



SOFTWARE RRP: \$410 (PRO)

# Capture One 6.2

Ewen Bell examines the RAW image workflow software that brings professional output abilities to any DSLR.

**W**hat's in the box More than a decade ago, when the innovative Danish company Phase One first started building digital backs for medium format cameras, they had to develop their own software to process the unique RAW files coming off the sensor. What they learned about workflow and image quality has proved very handy for a wide world of DSLR cameras as well.

Capture One is purely a tool for processing RAW files. If you're the kind of photographer who likes to optimise many or most of your images, even just a little, then you've probably already worked out that RAW formats offer superior quality to JPEG in every respect. Put simply, there's a lot more data to play with, so you have more latitude when manipulating dynamic range, exposure and colour balance.

RAW Workflow tools such as Capture One not only leave an impression on quality but efficiency as well. They let you edit, manipulate, index and tag RAW files in far less time than if you work with JPEG.

The advantage to a workflow solution over editing RAW files one at a time is the ability to quickly apply your tune-ups or metadata to multiple files and identify your favourites from the pack. The more images you're working with, the greater the advantage to workflow-based processing. Capture One integrates the interfaces for browsing and editing into a unified window set, so the result is a workflow environment that puts your necessary and desired tools within easy reach at all times. The difference between working on a single file in Photoshop versus an entire set of images in Capture One is profound.

RAW workflow goes a little like this. You point Capture One at a folder full of photos and let it build an index to speed your work later on. You rummage through the images, previewing thumbnails at any scale you prefer, and enlarge the frames of most interest to you. Any tweaking happens inside the realm of Capture One, the original RAW file is left untouched and unharmed, and you can generate variants of a single file to compare one style of treatment to another.

Once you're happy with that treatment on a single frame, you can copy and paste all or some of those changes to other frames in the set, then go through and fine tune the best ones so they get sufficient individual attention. When all your selected photos have been tuned, optimised and tagged to perfection, you move across to the "processing" queue, pick out one or more recipes, and let Capture One turn your RAW file into ready-to-roll JPEG, TIFF or DNG formats.

## Raw performance

The major drawback to shooting RAW files is the extra work required to generate useful image files, as opposed to having ready-to-share JPEGs. But the workload need not be demanding. If you're intending to do some optimisation to your images anyway, then RAW not only makes more sense than JPEG, it becomes compelling. The final act of crunching a JPEG from your RAW file is a little time consuming, depending on the grunt inside your Mac or PC, but the big gains are made with efficient workflow tools that help you set up the files before final conversion.

Two things give Capture One a serious performance advantage over similar applications for RAW workflow. Pre-indexing your files makes the initial swap from one folder to another a little slow, but, once completed, the speed with which you move from one photo to the next is impressive.

The second performance gain comes from the unique manner in which Capture One stores its index and optimisations. Instead of supporting a large centralised database, as per Lightroom, Capture One keeps a subfolder alongside each set of RAW files. It's a profound difference and one



## WHAT WE THOUGHT: Love it:

- ✓ Browsing, comparing and deleting is super-fast and lets you focus on the good stuff.
- ✓ Removing dust spots works to perfection and makes it easy to fix lots of files in very little time.
- ✓ The user interface can be customised any way you like it, from swapping layout of browser and tools to building your own set of frequently used tools and hiding the ones you don't use.

## Like it:

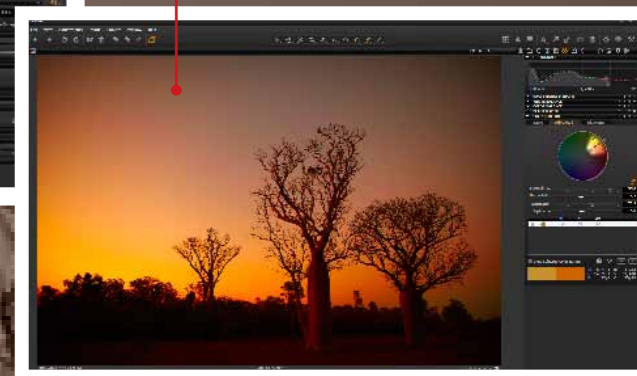
- ✓ Copy and paste is made flexible, letting you choose the full set of tweaks or just a few.
- ✓ Metadata support is excellent and makes full use of the workflow environment.
- ✓ The features list keeps expanding with every new release, which is good for geeks but does impact performance.
- ✓ The list of supported cameras is massive, covering everything from Leaf digital backs to DSLRs and many compact models that use their own RAW format or DNG files.

## Loathe it:

- ✗ Bugs in software for your graphics card can cause annoying crashes without warning.



**ADVANCED COLOUR MANIPULATION #2**  
The drift and depth of a selected colour can be varied so your tweaking is applied to a narrow or wide colour range as required.



**ADVANCED COLOUR MANIPULATION #1**  
Make subtle manipulations selected colours by choosing a sample with the droplet tool and adjusting to suit.



**“RAW Workflow tools such as Capture One not only leave an impression on quality but efficiency as well”**



**POINTS OF VIEW**

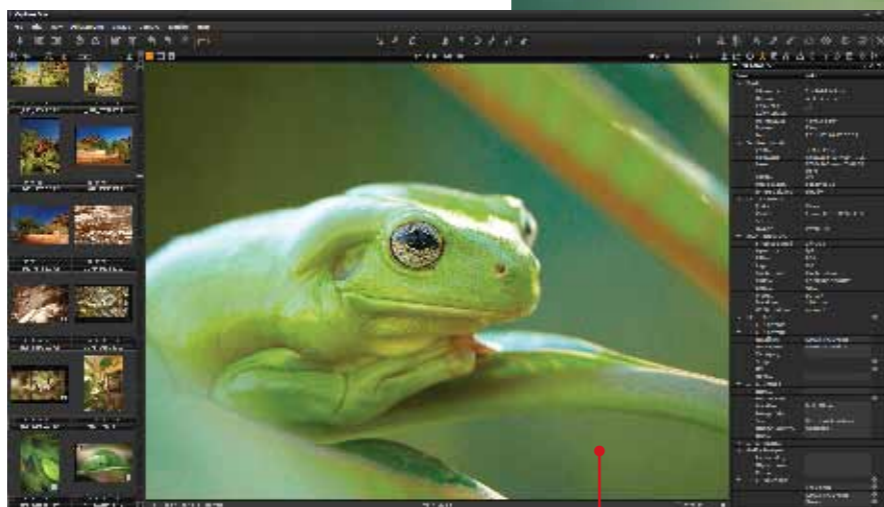
There are flexible options to preview multiple frames on screen at the same time, as well as several ways to quickly zoom into a frame for a closer look

**EXPRESS YOURSELF**

The spread of tools in Capture One makes it easy to access powerful creative options, but the flexibility of variants that overlay your RAW files makes it enticing to explore those tools.

**ADVANCED FEATURE No.1  
DYNAMIC RANGE**

Getting the most out of your digital files is the ultimate goal of working with RAW, so the interface for manipulating Dynamic Range is critical. Pulling on the highlights or shadows of your file brings through the deeper data stored inside the RAW file, filling out the details across shadows or pulling back the blow-out in highlights. It's not a magic wand, but an essential part of refining images shot under difficult light conditions.



**METADATA**

The advantage to a workflow solution over editing RAW files one at a time is the ability to quickly apply your tune-ups or metadata to multiple files, and identify your favourites from the pack.

There are flexible options to preview multiple frames on screen at the same time, several ways to quickly zoom into a frame for a closer look, and best of all you have direct access to the RAW files if you decide to delete a bunch of them forever. The default option is for deleted frames to go into a Capture One trashcan, but modifier keys let you skip the safe option and make your choice permanent.

In just a few keystrokes, you can whittle down a few thousand shots to a handful of keepers, freeing up valuable disk space and clearing the decks for another day of downloads off the camera.

One reason deleting is so effective in Capture One is because you can quickly compare images

that have been tuned to look their best. You start with one frame and make a few adjustments, then copy those adjustments to be applied across the rest of the burst frames. It takes very little time to explore the deeper potential of each image, and give it a star rating or just toss it in the trash.

For those who prefer to tag before trashing, you can rummage through your set and assign a colour tag or rating and then sort the set by tag. Anything unrated is dropped to the end of the browse list and you can bulk delete the unloved frames.

**Too many choices**

Old habits die hard, and it can take a while to adjust to the new versions of software. Capture One updates tend to be feature rich, but you have the ability to shun as many of those features as you want. Every tool can be added

**“If I have to sit and wait for a preview to be constructed, my productivity takes a dive”**

or removed from a tool-tab; every tool-tab can be added or removed from the window; and the arrangement of the tools, browser and preview are all up for adjustment.

I find that a dozen tools are the ones I use a lot, so I place them all into a quick-set at the beginning of my tools tabs. Big screens can accommodate large numbers of tools in a single tab, while smaller screens employ auto-compacting of tools when space is at a premium. The browser can be quickly hidden from view or recalled with a single keystroke, making the workspace within Capture One a very dynamic environment.

There's more than one way to use most tools. Mouse-click the rotation tool and from then on the left/right cursor keys give you fine grade control of your horizon. Use the mouse to hold and slide the rotation tool and your frame can be spun from side to side. Or just grab the horizon cursor and draw your desired angle across the image.

There's a separate preview window to support desktops with multiple displays, letting you fill one screen with a glorious frame and leave all the browsing and tools on another.

**Creative not destructive**

Your RAW files are your master copies of the image, your digital negative. For this reason Capture One, like most RAW processing tools, is a totally non-

**ADVANCED FEATURE No.2  
NOISE REDUCTION**

Most RAW files behave nicely with standard noise reduction profiles, but there are times when you want to push the limits of the technology. The more you smooth out the pixel damage in a noisy file, the more you lose detail – it's a balancing act that can be achieved with very fine controls. Noise comes in more than one variety, and so do the tweaks for removing them in Capture One.

**The Competition**

If you're new to the RAW workflow concept, you might want to have a look at these applications in addition to Capture One:

- Adobe Lightroom ([adobe.com](http://adobe.com))
- Aperture ([apple.com/aperture](http://apple.com/aperture))
- DxO ([dxo.com](http://dxo.com))
- Bibble ([bibblelabs.com](http://bibblelabs.com))

**» DETAILS**

- Manufacturer:** Phase One
- RRP:** \$410 (for Pro suite)
- Platforms:** Mac and Windows
- Who's it for:** Anybody who wants to process RAW files, professionals and beginners alike.
- Website:** [phaseone.com](http://phaseone.com)

**» VERDICT**

**Features:** Fast browsing; excellent metadata support; customisable user interface; powerful dust spot removal; processes multiple files quickly and easily.

**Quality:** Parallel processors, 64-bit operating systems and OpenCL graphics cards equals high quality on good hardware.

**Value:** Free minor upgrades for registered users, plus three free major upgrades.

**» Superb quality RAW image processing that offers efficient workflow and resource-savvy features. Excellent support for a wide range of cameras and a fully customisable user interface. This application is not without a few bugs, but its performance vastly outweighs the occasional blips.**

**» RATING 9/10**



**“Dropping out saturation, isolating a selected hue or adding a vignette are easy to tinker with”**

destructive tool. When you edit an image you are in fact working in a read-only environment where the RAW file is concerned, as all your hard work is being stuffed inside a subfolder, leaving the original untouched. Aside from preserving the integrity of your RAW files, this allows Capture One to work on multiple variants of the same file with ease.

Cloning a variant of an image takes all your existing tune-ups and copies them into a connected variant. You can tinker away with the new variant, explore creative options and go crazy with all the tool sliders. If you decide the new variant is a winner, make it your primary variant, or delete the others.

The freedom to be creative with your images is palpable, and once you start playing with variants, your comfort levels with pushing the boundaries of post-processing will grow. Exaggerating colour tones, dropping out saturation, isolating a selected hue or adding a vignette for effect are easy to tinker with. When you go too far, just create a new variant free of adjustments and you have your original RAW file back again.

The spread of tools in Capture One makes it easy to access powerful creative options, but the flexibility of variants that overlay your RAW files makes it enticing to explore those tools. Ultimately this is where Capture One excels, as a digital darkroom that lets you enhance the potential of RAW files. If you were shooting on film you'd likely spend more time in the darkroom than you did taking photos, and Capture One appeals to that aspect of the photographic brain that wants to



**BROWSE DISPLAY**  
Capture One integrates the interfaces for browsing and editing into a unified window set, so the result is a workflow environment that puts your favourite tools within easy reach at all times.

delve into the digital negative and produce a truly expressive image.

**Tethered tools**

Phase One has traditionally made camera backs that spend a lot of time in studio settings, so it's no wonder they reserve a lot of effort for tethered shooting. You don't need a Mamiya or Hasselblad to enjoy these features either, as most top-level DSLR models can be driven from the desktop.

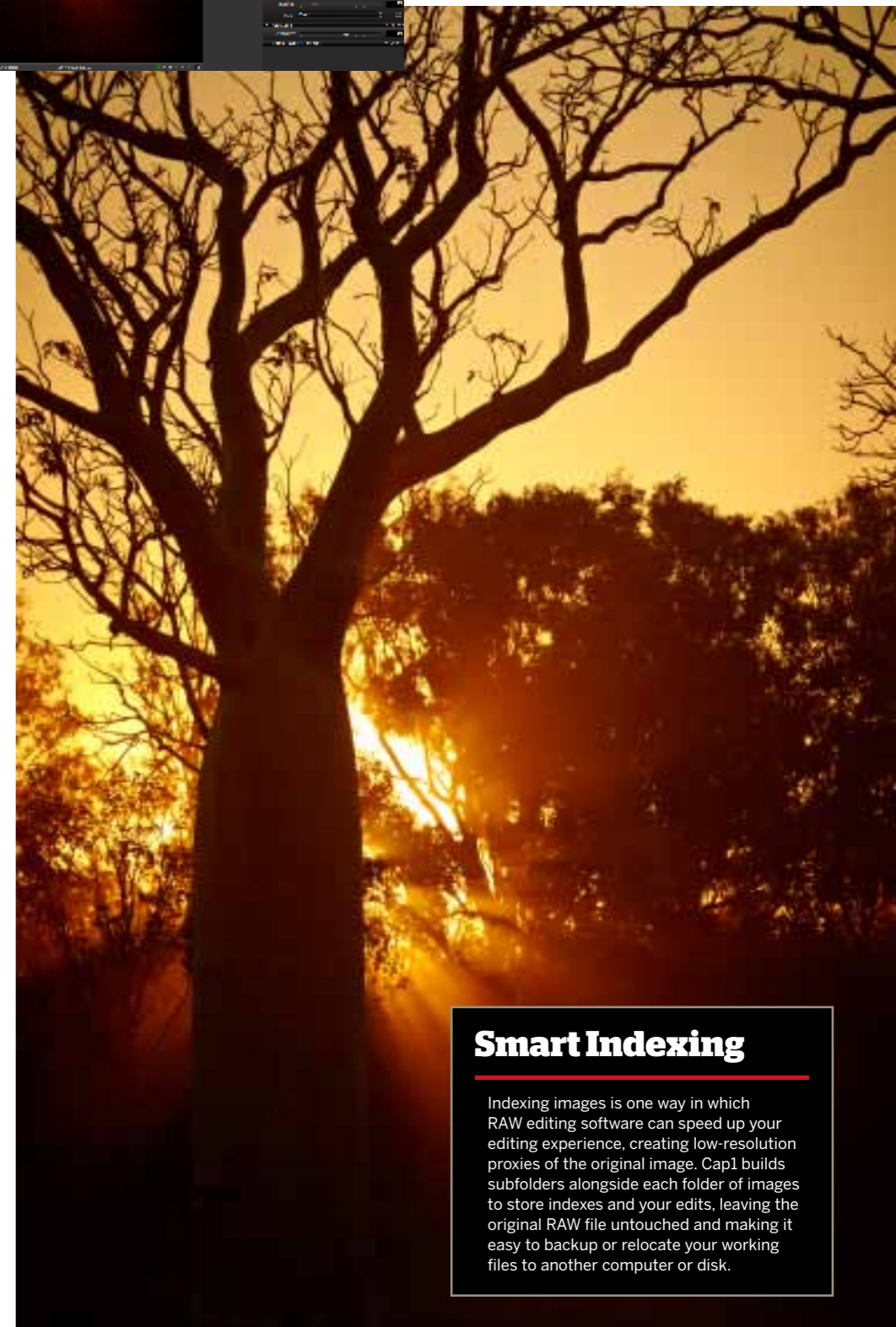
If you have a long cable or wireless link to the desktop, you can still just shoot frames on your DSLR and watch them load directly on the desktop. Capture Pilot compliments the tethered mode by sharing your captures in real time to iPod or iPhone devices. Your clients are free to rummage through the frames while you're still shooting more. Recent updates to Capture Pilot also allow you to drive the camera from a mobile device. (It's possible they're getting a little carried away with features at this point.)

Capture One also provides options for importing images off your storage. Pop in a CF card and Capture One presents a dozen options on how you might want to copy or relocate those frames. You can add a bit of metadata across all the RAW files, drop them into an existing folder, or rename the files according to a dazzling array of choices. The ability to preview and select frames before downloading from an external media is often useful, plus you can clear the media as you copy or keep the originals intact.

**Disks and display**

Two things can slow down processing with Capture One: a slow external disk or a clunky graphics card. The file-intensive nature of Capture One does test the performance of your disk systems, and while it works adequately across an external disk or even network drives, the speed hit is obvious. Working from an internal disk will ensure your desktop or laptop processor is fed at full speed.

Capture One makes the most of leading-edge technologies, including parallel processors, 64-bit operating systems and OpenCL graphics cards. This is great news if



**VASTLY FLEXIBLE MONO**

Capture One's B+W conversion capabilities are flexible and option-rich to produce better, and more subtle, monochrome images.

**ADVANCED FEATURE No.3 BLACK & WHITE**

Fans of B+W conversions will appreciate the latest support in version 6.2 of Capture One. Hidden under the tool-tab for colour adjustments, the B+W tool lets you manipulate discrete colour responses far better than any filter could achieve. Brighten your greens, darken your blues or perk up those reds so that your final B+W expression is rich with emphasis on your preferred elements.



**Smart Indexing**

Indexing images is one way in which RAW editing software can speed up your editing experience, creating low-resolution proxies of the original image. Cap1 builds subfolders alongside each folder of images to store indexes and your edits, leaving the original RAW file untouched and making it easy to backup or relocate your working files to another computer or disk.



**“I can throw 4000 images at the program, or queue up 500 full resolution images to process into high-quality JPEGs without a flaw”**

### Best Performance

With any RAW workflow software, buy a computer system with a supported video card that can handle OpenCL framework, plus fast internal disks and at least 4G of RAM. Don't assume you need a desktop either; many laptops will fit the bill.



you're buying the best hardware, but can also expose limitations on reliability. Capture One works the graphics card very hard and when they can't keep up, the application gives an appearance of freezing, when in fact there's a queue piling at the bottle-neck deep down in the system.

Performance on large screens can take a serious hit if you haven't got a chunky graphics card to back it up. A full HD desktop display pumps out 1920x1080 pixels and demands roughly four times the processing power of a netbook screen. Mac users enjoy highly standardised hardware, and tend to suffer fewer glitches than their PC counterparts.

Despite some glitches in the code, Capture One is an industrial strength solution. I can throw 4000 images from a 21MP camera at the program, or queue up 500 full resolution images to process into high-quality JPEGs without a flaw. And that's on modest hardware like an i3-core processor with 4G of memory.

#### ADVANCED FEATURE No.4 LENS CORRECTION

This is a complicated set of features designed to correct flaws in lens design. Pre-defined correction settings are available for professional lenses, but most DSLRs are excluded from this range. Instead, you can generate your own corrections, including compensation for vignetting at wide apertures, chromatic aberrations in bright light, and angular flaws from keystone or pincushion distortion.

#### Processed and ready

The entire objective of RAW workflow software is to generate nice looking image files, not merely to know what treats are hidden inside your original RAWs. JPEG is still the currency of choice for sharing your images online or delivering files for print. Generating your output images is just as important as fine-tuning the input RAW file.

Capture One has a dedicated processing tool-tab loaded with everything you need, and a few things you don't. The core of Capture One processing is the "recipe". You tick one or more recipes, select one or more RAW files and hit the process button. By default the processing queue is active, but you can choose to halt the queue and let the images churn away when you're not using the computer.

If you're working on a netbook this is one of the slowest tasks, revealing the inherent lack of grunt offered by these low-cost laptops. Processing images also takes lower priority than building indexes, and Capture One takes care to avoid placing too many demands on your CPU at any one time.

Designing your processing recipes is the other side of the coin to tuning your RAW images, and the choice of options can make you dizzy. Aside from what format or compression level to output the files, you can constrain by pixels or percentage, rename files with additional or custom information, filter out metadata, apply custom watermarks and drop recipes into different subfolders.

I set up a hi-res JPEG recipe with low compression and AdobeRGB colour space for print output, plus a screen resolution recipe with

enough pixels for my HD screen using the web-friendly sRGB colour space and some email friendly compression. Each drops into their own subfolders to keep the different JPEGs separate, and the low-res versions also get a watermark for good measure.

All the metadata I loaded into the RAW files is dragged across as well, which is then utilised by online photo galleries as pics are uploaded. If you like, you can get Capture One to build an online proof sheet. Adding more features that I'll never use is pretty much why I wanted to steer clear of Photoshop in the first place, so I'm not going to cheer too much about that addition.

#### Pixel dust

If you're still wavering on the issue of RAW workflow applications versus Photoshop, I have two words for you: dust spots. The biggest challenge with DSLRs is keeping dust off the sensor and off your images. In spite of the best technology available, and your best efforts to be cautious, you will end up with dust on your shots. Capture One's spot removal tool works wonders and can save you a lot of work.

Using the "Dust" mode, you pinpoint the location and size of the dust spot. Any frame with a reasonable amount of blue sky and a narrow aperture will reveal any particles on your sensor. I start with one of those frames, tag all the dust that affects the frame, and copy/apply the dust data across other frames where the dust might be visible. It doesn't matter what rotation, cropping, tweaking or manipulation has been applied to subsequent frames, as Capture One is taking note of which pixels on the sensor have been affected.

If I was slow to use my sensor-cleaning mode on the camera, or just had a stubborn bit of grit, I can

#### ADVANCED FEATURE No.5 LOCAL ADJUSTMENTS

Adjustment layers can be stacked on top of one another, each one highlighting a hand-drawn region of the frame. A bit like using the paintbrush tool in Photoshop: just pick the brush size and feathering. Layers can enhance exposure compensation, saturation, contrast and a few other colour options. It's the ideal tool for those times when you didn't have your ND grad filter on hand.

quickly tidy up the entire set within a few minutes. The dust mode uses neighbouring data to decide how much of the tagged area needs modification, rather than applying a cloning cleanup. It's a subtle difference, but helps to ensure the dust spot tool only makes changes when necessary. There's an additional mode for "spots" instead of "dust", intended to help you tidy up unwanted objects in the frame, rather than dust on your sensor.

#### Copy that

When you copy the adjustments from a frame, Capture One includes any dust-data in that copy by default, along with a swag of other potential tune-ups. A special tool-tab lets you adjust which elements are to be stored in the clipboard, so you can ignore rotation or cropping from your source frame before applying to a mass of other frames.

As is the trademark of Capture One, there is immense flexibility in the copy/apply system. Every single tool in every single tab has a separate copy/apply option. You can quickly copy just the metadata from one frame and apply just the metadata to other frames. These dedicated copy/apply dialogues also let you specify any discrete elements within the tool, so you can copy just some of your metadata entries instead of all of them.

Too many options can create complexity, but can also rob you of screen space. With a file browser, tool-tabs, tool selector, mode selector and preview window all jammed into one screen, the interface can get crowded. Each tool has a button to copy/apply, revert to default, and perhaps make auto-adjustments. And that's before you actually get the functions for the tool itself.

Products like Lightroom, which entered the market fairly recently compared to Capture One, have pushed the developers to cram in more features and more flexibility. Earlier versions of Capture One may have lacked the depth of features, but also ran many times faster. Everything comes at a price.

Yet each time Phase One release a new update for the package I find myself compelled to upgrade because they thought of something new to make my life easier. And that brings me to perhaps my favourite feature of Capture One, the license.

#### Upgrade paths

I know most photographers prefer to buy their software from dubious IT centres in Bangkok, but Phase One has created a compelling environment for owning a legal copy.

Each time you upgrade your camera body, you'll likely need to upgrade your version of Capture One, because the RAW file format from one DSLR to the next is never quite the same. These upgrades are free for registered users. Even if you didn't want the latest features of the application, you may need the camera support anyway.

Not only are minor upgrades free but a license for Capture One 6.2 Pro gives you three major upgrade for free as well. Your next download of versions 7, 8 and 9 are already paid for too. Nearly every photographer I know has more than one computer, usually a laptop

#### USE "RECIPES" FOR FAST, MULTIPLE PROCESSING

The core of Capture One processing is the "recipe". Tick one or more recipes, select one or more RAW files, and hit the process button.

and a desktop, which is why Phase One makes its license good for two computers at a time. One license fee covers both machines.

#### Conclusion

The idea of processing RAW files is not to create great photos from bad files, it's about extracting the last 5-10% of quality from your work, that extra quality that takes great frames and turns them into really great photos. Likewise, employing RAW workflow software isn't a question of "better quality" images compared to other RAW processing options, but a question of reducing your workload and getting the job finished faster.

Capture One has a proud pedigree of delivering pure performance – premium quality output, a wide range of creative tools and remarkable efficiency when dealing with very large numbers of very large files. Version 6 adds many new features that will appeal to any DSLR user, not just the professionals.

#### ADVANCED FEATURE SELECTIVE COLOURS

You can make subtle manipulations to unwanted colours by selecting a sample with the droplet tool and adjusting the characteristics of that sample. The drift and depth of the selected colour can be varied so your tweaking is applied to a narrow or wide colour range as required.

ENTRY-LEVEL DSLR RRP: \$999

# Nikon D5100

Ewen Bell test-drives a caffeine-free DSLR with highly addictive abilities.

**F**OR THIS REVIEW I DECIDED to visit my local café and see how a small but capable DSLR looks along side a fine Italian coffee machine. It's a tale of old meets new: a traditional shape with a few new twists slipped into a finely crafted design. And yes, at this point we're talking about both the coffee machine and the camera.

The autofocus is capable and not easily fooled by difficult light conditions, such as glaring light at sunset or shiny surfaces on the barista handles. The focus assist lamp does come on a lot more often than it should when shooting indoors, but then again, we're not looking at a big budget to own a D5100. Entry-level cameras have to ship with some features stripped out, otherwise nobody would buy the more expensive models.

Features such as articulated rear screen, focus tracking, live view mode and HD video are not often useful when shooting coffee and a barista. In most respects this kind of consumer-focused

camera does way more than it needs to, but so long as it takes nice pictures I don't care. I find the default image review on most entry-level cameras overstates colour saturation, and the D5100 is no different. Tweaking the Picture Control allows for a more neutral representation.

Our review rig had the Nikon 24mm f/1.4 prime lens so that we could get a feel for the best this camera is capable of. With a DX mount, this body effectively converts the wide-angle lens to a 36mm field of view. I'm a fan of shooting with primes and letting your feet do the zooming. This lens itself is equal to the size and weight of the D5100, and a fair bit more expensive, but together they make for a confident bit of kit for urban photographers. The body won't necessarily get the absolute best out of the autofocus abilities of this lens, but the D5100 does drive it with accuracy.

With 16MP of RAW files pouring into the

**Buying advice**  
Since it's the lens that makes all the difference, the money you save on a Nikon D5100 can go towards a really good piece of glass!



**“You have to get familiar with your gear before you can get the best from it”**

SD slot, there's plenty of scope for cropping if you need to, while the shutter action is dampened to avoid attracting extra attention.

The configuration of controls around the grip and back of the body will be familiar to Nikon users, and not so hard to learn for newcomers. For some reason the display toggle sits next to the shutter instead of the display, which can lead to confusion, and the four-way controller at the rear is easily tripped to divert the location of the AutoFocus grid selection. Much like a fine Italian coffee machine, you have to get familiar with your gear before you can get the best from it.



■ The Nikon D5100 weighs in at around 509g (body only).

## WHAT WE THOUGHT: Love it:

- ✓ Excellent build quality and ergonomics.
- ✓ 16MP is plenty to play with.

## Like it:

- ✓ The articulated screen can be useful but pops out of the way when not needed.
- ✓ High ISO abilities of the camera meet the modern standard.

## Loathe it:

- ✗ If you want better autofocus or high-speed flash sync, you'll need a pro camera body instead of this one.

### BUTTON LAYOUT

“The configuration of controls around the grip and back of the body will be familiar to Nikon users, and not so hard to learn for newcomers.”

### BUILT-IN FLASH

The onboard flash unit features auto mode, auto with red-eye reduction, auto slow sync, auto slow sync with red-eye reduction, fill-flash, rear-curtain with slow sync and more.

### THE SENSOR

With a Nikon DX format (23.6mm x 15.6mm) CMOS sensor, the D5100 produces 16.2 million effective pixels. In other words, plenty of grunt for an entry-level model.

### AUTOFOCUS FEATURES

Standard are: face-priority AF; wide-area AF; normal-area AF; and subject-tracking AF. Plus contrast-detect AF anywhere in frame (ie, focus point is automatically selected when in face-priority or subject-tracking AF modes).

■ The Nikon D5100 Entry-level DSLRs have never looked so good.

### GET INTO THE SWING OF THINGS

The D5100 features a new horizontal swing, vari-angle rear monitor and full 1080p HD video recording.

### WALK YOU THROUGH IT

The D5100 comes with 16 scene modes to allow beginners to more easily capture photos via automatic camera setting optimisation.



## » DETAILS

**Manufacturer:** Nikon

**RRP:** \$999 for body only

**Memory type:** SD/SDHC cards

**FPS:** 3

**Sensor size and resolution:**

APS-C sized 16.2MP CMOS

**LCD Display:** 3.0" with 921,000 pixels

**Processor:** Expeed2

**Frame rate:** 4fps

**Maximum shutter speed:** 1/4000th

**Weight:** 560g

**Who's it for:** Beginners looking for a capable SLR format and don't mind the APS-C sized sensor.

**Website:** nikon.com.au

## » VERDICT

**Features:** Full HD movies; vari-angle LCD; special effects modes; new HDR function.

**Quality:** Hard to find fault, although it suits street settings more than a studio role.

**Value:** At less than a grand, it represents outstanding value for a beginner model.

» An excellent camera for the money, featured to please consumers but very capable when coupled with a good lens.

» **RATING** **8/10**

The rest of the D5100 user interface is nicely updated and offers good feedback to the photographer about what they're doing and how the camera has responded. There is really little to complain about; it's capable of great images, although suits a streetwise setting more than a dedicated studio role. Comparing it to a full-frame Nikon D3s is like comparing a double-espresso to a decaf soy latte; they're simply not for the same audience.

I've always argued that photographers should worry more about their lens than the camera, so the money you save on the D5100 can go towards a really good piece of glass, like Nikon's 24mm f/1.4.

If you're not planning to shop for a full-frame body, and you enjoy the feel and controls of the Nikon design, then the D5100 is a convincing model sold at an excellent price.

ENTRY-LEVEL DSLR RRP: \$599

# Canon EOS 1100D

Don't let the colour confuse you; Canon's funkiest entry-level DSLR isn't just a good-looking, gimmicky camera... it's got the specs to back it up, writes Lisa Perkovic.

**C**ANON IS COVERING ALL ITS bases in the DSLR market with this entry-level body built for beginners. The EOS 1100D follows on from the EOS 1000D, which when released almost three years ago, sat right beneath the 450D as a more affordable consumer alternative. This time the 1100D follows just after the new 600D – the 600D has the superior specs with the 18MP sensor but also lands out of the fierce under-\$1000 mark, retailing for \$1099, body only. That leaves the 1100D to fill the gap for a camera with all of Canon's tried-and-tested features – minus the whizz bang extras that drive prices up.

The 1100D has the specs that made Canon a success. Although the 12.2MP CMOS sensor offers less MP than a lot of compacts on the market, the 7D's 63-area iFCL colour-sensitive metering is successfully introduced, along with a 9-point AF system. The sensitive ISO is another major selling point, with the ISO 100-6400 range suitable for low-light work – a bonus for beginners experimenting with different techniques.

The 14-bit DIGIC 4 processor will help cut down noise and control image quality, too. There's always

the built-in flash but it's nice to see Canon encouraging creative shooting.

The range of shooting modes is a reflection of the entry-level target market – there's the usual Auto, Portrait, Landscape, Close-Up, Night Portrait and Creative Auto settings, as well as picture styles like Neutral, Faithful and Monochrome. The intuitive interface now also includes Feature Guide, a built-in glossary for features and shooting modes that will make navigating controls easier for beginners.

Users will also enjoy the addition of a Q "Quick Control" button. The Live View mode is great for HD video shooting (720p only) which runs at 30fps and offers automatic exposure control.

Canon has abandoned the 1000D's textured plastic look for a smooth exterior made using polycarbonate resin. It's a small differentiation that moves this camera away from the look and

## » DETAILS

**Manufacturer:** Canon

**RRP:** \$599

**Memory type:** SD, SDHC or SDXC cards

**FPS:** 3 fps for 830 JPEG frame

**Sensor size and resolution:**

22.2mm x 14.7mm, 12.2MP CMOS

**Processor:** DIGIC 4

**Weight:** 500g

**Who's it for:** Entry-level prosumers

**Website:** canon.com.au

feel of the EOS professional bodies. The pay-off is in weight, with the 1000D coming in at just 500g without a lens or battery. The 600D weighs 570g, which isn't a vast difference, but the 5D Mark II is 810g, and you'll definitely notice that.

**“Users will also enjoy the addition of a Q ‘Quick Control’ button”**



■ The stainless steel and plastic 1100D weighs in at just 500g (body only).

## WHAT WE THOUGHT:

### Love it:

- ✓ Super-simple layout of buttons and controls; anyone could pick it up and navigate within moments.

### Like it:

- ✓ Creative leap with the three colour schemes: a bolder step from usually straightlaced Canon.

### Less impressed:

- ✗ Video mode not the best; 17min cap and few manual adjustments permitted.

## » VERDICT

**Features:** 9 point AF; 63-area iFCL metering; ISO 100-6400; HD (720p) video capture; available in red, chrome and black.

**Quality:** The low price means it's taken a small hit on the solid built front, but not image quality.

**Value:** Feature shortfalls can be overlooked because of great price point.

» Great for beginners. The body isn't too heavy and has the specs you want for experimenting with stills and video.

» RATING **7/10**

## VIDEO PERFORMANCE

Good frame rate – 30fps – for shooting video, but at just 720p HD, other entry-level cameras have better output.



## BENEATH THE SURFACE

The 1100D's funky exterior hides a 12.2 Megapixel Canon-developed CMOS sensor for great, low-noise image quality.

■ The Canon 1100D Designed with first-time photographers in mind.

## LOW-LIGHT CAPABILITIES

“The sensitive ISO is a major selling point, with the ISO 100-6400 range suitable for low-light work – a bonus for beginners experimenting with different techniques.”

## Canon EF 50mm f/1.2L USM

A must in every photographer's kit, this portrait lens is for when you want to get up close and personal.

A lot of shooters start out with the 50mm f/1.4 or f/1.8, but this vastly more expensive L Series lens is worth every penny. It's not much of a difference in f-stop and the lens is larger and heavier, but the quality is definitely noticeable. AF and image sharpness when the sensor is wide open is unparalleled for a 50mm.

There's the usual Canon Super Spectra lens element coatings for flare and ghosting reduction, a ring ultrasonic motor and E-TTL flash system syncing, as well as practical weather sealing options

with an additional filter.

The lens boasts full-time manual focus override, and a lot of photographers prefer the mechanical focusing here to the focus-by-wire design of the 85mm f/1.2. There can be some back focusing at maximum magnification levels. This is a popular lens among portrait and wedding photographers who take advantage of the superior specs to capture details up close in low light.



## » VERDICT

RRP: \$2499

Website: canon.com.au

Manufacturer: Canon

Features: f/1.2 max aperture, 8 elements in 6 groups

Minimum focal distance: 0.45m

Angle: Diagonal angle FF 47°, diagonal APS-C 31°

Size: 73.8mm x 50.5mm

» RATING **9/10**

## Canon EF 24-70mm f/2.8L USM

The lens that won't lead you astray, no matter where you go and what you do.

Another lens you can't go past having in the camera kit, the 24-70mm is a good all-rounder for the photographer who's just starting to get serious. The ultra-low dispersion glass element and two different aspherical lens elements ensure sharp, high-quality images. Multi-layer optical coatings reduce ghosting and lens flare, while the ultrasonic motor ring controls AF quickly and quietly.

Weighing in at 950g, it's heavy for a walk-around lens but this is what the specs are best for. There are weather-resistant sealings at the mount, zoom and focus

rings and the switch plate, fending off dust and water. An electromagnetically controlled automatic diaphragm maintains apertures between f/2.8 to f/5.6, maximising circular light points in background blur. The minimum focal distance is closer than that of its predecessor, the 28-70mm f/2.8, with upgraded speed and durability from the internal focusing. There's also full built-in manual focus override.



## » VERDICT

RRP: \$2100

Website: canon.com.au

Manufacturer: Canon

Features: f/2.8 max aperture, 16 elements in 13 groups (2 different aspherical, ultra-low dispersion)

Minimum focal distance: 0.38m

Angle: FF 47°, diagonal APS-C 31°

Size: 83.2mm x 123.5mm

» RATING **8/10**

LENS RRP: \$699

# Tamron SP 70-300mm F4-5.6

**Editor's CHOICE**  
If your budget is tight, Tamron's 70-300mm is the zoom for you. You won't soon want for another.

Fresh of a win at the 2011 TIPA awards for best entry-level lens, this zoom lens is long on quality, short on price.

**W**HEN YOU START GETTING INTO the 300mm telephoto range, the pressure on your budget can bring down your options for image quality. For the price of a second camera body you could buy a prime 300mm lens with all the trimmings and a wide open aperture of f/4. However, for a fraction of the cost you can get the Tamron 70-300mm and still go home with excellent image quality.

It may seem unfair to directly compare this lens to a 300mm prime worth four times the price, but it's good to know exactly what you're missing out on by purchasing the more affordable option. No surprise that a zoom lens falls short of the focus accuracy and image sharpness of a prime lens,

but the question is how far short? I found the image quality under ideal light conditions to be excellent, with crisp contrast and good resolution that only dropped off a little at full zoom. Shooting into strong light can expose the limitations of the lens elements at times, with colour fringes creeping into the mix, but these minor flaws are acceptable for all but the most professional of demands.

Many people wanting a 300mm lens will be shooting wildlife, but when tested on Canon's full-frame DSLR models, the Tamron autofocus couldn't quite keep up. That's understandable; it's a \$700 lens. If your subject isn't moving with killer speed, you'll likely get the shot – and can also successfully engage AI Focus to track a moving target. Tamron uses the name Vibration Control (VC) for their image stabilisation feature, and it's both effective and essential – because holding steady with a lens this light is prone to jitters.

What you can't do very well is pan on moving wildlife, as the image stabilisation lacks a panning mode for tracking lateral movement. It also doesn't work with 1.4x or 2x conversion tubes for the Canon, so you can't employ these cheap options to extend your reach. Canon's 25mm extension tube does work nicely with the lens, however, enhancing the macro opportunity with acceptable autofocus performance. In low light the focus slows down a little but still doesn't make many mistakes, while shooting wide open at f/4-5.6 is just slightly on the soft side.

But the best of any lens is found in the middle, and at f/9-13 the Tamron looks clean and vibrant.

Build quality is better than many budget telephoto lenses, but you only get what you pay for. The rear lens has very poor protection from dust or humidity and particles look like they could easily creep into the barrel when zooming. The external pump action of the

**“At f/9-13, the Tamron 70-300mm looks clean and vibrant”**



■ Shot with a Canon 5DmkII at f/9, 1/400sec.

zoom is necessarily tight in action to avoid the extended lens from slipping during use, but offers a lot of resistance in the process. It doesn't feel snappy to operate.

If you want a better telephoto lens you could spend a bucket more money in the process. The autofocus is good, just not quite fast enough for some wildlife situations. This is a versatile zoom that delivers great images through the range, with a little performance loss at the margins.

**XLD LENS ELEMENT**

New optical system optimised for DSLRs achieves top resolution in the 70-300mm class with specialised glass elements, including an XLD (Extra Low Dispersion) lens.

**ULTRASONIC SILENCE**

The “USD” part of the name stands for “Ultrasonic Silent Drive”, and this 70-300mm is the first lens to benefit from it. It's precise, fast and has full-time manual focus override.

**MOUNT UP**

The affordable Tamron 70-300mm is available in mounts for Canon, Nikon and Sony – although Sony models do not have the VC image stabilisation, as it's already in-built in Sony bodies.

**VC STABILISATION**

Tamron's VC (Vibration Compensation) mechanism uses a three-coil system, with three driving coils activating special lens groups electromagnetically via three steel balls.

» **DETAILS**

- Manufacturer:** Tamron
- RRP:** \$699
- Minimum focal distance:** 1.5m
- Angle:** 34° - 8° on EF-S or DX mounts
- Weight:** 765g
- Size:** 1/4000th
- Who's it for:** Diameter 81.5mm, length 142.7mm.
- Website:** tamron.com.au

» **VERDICT**

- Features:** 17 elements in 12 groups.
- Quality:** Won best entry-level lens honours at the TIPA 2011 Awards.
- Value:** At a quarter the price of a prime 300mm, this is almost unbeatable value.
- » **Professional image quality without the professional price, a good performing lens slowed down only a little bit by the autofocus.**

» **RATING 9/10**

**INSIDER TIP**

Although unfortunately this lens doesn't marry with Canon's 1.4x or 2x conversion tubes for that little bit of extra reach, when coupled with a 25mm extension tube, the Tamron 70-300mm suddenly becomes a highly effective (and highly affordable) in-the-field option for capturing macro images.



■ Shooting into strong light, some chromatic aberration creeps, but its more than acceptable.

**Buying advice**  
Not the cheapest tripod out there – but with good reason. If you're buying one, sturdy and good quality beats budget every time.

**TRIPOD** RRP: \$840/\$165

# Manfrotto 498RC2 Midi Ball Head

Panning with independent motion to the magnesium ball head offers a blend of two modes

**I** GAVE THIS TRIPOD and head a pounding. My profuse apologies to Manfrotto for being so rough on their gear, especially considering it was on loan and had to go back to the office with a series of battle scars. After a week west of Alice Springs pushing a Toyota Landcruiser to the limits, I can fully appreciate the quality of build behind both the 4WD and the tripod.

I was expecting the tripod to be in worse condition after this journey. When strapped to the outside of my camera bag, while clambering up rocks, the rig took a few direct hits. Usually it was the rocks that came off second best. The 498RC2 Midi Ball Head is built from magnesium alloy and feels pretty solid. It has both the quick adjustment ball head and an independent panoramic rotation designed for people who want precision panning for sequences of still frames, rather than video. My unit was subjected to every grade of sand you can imagine, yet continued to perform flawlessly. I was genuinely surprised that I failed to bugger up the panning mechanism, but the design does a good job of resisting grit where it doesn't belong.

Including the friction control for the ball, you've got three different knobs on the head and it gets pretty busy when trying to set up a shot. My colleague was shooting with the less robust Light

**“Clambering up rocks, the rig took a few direct hits. Usually it was the rocks that came off second best”**

## WHAT WE THOUGHT:

### Love it:

- ✓ Solid unit that flexes in all the right ways and none of the bad ways
- ✓ Sand and dust failed to impact the performance of moving parts

### Like it:

- ✓ Very light for such a solid rig, even with the magnesium head attached

### The Gear

- Manfrotto 055CX-PRO4 Tripod
- Manfrotto 498RC2 Midi Ball Head
- Canon EOS 5D MkII
- Canon EF 24mm f/1.4 L USM

### The Shot

- 10 seconds at f/22 on ISO 3200

■ Southern Stars West of Alice Springs  
The Milky Way about an hour after sundown, photographed at “Finke 2 Mile” bush camping area in the western section of the West McDonnell Ranges, NT.

## » DETAILS

**Manufacturer:** Manfrotto

**RRP:** \$840 / \$165

**Maximum Height:** 1.7m with central column fully extended

**Maximum Load:** 8kg for the tripod and midi ball head

**Weight:** 1.7kg (tripod) / 0.6kg (midi ball head)

**Who's it for:** Amateurs and professionals alike will see the value in this equipment.

**Website:** manfrotto.com

### SOLID FOUNDATIONS

“The 055CX is a familiar tripod base, and I chose it because I wanted something genuinely solid for my shots.”

Grip Ball Head, also by Manfrotto, and he enjoyed a more fluid ability to reframe between shots. Subtle adjustments are the tricky ones, however, when you want to nudge the frame a few degrees in a given direction. Once you get a handle on the friction control of the 498RC2, you've got a solid platform that can be finely detuned for adjustment.

The 055CX is a familiar tripod base for me, and I chose it for this journey because I wanted something genuinely solid for my shots. It's not in my nature to be a fan of tripods, but when you need one you better get a good one. Having something light and easy to pack or carry is of little value if the fully extended legs aren't rock solid. I was shooting infrared images with exposures of several minutes, sometimes with evening winds blasting into the camera. I was glad I had the sturdy legs to support the magnesium head.

Manfrotto's standard RC2 mounting plate has a two-stage release that's designed more for security

## » VERDICT

**Tripod features:** Lightweight carbon fibre for strength and portability .

**Head Features:** Panning mode plus rugged ball head with friction control.

**Value:** It would be hard going back to a smaller unit to save a little weight at the expense of a lot of quality.

**» Weight is always an issue when taking this tripod out of the studio, but stability is something you should never compromise on. Combining the Midi Ball Head with a professional series 055CX tripod from Manfrotto gets the balance right.**

## » RATING

**4/5**



### TRUE GRIT

“I was genuinely surprised that I failed to bugger up the panning mechanism, but the design does a good job of resisting grit where it doesn't belong.”

### FINE TUNING

“Once you get a handle on the friction control of the 498RC2, you've got a solid platform that can be finely detuned for adjustment.”

than speed. That's not a bad thing, and while it takes a little getting used to the RC2 is more compact and lighter than the RC4 option. Most of the time when using a tripod you're planning to leave the camera on it for a while, so it's good to know you can't easily drop your camera body by wrapping a strap across the release lever.

Weight is an issue when travelling, but the combination of 055CX and 498RC2 was about 2.1kg. That didn't put a dent in my baggage allowance and was easy to pack down into a small case. What really surprised me was how resilient the carbon fibre material was to abrasion when pitted against the sandstone of the outback. Fine red dust and gritty yellow sand had made it's way into every bit of gear I had after a week in the bush, but the tripod still worked without a hitch. Unfolding the legs on the 055CX is a little slow compared to smaller and lighter models, but that's the trade-off for having the more stable platform to work with. And there are degrees of “light-weight” anyhow, and the combination of Midi Ball with the 055CX was not what I call heavy.

This version of the 055CX, the PRO4 with four tube sections and a maximum extension of 170cm, also features the novel Q90 Degree system that converts the centre column to a horizontal bar for shooting macro and flora from above. There's a lot of flexibility in this design to create a solid platform for a wide range of scenarios. It would be hard going back to a smaller unit to save a little weight at the expense of a lot of quality.

The highlight of my journey took place in Palm Valley, a small series of gorges at the end of a pretty serious 4WD track. Massive rock profiles rise above the terrain, and after sunset the Milky Way drops close to the horizon just above the formations. The combination is perfect for shooting the night sky, if you have a good tripod. I'm glad I did.



■ The gritty outback proved no match for the 498RC2

LAPTOPS RRP: \$999-\$2499

# One for the road

When you hit the road, why not take your digital darkroom with you? For less than the cost of a full-frame DSLR you can pack some heavy duty processing without weighing down your camera pack, writes Ewen Bell.



## Apple takes a bite

### 13" Mac Book Air

RRP: from \$1599

Website: [apple.com.au](http://apple.com.au)

Features: 2G RAM / 128G Flash Drive / 7hr battery life / 1.3kg / Core2Duo

Those lusciously large laptop screens that Apple users love on their desktop prove to be less appealing when living out of a backpack. Finally Apple released the Mac Book Air and the world of truly portable processing became a reality. They got a lot of things right with this model, including a screen rich in pixels and brightness that makes editing photos easier: 1440 x 900 pixels are stuffed into a 13-inch LCD, which means smaller pixel sizes and a more realistic impression of image sharpness. There's enough horsepower under the hood to run your favourite RAW processing software, just. The 13-inch model has an SD card slot too, which for many DSLRs means one less adaptor to pack.

If you're a Mac fan, all you have to decide is which model best suits your needs. But if your favourite processing software runs on either platform, you have some real choice for something light with might. Air is a little thin on some specs but comes packaged in a seriously clever birthday suit. Quality of design and build matter a lot when you're stuffing the machine into a day pack or driving across the outback. This is designed to last and will cope with hard knocks better than most its size.

» VERDICT » A classy package with an adequate processor

» RATING **8/10**



## Lighter than air

### 13" Samsung Series 9

RRP: from \$2499

Website: [samsung.com.au](http://samsung.com.au)

Features: 4G RAM / 128G SSD / 8hr battery life / 1.3kg / Core i5

For several years the PC world has been flooded with travel-friendly netbooks that have the grunt of an asthmatic hamster, but not to worry – they were super cheap and light. Samsung's Series 9 escapes the Netbook power fade with enough processing muscle to replace your desktop, plus a faster USB 3.0 port so you can move lots of big files without the wait. A little more screen resolution would have made it the perfect package, as 1366 x 768 pixels is the bare minimum for 13-inch screens, rather than exceptional. There's a built-in memory card slot, but only for Micro SD cards.

There were lots of ultra-portable PC notebooks before this one but few could hold a candle to the quality set by the Mac Book Air. Samsung have gone close, creating a machine powerful enough for desktop image processing, equipped with enough RAM to handle commercial jobs, backed up with serious disk throughput plus 1Gigabit networking speeds. While you definitely get excellent value at the Australian recommended retail price, the very same model is selling much cheaper in overseas markets so wait until your next trip and look into buying on the road.

» VERDICT » More pixels and less dollars would make it more compelling

» RATING **8/10**



## Less is more

### 10" HP Mini 5103

RRP: \$999

Website: [hp.com.au](http://hp.com.au)

Features: 4G RAM / 128G SSD / 8hr battery life / 1.3kg / Core i5

It won't turn any heads at your coffee shop and has less grunt than a Toyota Prius, but a well-equipped Netbook can become your best friend while travelling. This model has a few things the others don't, such as 320G of internal hard drive space so you have room enough to download your work each day. There's even a sim-card slot to help you stay online while you roam, plus a touch screen to make browsing images easier. Best of all, the 10-inch screen crams in 1366 x 768 pixels so you're getting plenty of room for image editing software and very fine pixel-pitch. You'll see immediately which photos are sharp and which are not.

There are much cheaper versions of the HP Mini too, so for the cost of an average 50mm lens you could buy what amounts to a portable disk drive with screen and keyboard attached. The essential weakness of Netbooks are the Atom processors, which are not only slow but stumble on multi-tasking scenarios. Windows 7 still runs very nicely on the Netbooks, but dual core machines avoid those "click and wait" bottle necks. Processor grunt makes little impact, however, if all you're doing is downloading your memory cards each night.

» VERDICT » Sheer value for money makes it hard to ignore

» RATING **7/10**

**“Make sure you have lots of RAM to feed the beast. 2GB of memory is good; 4GB is better”**

### WHY TRAVEL WITH A LAPTOP?

- 1 Download your card each day and make a backup of the files so you don't run the risk of losing your work.
- 2 Spend a few minutes every night adding index data, such as the names of people and places that are hard to track down once you're back home.
- 3 Share your work with companions while you travel, or tune up a few select images to upload to Facebook.
- 4 Most camera bags have a slot for the laptop somewhere so you won't need to take an extra bag.

### MORE CORE, PLEASE!

#### How many processors do you need in one laptop?

Lightroom, Photoshop, Aperture and Capture One all take advantage of the extra processing power on dual or quad core machines, tackling large numbers of big files by sharing the burden. Make sure you have lots of RAM to feed the beast though. 2GB of memory is good; 4GB is better.

You'll also get faster results from processing RAW files on the road by keeping your work in progress stored internal to the laptop, and using an external disk for backups only.



### RAW ON THE ROAD

#### Is it really practical to process RAW files while travelling?

Yes, and you'd be missing out on a lot by leaving the laptop at home. Spending a few minutes every day to review your photos is a great way to improve your photography, and focus your mind on what you can be doing differently when you shoot the following day. Any work done on the road also helps save even more time once you're home in the real world.

For the last 12 months I've been travelling with a Netbook, as I love to travel light, and while it's no rocket ship I can still do the basics plus demonstrate my RAW workflow to travelling companions. A bright screen and tightly packed pixels are my preference, but having eight hours of battery life is lovely when I'm stuck on an aircraft or a bus all day.

FLASHES RRP: \$270-\$500

# Speedlights

Lisa Perkovic sheds some light on a selection of flashes for situations in the field.



## Canon 320EX

Canon's new entry-level speedlite answers the demands of DSLRs with HD video capabilities.

**RRP:** \$290

**Website:** canon.com.au

The 320EX is set apart by an LED video light designed to help out when shooting movies on HD-capable DSLRs. The feature sets this flash apart from the other speedlites in Canon's range. So does the wireless control option – working on one of four channels for greater control over output levels – which Canon's other new release, the 270EXII, doesn't have.

The flash is compatible with Canon camera E-TTL II systems and has built-in Infrared Remote Release. When used with newer Canon bodies like the EOS 1100D or 600D camera bodies, the video light has an auto light mode for detecting ambient light in Movie mode.

**Package:** The video light adds versatility to this flash – you won't need a secondary, constant light source for shooting HD. **7/10**

**Design:** The 320EX is a similar size to the 580EX II model, due to the additional video light. It has the standard bounce-and-swivel flash head and is a good external flash option. **6/10**

**Performance:** The LED flash guide number is 32, min ISO is 100, flash coverage can be manually adjusted from 24mm to 50mm. **6/10**

**End result:** The 320EX is a result of the new capabilities of HD capable DSLRs. Watch this space for more models. **6/10**

**Overall value:** If experimenting with HD on a DSLR, this flash is a good option. It's a great place to start before getting into more expensive speedlite models. **7/10**



## Nikon SB-700

The new Nikon speedlight is a fast, user-friendly speedlight, replacing the SB-600.

**RRP:** \$499

**Website:** samsung.com.au

Nikon's new speedlight has the brand's i-TTL through-the-lens metering system and the advanced multi-step auto zoom detecting lens focal length before adjusting for angles of view from 24mm to 120mm. There are three different illumination patterns to choose from; Centre-weighted, Even and Standard.

The flash is compatible with all FX and DX cameras, with wireless control options that allow it to be used as a control body for two groups of flashes. The improved LCD interface and additional adjustment switches maximise usability. It has a guide number of 28 (at ISO 100, 35mm on FX cameras).

**Package:** Included built-in bounce card, diffusion dome and external colour filters are great for working in a variety of light conditions. **8/10**

**Design:** A mounting lock lever is easy to use and the body is more compact than it's predecessor, the SB-600. The rotating head offers great versatility and bounce flash shooting. **7/10**

**Performance:** The flash has a high-speed recycling rate of 2.5 seconds with automatic heat detection to prevent burn-outs. **7/10**

**End result:** Advanced technology maximises sync from camera to flash, with great automatic and manual light detection options. **7/10**

**Overall value:** A good speedlight for all photographers looking to experiment with flash and a long-lasting addition to their camera kit. **7/10**

» **VERDICT** » Full-time LED option great for switching between stills and video.

» **RATING** **6.4/10**

» **VERDICT** » Bounce cards and filters a good inclusion. Great for fill-flash needs.

» **RATING** **7.2/10**

**“At 260g, it won't break your back. And at this price, it won't break your budget, either”**



## Sunpak PZ42X

Compact and convenient, the Sunpak PZ42X is a clip-on flash for everyone.

**RRP:** \$270

**Website:** sunpak.jp/English, adeals.com.au

If you're seeking a speedlight that mounts on the Canon, Nikon and Sony TTL light control systems, then this is the flash for you. The Sunpak PZ42X has a standard flash tube housing, a built-in wide panel, LCD display and mode select buttons. Its head rotates 90° upwards, 120° to the right and 180° to the left, allowing flexible flash bouncing. There are seven steps of EV adjustments for +/-1.5EV, with the power ratio also adjustable for seven steps. The Auto Focus Assist Light on the front of the flash works automatically in low light to aid focusing, with a range of 1m to 5m. The flash weighs just 260g, which won't break your back, and at this price, it won't break your budget, either. This is a great addition to your camera kit.

**Package:** Compatible with Canon, Nikon and Sony TTL light control systems, great for photographers with multiple cameras bodies. **8/10**

**Design:** Simple and easy-to-use control buttons work well with a standard external flash unit design. **8/10**

**Performance:** The PZ42X runs on 4 AA battery power and has a recycling rate of approximately 3.5 seconds per frame. **7/10**

**End result:** Adjustable focal length, flash power, flash speed and bounce angle make this a versatile piece of equipment. **7/10**

**Overall value:** A great flash for photographers who need to shoot on the go in a variety of lighting conditions. **7/10**

» **VERDICT** » Serviceable speedlight for shooting a variety of different lighting conditions.

» **RATING** **7.4/10**



## Sony HVL-F43AM

Sony's Alpha camera series has been carving out space. Now there are accessories to match.

**RRP:** \$499

**Website:** sony.com.au

The HVL-F43AM external flash takes over from the HVL-F42AM with a slew of new features designed to bring the lighting system up to scratch with the new Alpha camera bodies. Sony users will be happy to see the Quick Shift Bounce System of the HVL-F58AM in use here. The move away from traditional swivel-tilt systems allows quick, easy adjustments for landscape and portrait positions. The bounce angle adjusts 150 degrees up, 8 degrees down and quick bounces 90 degrees left and 90 degrees right, enabling a good range for shooters with front-mounted flash diffusers. The flash weighs in at 340g, coming in just under the Canon 580 EX II's 405g.

**Package:** Wireless Ratio Control allows the flash system to be used with up to three groups of flashes. **6/10**

**Design:** The Sony hot-shoe clip-on system is quick and easy to use, as is the panel display. Quick Shift Bounce allows greater range of movements that are good for experimenting with flash. **7/10**

**Performance:** The flash has a powerful GN43 output (105mm ISO 100) and a 2.9 second recycling rate. **8/10**

**End result:** With 22 switchable power levels and the Quick Shift Bounce System, this is a versatile flash with lots of options **7/10**

**Overall value:** The price is high compared with Canon's speedlites for its high-end DSLR bodies but if you've got an Alpha camera, you might have some spare change for a flash that'll stand you in good stead. **7/10**

» **VERDICT** » Great entry-level flash for Alpha DSLR users, with the specs for experimentation.

» **RATING** **7/10**

CAMERA BAGS RRP: \$75-\$US200

# Shooting in disguise

Camera bag designers have finally caught on that in some situations you don't want the world to know you're carrying a kit. Lisa Perkovic presents her picks for cloaking your camera in style.



## Acme Made Union Photo Messenger

A bag that takes shooting to the streets, and looks damn fine doing it.

RRP: \$75

Website: acmemade.com.au; maxwell.com.au

Gone are the days of dragging daggy backpacks and roller bags around on a shoot. Satchels and messenger bags are finally starting to turn up and the latest design from Acme Made is big on style. The Union Photo Messenger is designed to blend in – its sleek black fabric and paired-back design definitely doesn't scream "camera bag". You'll still find all the usual camera carrier features, including padded interior dividers and a quick access pocket, but everything is streamlined for a bit more style. The bag is designed for shooting on the go, when you don't want to look like a photographer but still want to be able to carry the equipment to shoot like one.

**Package:** Has space for one DSLR, two lenses and a few accessories, so you'll need another bag for bigger kits. **7/10**

**Design:** The sleek exterior is where attention has been paid; the interior is missing a few more small pockets for memory cards and spare batteries. **6/10**

**Performance:** The over-the-shoulder strap is great for when you've got to move fast. There's also a quick-grab handle on top if you just want to pick the bag up. **8/10**

**End result:** It won't fit your whole kit but will do for short shoots where you don't want the hassle of a big bag that screams "valuables!" **7/10**

**Overall value:** A good price for an entry-level bag that you can use for carrying items other than your kit **8/10**

» VERDICT » For someone who cares more about style than carrying a vast amount.

» RATING **7.2/10**



## Manfrotto Veloce VII

Backpacks have never been so stylish since Manfrotto launched its Veloce range.

RRP: from \$135

Website: manfrotto.com; adeal.com.au

Manfrotto's tripods are world-renowned for quality and consistency, so we've got very high hopes for their range of backpacks and bags. The Veloce VII doesn't disappoint in one very big area – the bright, white bag has clearly been designed with style in mind. It's available in black, but why not try something different? It fits a DSLR with 70-200mm lens attached in the main camera compartment and has space for three lenses, a flash, accessories, laptop and even a tripod. Like a Lowepro Fastpack, the bag opens from the back but also has a top-loading option with an entry flap on top.

**Package:** Plenty of pockets for pens, memory cards, mobile phones and card readers alongside your camera body and lenses. **8/10**

**Design:** You either love or hate bags that open from the back. Side access to the camera compartment wouldn't go astray. **6/10**

**Performance:** The back has plenty of space for your kit but it's a shame there's no separate top section. **7/10**

**End result:** It's great to see there's space for a tripod inside the bag – everything is contained inside so the outside stays sleek and clean. **8/10**

**Overall value:** Bags designed with style in mind are great value as they can be used not just to carry your camera kit. The snow-white Manfrotto Veloce VII would turn heads anywhere. **8/10**

» VERDICT » Super sleek, but we have to wonder how long it would stay white...

» RATING **7.4/10**

**“You'll get a lot of use out of it, even if you use it as a normal bag. For a designer product, this is a bargain”**



## Kelly Moore Mimi

Beautiful bags in their own right, the Mimi makes shooting chic.

RRP: \$US200

Website: kellymoorebag.com

Photographer, mum and entrepreneur Kelly Moore Clark is bringing luxury to camera bags with her range of colourful and seriously stylish bags. The Mimi bag is available in black, lavender and grey, and holds a DSLR with lens attached, two additional lenses, two speed lights and any other stuff you care to cram into the pockets. There are five adjustable dividers and the entire interior is padded. The best part is this bag looks like a normal handbag – and a designer one at that. Attention to detail is impressive, from antique brass buckles and zippers to the use of water-resistant materials.

**Package:** A substantial kit can fit in this bag, you'll only be limited by how much weight you can carry on your shoulder **9/10**

**Design:** The central pocket is nice and wide, making it ideal for carrying and easily accessing a DSLR. **9/10**

**Performance:** The bag handles are a perfect length for carrying on your shoulder or arm. There's also a longer cross-body strap that makes shooting with the bag on easy. **9/10**

**End result:** A great product for a niche that's in need of attention, this bag is perfect for someone who wants to shoot in style. **10/10**

**Overall value:** There's no way to tell this is a camera bag, so use it as a normal, everyday handbag or to carry your kit and you've got your money's worth. **10/10**

» VERDICT » Moore has thought long and hard about what female shooters want.

» RATING **9.4/10**



## Epiphanie Clover

Ladies: searching for a camera bag that's a style revelation? You're about to have an epiphanie.

RRP: \$US185

Website: epiphaniebags.com

"Liberating stylish women from the man bag" is their motto, and Epiphanie has certainly had a brainwave with its range. Designed to be functional without sacrificing on looks, these bags are bold and beautiful. Clover is a tote-sized shoulder bag with great detailing, including braided straps and silver buckles and studs. The bag comes in bright red, aqua and a more sombre black. Photographer Maile designed this bag to be fun, practical and versatile. It holds a 15-inch laptop, DSLR with lens attached, two additional lenses and a bunch of accessories.

**Package:** You can fit a good-sized kit in this bag but might be limited by the number of adjustable velcro panels. **7/10**

**Design:** With two exterior pockets and one internal pocket, the bag could use a few more spots for smaller items but otherwise is great for a basic kit. **7/10**

**Performance:** The longer cross-body strap is a good addition and makes life easier when shooting, but the bag is quite big and an awkward shape to be slung across your back. **7/10**

**End result:** A beautiful bag that works well as a basic kit bag, the Clover is great for short shoots where style matters. **8/10**

**Overall value:** You'll get a lot of use out of it, even if you use it as a normal handbag. For a designer product, this is a bargain. **9/10**

» VERDICT » Great for looking good, the Clover isn't the easiest to carry, but is perfect for outings.

» RATING **7.6/10**