.

One of those apps is called 'Safe to fly' (it can be found on the app store for iOS).

DOWNLOAD THE APP HERE: ITUNES.APPLE.COM



### **6# REGISTER WITH CASA**

#### AND LEARN HOW TO SELL YOUR PHOTOS

The Phantom and Mavic series drones fall into the <2kg category. What does this mean? It means you can fly your drone for commercial gain, as long as you're abiding by the basic rules set out by CASA (listed above).

But before you go selling your pictures or videos, you'll need to apply for your Aviation Reference Number (ARN) from CASA.

It's a pretty basic and quick process which takes roughly 5-10 business days to process. Once you've got your ARN, you're good to go!

REGISTER WITH CASA HERE: WWW.CASA.GOV.AU/STANDARD-PAGE/ARN-APPLICATIONS



#### PHANTOM 4 PRO

#### MAIN CHARACTER

Make no mistake, the Phantom 4 Professional is the best drone on the market for under 2kg. It is jam packed with technology that will last for years.

#### PHANTOM 4 ADV.

#### SUPPORTING ROLE

The new Phantom 4 Advanced is an upgrade on the popular but soon to be discontinued Phantom 4. Much of the improvements have to do with the camera.

#### PHANTOM 3 PRO

#### AGING CLASSIC

The Phantom 3 Professional is a decent drone which packs great technology for someone wanting to get into the drone market.

# **COMPARE DRONES**

#### PHANTOM 3 STA.

#### BREAKDOWN \$859

- Battery life 20-25 minutes.
- 2.7k enabled with a 12 mega pixel camera.
- 1k range in the right conditions.
- Cheap and very affordable for a first drone.
- GPS enabled.
- Auto return-to-home feature.
- Automatic take off and landing.

#### PHANTOM 3 ADV.

#### **BREAKDOWN**

- Battery life 20-25 minutes.
- 2.7k enabled with a 12 mega pixel camera.
- 5k range in the right conditions.
- Light bridge enabled connection.
- GPS enabled.
- Auto return-to-home feature.
- Automatic take off and landing.

#### PHANTOM 3 PRO.

#### **BREAKDOWN**

- Battery life 20-25 minutes.
- 4k enabled with a 12 mega pixel camera.
- 5k range in the right conditions.
- Light bridge enabled connection.
- GPS enabled.
- Auto return-to-home feature.
- Automatic take off and landing.

# **COMPARE DRONES**

#### **MAVIC PRO**

#### BREAKDOWN \$1.699

- Battery life 20-25 minutes.
- 4k/60fps enabled with a 12 MP camera utilising a 1/2" sensor.
- Camera has a narrower fieldof-view than the other two.
- 5-7k range in the right
- conditions.
- Obstacle Avoidance with sensor redundancy.
- Maximum speed of 40mph (64kmh).
- GPS enabled.
- Auto return-to-home feature.
- Automatic take off and
- landing.

#### PHANTOM 4 ADV.

#### BREAKDOWN \$2.299 - \$2.799

- Battery life 25-30 minutes.
- 4K/60fps enabled with a 20 MP camera utilising a 1" sensor.
- Wider field of view perfect for landscape shots.
- 5-7k range in the right conditions.
- Front and bottom sensors. Obstacle sensing range increased from 15 m to 30 m.
- Maximum speed of 44mph (72kmh).
- GPS enabled.
- Auto return-to-home feature.
- · Automatic take off and
- landing.

#### PHANTOM 4 PRO

#### BREAKDOWN \$2,599 - \$3,099

- Battery life 25-30 minutes.
- 4K enabled with a 20 MP camera utilising a 1" sensor.
- Wider field of view perfect for landscape shots.
- 5-7k range in the right
- conditions.
- 360-degree obstacle avoidance with front, rear and side sensors.
- Quick release props.
- Ability to change aperture up to fl1.
- Live streaming to your mobile device.
- Auto return-to-home feature.
- Automatic take off and
- landing.

# THE PHANTOM 3 STANDARD

BEST DRONE ON A BUDGET

Rating ☆☆☆

The Phantom 3 Standard may be getting old and cheap, but it can still be a great introductory drone. It doesn't have 4K (2.7k maximum) and has range issues beyond 700-1000 metres. This is due to the fact that the Phantom 3 Standard uses Wifi connection and not Light Bridge like its predecessors. Still a great drone for beginners!





Play Video



Learn More

# WHY PHANTOM 3 STANDARD?

#### GREAT VALUE

At only AUD\$859, the Phantom 3 Standard is cheap and very affordable for a first drone. If you're not fussed about how far you can fly it, this may be the drone for you.

#### EASY AND FUN TO FLY

With an intuitive flight system, auto return-to-home mode and a built-in camera that captures vivid 2.7K video and 12 MP photos, this is an easy and super fun drone to fly.

#### **GPS-ASSISTED FLIGHT FEATURES**

They let you concentrate on getting great images while the drone helps you fly safely! You can achieve advanced camera perspectives with the Point of Interest, Follow Me and Waypoints modes (pending app feature availability).

# THE PHANTOM 3 PROFESSIONAL

SAME AS THE ADVANCED, BUT 4K ENABLED

Rating ☆☆☆☆

The Phantom 3 Professional is basically the exact same drone as the Phantom 3 Advanced. The only difference is the Phantom 3 Professional is 4k enabled for video capturing. It also has a bigger charger which cuts the charging time of your batteries by about 20-30%.

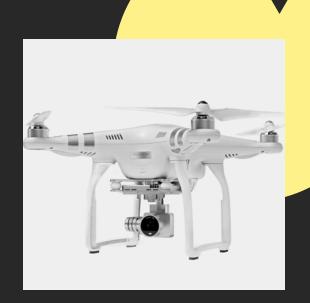
The Phantom 3 Professional is definitely a decent introductory drone for any budding videographers out there.



Play Video



Learn More





#### SHOOTS 4K VIDEO

It boasts a top quality camera that shoots 4k (or 2.7K) video at 30fps with 12MP for photos and has professional f/2.8 lens with 94° field of view.

#### LIGHT BRIDGE ENABLED CONNECTION

The main difference with the Standard is that the Pro uses Light Bridge connection instead of Wi-fi, allowing it to fly much further, up to 5k.

#### INTUITIVE CONTROLS, SAFE FLIGHT

Fast and responsive, this is the ideal drone for experienced users and first-time pilots, as it features a unique beginner mode that helps you learn how to fly in a safe, limited area.

# THE MAVIC PRO

# A TINY DRONE THAT PACKS A BIG PUNCH

Rating ☆☆☆☆

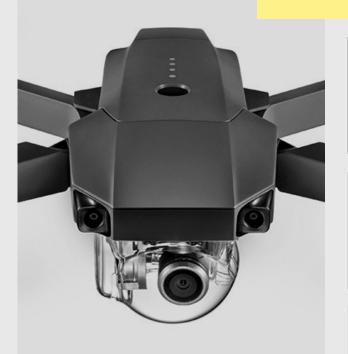
This piece of equipment marks a new era in technology for the drone world. With its unique folding design, the Mavic is so small it can fit inside the palm of your hand. We really like this drone as it's very easy to use and set's up in a matter of seconds.







### WHY MAVIC PRO?



#### FOLDING DESIGN

The Mavic can fit in your back pocket and taken with you on your travels without any troubles.

#### SUPERB CAMERA

The Mavic boasts a 4k enabled 12 MP camera utilizing a 1/2" sensor. The camera is basically the same as the Phantom 4 series, but the Mavic's Field of View is narrower.

#### TICKS ALL THE BOXES

There's a reason the Mavic Pro is so popular; because it ticks every box a drone enthusiast wants: small, compact, easy to fly, great battery life and a good quality camera!

# THE PHANTOM 4 ADVANCED/+

HIGH PERFORMANCE CAMERA AND
OBSTACLE AVOIDANCE

Rating ☆☆☆☆

The Phantom 4 was DJI's leading drone before they released the Phantom 4 Pro. Now DJI has launched (another) new drone, The Phantom 4 Advanced, an upgraded version of the original Phantom 4, which the company will cease selling on April 30th. This new release has quite a lot of improvements on its predecessor.







# WHY PHANTOM 4 ADVANCED?

#### 4K CAMERA WITH MECHANICAL SHUTTER

It boasts 4K capabilities with 1-inch, 20MP sensor and a mechanical shutter that eliminates rolling shutter distortion, which occurs when capturing fast moving subjects.

#### IMPROVED VERSION OF THE PHANTOM 4

The maximum flight speed is slightly higher in P-mode; flight time is extended to 30 min. and the transmission range is extended to 7 km.

#### ADVANCED + INCL. DISPLAY SCREEN

The Phantom 4 Advanced comes in two versions. The Plus version comes with a 5.5-inch 1080p screen integrated into the controller, ideal for outdoor use in sunny conditions.

# THE PHANTOM 4 PRO / PRO+

MOST ADVANCED DRONE FOR CONSUMER USE

Rating 分分分分分

Make no mistake, the Phantom 4 Professional is the best drone on the market for under 2kg. It is jam packed with technology that will last for years. It's a drone for everyone and we can not recommend it highly enough.







### WHY PHANTOM 4 PRO?

#### **UPGRADED CAMERA**

The Phantom 4 Pro now boasts a huge 20 mega pixel camera which utilises a full 1" sensor! The camera produces amazing photo's and video's.

#### SENSORS ON ALL FOUR SIDES

With cameras in the back and infrared sensors on the sides to give it 360-degree obstacle avoidance, you can now move in any direction with confidence that you won't crash.

#### ABILITY TO ADJUST LENS APERTURE

Its ability to capture a large dynamic range is incredible, as it enables you to capture those intricate details you couldn't capture before.

### WHY PHANTOM 4 PRO+?

#### CRYSTAL SKY DISPLAY SCREEN

The difference between the Phantom 4 Pro and the Phantom 4 Pro + is the addition of an in-build 5.5 inch screen on the controller. It utilizes the Crystal Sky display technology which is incredibly bright. It's so bright that there is nothing on the market that comes close to it's brightness at the moment!

We highly recommend the screen to anyone who is thinking of purchasing it. We've used the display in direct sunlight with no issues at all, something we had trouble with using a mobile device (we had to purchase hood protectors to be able to see the display).





# THE INSPIRE 1

# A PROFESSIONAL FILMMAKER'S DREAM

Rating 分分分分分

The Inspire 1 is one mean beast, weighing in at a whopping 2.9kg. Although it's widely regarded as a professionals drone, a lot of well adversed enthusiasts love to get their hands on one for their hobby. The Inspire 1 has come down dramatically in price since the release of its predecessor, the Inspire 2, and is a really great piece of equipment to own if you're serious about drone photography.









### WHY INSPIRE 1?

#### 360 UNOBSTRUCTED VIEW

The drone is designed beautifully with its arms made from Carbon Fibre that lifts above the camera's view after take off for a full 360 unobstructed view.

#### ABILITY TO CHANGE APERTURE

The Inspire packs a 12 mega pixel 4K camera that utilizes a 1/2.3" sensor. The lens at 94 degrees makes the shots look more cinematic by keeping the horizon level and not distorting the images.

#### **DUAL-OPERATOR CONTROL**

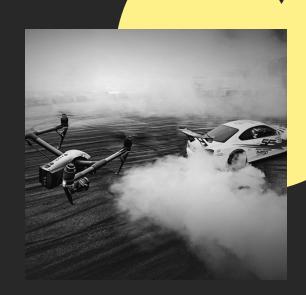
Duel controller set ups means one person can take care of the flying while the other can control the camera, another reason why the professionals love this drone!

# THE INSPIRE 2

# THE MOST SOPHISTICATED DRONE TECHNOLOGY ON THE MARKET

Rating \*\*\*\*

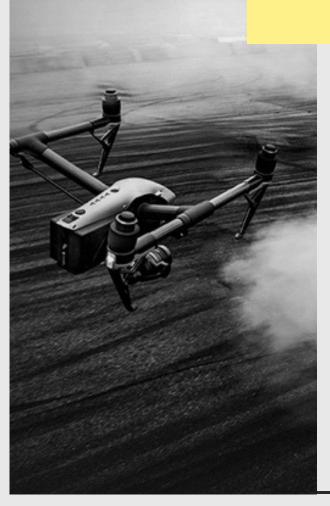
The Inspire 2 is the most sophisticated and advanced piece of drone technology on the market, period. The Inspire 2 runs with pretty much everything the Inspire 1 had plus a lot more. It's been redefined in the hardware section and tinkered to deliver pro-grade video features and enhanced duel-operator control. it flies like an absolute dream!







### WHY INSPIRE 2?



#### TWO CAMERA SET-UPS

The Inspire 2 can be purchased with either the new Zenmuse X4S, a 20MP camera utilizing a 1" sensor, or the X5S which comprises of a 20.8MP camera with a 4/3" sensor.

#### SERIOUSLY FAST

The Inspire 2 can reach a maximum speed of 104km an hour in the right conditions! It has a 360 degree obstacle avoidance sensor that gives piece of mind knowing you're protected from every angle possible.

#### TOP OF THE LINE PRODUCT

The Inspire 2 is not designed for your every day hobbyist, it's a drone designed for professionals and it shows with the amount of technology jam packed inside.

# THANK YOU!

GOT ANY QUESTIONS? MESSAGE US AT: INFO@CRAZYSHOTDRONES.COM.AU

TAKE ME TO THE STORE