

DIGITAL CAMERA RRP: \$2799 with kit lens

The Grown Up Alpha Sony A77

More pixels and an improved electronic viewfinder give Sony users a reason to consider upgrading, writes **Ewen Bell**.

AT THE CENTRE OF THE SONY A77 is a 24.3MP Exmor sensor with a 1.5 crop factor and the unique Translucent Mirror Technology that Sony have adopted to set their cameras apart from all others. Almost every aspect of this camera is an upgrade from previous versions of the Alpha range, from the magnesium alloy build to a new and more powerful BIONZ processor.

Comparisons on the basis of pixels would miss the real strengths of the A77, and indeed the packing in of 24 million of them is excessive for

this sized sensor. This won't be the Alpha that convinces hordes of Nikon and Canon users to trade in their lenses, but lots of innovative features designed to appeal to enthusiasts and some glossy specifications make this the best Alpha Sony have built to date.

Button up

As Sony's SLT range matures, we're seeing more controls appearing on the outer body of the cameras, which makes life tricky for the designers. The sheer number of buttons, dials and job wheels on the A77 is a little

daunting, partly because the articulated rear screen adds bulk and partly because the EVF necessitates a few extra controls.

Front and rear job dials perform unique functions when shooting in different modes, and a large exposure dial on the left makes nice positive steps through the featured exposure options. This is where you can jump from shallow depth of field work in aperture priority to the highly effective Sweep Panorama that Sony perfected in the NEX series.

Buyer's advice
Kits this reasonably priced typically indicate a dip in lens quality. Not this time: the 16-50mm f/2.8 kit lens is excellent.

“Innovative features and glossy specs make this the best Alpha Sony have built”

A dedicated external flash connector sits above the viewfinder, with a rubber shoe to protect the metal connectors. Another flash cable connector is included on the left side where all the usual ports are recessed into the body. HDMI, remote release, stereo microphone input and DC power are found here too, along with the built-in GPS unit. This worked very quickly in the field and it never hurts to have your photos geotagged for future reference.

The articulated rear screen is large and useful for shooting at awkward angles, but the 4-way controller that delivers most of the on-screen mobility is something of a loose cannon. A more common feature on Sony gear these days is the digital spirit-level, which is quick to access and could be very useful for tripod work.

The autofocus mode selector is peculiarly pitted beneath the lens with a dial that protrudes at 45 degrees from the body. It looks like something of an afterthought, as though the engineers were told at the last minute to pull that feature out of the menu system and give it direct access. Nikon have struggled



FAST ACCESS

The top LCD screen is useful to users who learn the dials properly and want quick access to features like ISO and drive modes.

ALPHA KIT QUALITY

The new 16-50mm f/2.8 lens is an excellent choice for the system, giving a good measure of wide-angle ability and shooting a little beyond the standard field of view.

to get this feature out of harms way, with a solution that gets flicked and reset as you drag your camera out of a bag. The A77 won't suffer that fate because the dial is a little too tricky to roll and won't get knocked so easily.

The top LCD screen is useful to users who learn the dials properly and want quick access to features like ISO and drive modes.

Auto ISO has been partially implemented on the A77, offering the ability to set the ISO range but not minimum shutter speed. Neither can you employ Auto ISO in manual exposure modes. For wildlife shooters who want to lock the shutter and aperture to suit conditions, the ability to float the ISO to achieve the right exposure is very desirable. It's an opportunity missed by Sony to make the most of the high burst modes and accurate autofocus system.

The right lens

The new 16-50mm f/2.8 lens is an excellent choice for the system, giving a good measure of wide-angle ability and shooting a little beyond the standard field of view; 50mm on this camera is effectively 75mm, which is not a major telephoto

BIG FEATURES INSIDE THE A77

- » 2.4million pixels and on OLED display in the EVF
- » Shutter rated for 150,000 frames
- » Multi-shot features for enhanced ISO or dynamic range
- » Digital processing correction for lens aberrations
- » Custom programming of buttons and Memory Recall on the shoot dial
- » Built-in GPS
- » LCD panel on top of body
- » Micro adjustment function for Autofocus
- » Magnesium Alloy construction
- » Image stabilisation built in to the sensor design



LITTLE BROTHER

The Alpha A65 falls just short of the A77 in a number of ways, including: fewer frames per second; slightly less sturdy build; minimum ISO not as low; fewer autofocus points; slower max shutter speed; and no top LCD.

■ The Alpha Dog
The A77 (right) represents the pinnacle of Sony's SLT technology

» DETAILS

Manufacturer: Sony

RRP A77 with 16-50mm f/2.8: \$2799

RRP A77 body only: \$1899

Website: sony.com.au

Sensor: APS-C sized CMOS at 24.3MP

Viewfinder: Electronic "TruFinder" OLED with 1024x768 display

Display: 3" TFT with 920,000 pixels

Sensitivity Range: 100-16000 ISO

Lens: f/2.8 16-50mm lens (equivalent to 24-75mm)

Weight: 653g (body) + 577g (lens)

Media: SD/SDHC cards

» VERDICT

Pushing the technology limits in the A77 has resulted in a camera that produces pixels in favour of performance. The highlight of this bundle is the 16-50mm f/2.8 lens, a fast zoom that can make the most of the high density APS-C sensor.

» RATING

8/10



WORK THE ANGLES

The articulated rear screen is large and useful for shooting at awkward angles.

length – but you certainly have what you need for street photography and portraits. This lens also holds a maximum aperture of f/2.8 through the range, so there's a bit of quality in the lens build.

Most buyers of the APS-C sized DSLR cameras are shopping on a budget, and the manufacturers have tended to ship budget lenses in the bundles to keep the sticker price to a minimum. This 16-50mm f/2.8 from Sony breaks that pattern and offers buyers a quality lens that matches the sensor. One of the trade-offs to building an affordable lens with better optics was the pump-action zoom design, a compromise that means owners will have to be wary of sand and condensation.

“With a little practice, the tracking focus can be a very useful tool”

FIRMWARE WISE

EDITOR'S NOTE: This review was based on an early production-line model with firmware v1.04, after upgrading our unit from v1.02. If you've read poor reviews on the earlier firmware revisions, you'll be pleased to know that the v1.04 update removed a lot of severe bottlenecks when filling the buffer with fast frames.

SENSOR SIZE

Sony's range of SLT cameras uses the APS-C sized sensor, which is about half the size of a full-frame DSLR. The majority of DSLR cameras on the market use a similar sized format. The APS-C sensors effectively crop the image projected by a regular SLR lens, so that your 16mm wide angle offers a 24mm perspective.

f/13, the camera suddenly sounds like a golf-ball typewriter. Internally the shutter mechanism has to close down the aperture to complete the shot. The autofocus system can't operate at f/13, so shooting in continuous bursts throws the lens aperture back to f/3.5 in between exposures.

Features like smile detection, face registration and tracking focus offer a few more options for enthusiasts. Using the 4-way controller, you can trigger the tracking focus before re-framing your shot for depth and perspective. When you think you have it right, tap the shutter and watch the tracking focus lock in on the same object you originally targeted. A floating box highlights where the system is tracking, so you know that it has correctly picked your Aunt Gemima instead of the pooch.

HIGH-DEF VIDEO

The A77 with 16-50mm kit provides excellent options for shooting video, as the A77 excels with full-time autofocus and a wide range of HD frame rates.

TRACKING FOCUS

19 focus points are used to enable you to target, lock and track moving subjects within the middle 50% of the frame.



Nineteen focus points are employed to make the magic trick work, but you still need your tracked subject to be inside the middle 50% of the frame, because that's where the focus points are. With a little practice this can be a very useful tool that anyone can master.

Speed freaks

Tracking focus on the Alpha under the right conditions will keep your subject sharp during high-speed continuous shooting, aided by 19 focus points weighted towards the centre half of the frame. The top speed in continuous mode is an impressive 12fps. You have to be shooting in Continuous Advance Priority Auto Exposure mode in order to access the top frame rate, otherwise the high speed option drops down to 8fps.

Continuous Advance Priority AE is a very long name that's handled by a very small icon. Just look for the number "12" on the exposure dial. You can jump from your regular shooting mode directly into Continuous Advance Priority AE with one hand – no need to reset your single shot preferences – and you can use it in manual focus if you desire.

What you can't access at this speed is an f-stop above f/3.5, a limitation of the autofocus system that is somewhat starved for light. This is another reason the 16-50mm f/2.8 lens is packaged with the A77, because it delivers wide aperture shooting through the entire focal range. On a cheaper zoom lens that can't open to f/3.5, you can expect a performance hit on both the autofocus and high-speed modes.

As always, the best advice here is to avoid putting a cheap lens on a good camera.

Shooting 12fps is very, very fast, and even if you want more flexible exposure options the 8fps standard is excellent too. The only problem with all this abundant speed is the staggered rendering of the EVF. Unlike an optical viewfinder, the image you're looking at during the burst mode is a effectively a review of what you just shot rather than what the shutter is about to hit. For subjects on the go, it means that you're unable to frame up with confidence.

The other limitation on the A77 speed performance is duration. At the maximum frames per second you'll get 1.1 seconds of shooting before the buffer fills up, and the purging from camera to card in this instance is slower than usual. Worse still, the camera itself freezes while the processor sorts out a few priorities, so you lose responsiveness from dials and menu controls until the buffer is finished.

Sony are touting the SLT technology as a way to achieve faster burst modes and

HOT SHOE SHUFFLE

A dedicated external flash connector sits above the viewfinder, with a rubber shoe to protect the metal connectors.



“The autofocus system might be able to track the subject, but can the photographer?”

quicker autofocus. The absence of a mirror bounce no doubt improves the reliability of the mechanism and hence the durability of the camera when compared to conventional DSLRs. The limitations on autofocus to wide apertures compromises the real value of the 12fps specification – not to mention the practicalities of tracking a fast-moving subject through the electronic viewfinder.

The autofocus system might be able to track the subject, but can the photographer?

When shooting 24MP worth of data in every frame, the real limit to speed is not the mirror design, it's the flow of data from sensor to card. Having more pixels simply reduces the length of your burst mode and slows down the purge of captured images onto the SD card. Unfortunately, bigger is not always better, and it can be tiresome waiting for the camera to return to normal operation in between bursts of frames.

TOP SPEED

In order to hit 12fps the A77 users must select the Continuous Program Advance Priority AE mode, which effectively locks the aperture very wide open. The autofocus system cannot operate effectively at apertures narrower than f/3.5. In normal continuous shooting, with the speed set to Hi instead of Lo, you get a very healthy 8fps. The A77 bounces the shutter in and out of your selected aperture in order to feed the autofocus.

CLEAN SCENES

Sensor cleaning on the A77 has been upgraded to a lower frequency that is silent to human ears. Assuming the sensor cleaner also performs better than previous Alpha models, there's still the Translucent Mirror that needs manual cleaning. Dust spots here are slightly more obvious than dust on the rear of your lens. Not the end of the world, but not great.

WHAT WE THOUGHT Love it:

- ✓ Solid build quality and more than enough pixels for an APS-C sized sensor.
- ✓ Kit lens 16-50mm f/2.8 makes the most of the camera's abilities.

Like it:

- ✓ Sweep Panorama and Multi-Shot NR modes make full use of the BIONZ processor.

Loathe it:

- ✗ The electronic viewfinder is a love or hate proposition.
- ✗ The top speed of 12fps has serious limitations for serious use.

“As images fly off the sensor, the BIONZ processor fine-tunes JPEG files to their maximum potential”

Packed and processed

One thing the A77 does very well is digital processing. As images fly off the sensor, the BIONZ processor fine-tunes JPEG files to their maximum potential. The high pixel density and 30% reduction of light through the SLT technology puts a lot of demands on noise suppression. Sony have got some very effective algorithms in place to clean up the digital signal and deliver a good image. This becomes most

apparent when you switch to shooting RAW and examine the files back on the desktop.

The hard work being handled by the camera when shooting RAW becomes a burden for the photographer instead. As the light levels drop the image quality falls too, and the limits of the APS-C sized sensor jam packed with pixels starts to show.

RAW shooting is not an option if you want to employ the “teleconverter” function of the A77.

SIZE MATTERS

The A77 packs 24.3MP into a sensor half the size of the 18MP Canon 1Dx, and with the fast 16-50mm kit lens, you can get some value from those 24MP RAW files provided you leave the aperture wide open. We shot the scenes below on a bright and sunny day at f/2.8 (left) and f/13. The comparison was clear: superb levels of detail and crispness to the f/2.8 image, but an obvious defocused appearance to the f/13 version. The smaller sensor in the Sony effectively magnifies the effects of diffraction.

BUTTON UP

Front and rear job dials perform unique functions in different modes, while a large dial steps through the featured exposure options.



■ 16-50mm test I
Shot with the Sony A77;
1/1600sec; f/2.8; ISO 100;
focal length 28mm



■ 16-50mm test II
Shot with the Sony A77;
1/100sec; f/13; ISO 100;
focal length 28mm

TOTAL RECALL

The A77 features very handy custom programming for its buttons, as well as Memory Recall on the shoot dial.



OPTICAL VERSUS DIGITAL: THE SLT DEBATE

The defining difference between the Alpha range and every other DSLR on the market is the OLED Electronic View Finder (EVF), which Sony call their “TruFinder”. Fans of the EVF point out the ability to compose in low light, overlay data while composing, and access menu systems. Optical fans will point out the jaggy movement from lag and digital rendering of natural light. EVF is a necessity once you remove the reflex mirror of an SLR camera. The upside for the Sony is constant autofocus abilities even under live-view or video. The downside is that you lose 30% of your light to the autofocus system, which has to be recovered later on by amplifying the digital signal.

LET THERE BE LIGHT

The A77’s OLED (organic light-emitting diode) electronic viewfinder is a world-first that let’s you assess white balance and other data in real time.

There are no optical mechanics behind this feature; instead, you’re getting a cropped image as some of those 24 million pixels are tossed on the heap. You get a 12MP image at the first stage and 6MP at full “extension”. Sony are effectively making use of the EVF to crop in-camera, instead of cropping when you get back home.

Another innovative use of the processor and EVF is the Multi-Shot Noise Reduction, tuned up to deliver multiple frames in quick enough succession to negate the need for a tripod. This “Twilight” mode makes use of the fast capture rate and processing power to get a better shot than if you relied on high ISO settings or very slow shutter speeds. Again, this feature is limited to JPEG shooting but will be a neat trick for enthusiasts.

The electronic viewfinder on the A77 is an improvement on early versions in the Alpha series, but the additional speed and pixels still don’t overcome that feeling of disconnect. Moments of lag between activating the viewfinder, while your eye is peering into a black hole, detract from the illusion of replicating a genuine optical viewfinder. The inability to accurately follow subjects while shooting in high speed bursts negates the major technical achievement of the system, capturing 12fps at a resolution of 24MP.

Conclusion

Out of the box the A77 feels solid and robust, a good size for a DSLR and more comfortable than its smaller siblings. This camera should appeal to existing Sony users who are looking for a more mature camera and something substantial in their hands. The 16-50mm is the perfect fit and ensures you can use the best features of the A77. Shooting at 12fps sounds more impressive than it really is, but other features on this camera make it a great option for enthusiasts.

SOLID PERFORMANCE

The Sony A77 has a sturdier build than its predecessors, with a magnesium alloy body and dust and moisture protection.



PORTS OF CALL

Spare flash cable port, HDMI, remote release, stereo microphone input and DC power are found here, along with a built-in GPS unit.

“12fps is very, very fast, and even if you want more flexible options the 8fps standard is excellent”

DIGITAL CAMERA RRP: From \$949 with 18-55mm

The Next Sony NEX

Big features in small packages put the E-mount systems in a class of their own, writes **Ewen Bell**.

SELLING AT A BUDGET PRICE and bursting with features, the Sony NEX cameras offer an interesting alternative to the DSLR format. The two latest models represent a fine-tuning of a format that already works well. Interchangeable lenses, an APS-C sized sensor and a comprehensive range of operational modes give the NEX range the feel of a DSLR without the size or weight.

» DETAILS

NEX-5N

Manufacturer: Sony

Website: sony.com.au

RRP: \$949 for NEX-5N with 18-55mm lens

Sensor: APS-C sized Exmor CMOS at 16.1MP

Processor: BIONZ

Display: 3" TFT with 920,000 pixels

Sensitivity Range: 100-25600 ISO

Weight: 269g (body only)

Image quality is a feature on the NEX-5N and 7 and RAW file support adds some genuine flexibility to match the hardware. Sony developed the E-mount lenses specifically for this range of cameras – a compact specification that does away with the conventional SLR mirror, translucent or conventional. This gives engineers a shorter projection path to tinker with and hence more modest sized lenses.

Sony have designed such compact camera bodies that almost every lens looks monstrously big attached to the sensor. The 16mm “pancake” lens, however, fits the format perfectly, a slim profile and effectively 24mm of SLR wide angle. These are serious alternatives to the Fuji X100 and Leica X1, with the same sized sensor and a host of features for less money.

THREE CHEERS FOR 5N

Ultimately, the Sony NEX-5N is my pick of the NEX series, because it's the most compact and has been stripped of all but the most necessary controls.

“The NEX range has the feel of a DSLR without the size or weight”

At the controls

The menu interface on both NEX models is almost the same, offering a range of features that are in line with the Alpha SLT range but presented in a very different user interface. Six icons descend into the various detailed options, but the result is confusing at first and requires some getting used to.

Locating where to disable autofocus and switch to manual mode is not intuitive, for example, and on the NEX-7 there's a dedicated toggled button for AF/MF modes that's ignored once you set manual focus in the menu. Even simple tasks like changing the ISO settings become a tedious process. The NEX-5N has the advantage over the NEX-7 with touch-screen controls.

The menu system on the NEX range is probably its least appealing feature. I've watched many NEX owners struggle through the menu system looking for specific functions and end up wrestling with the dial mode. It's not an intuitive interface. The touch screen mode on the NEX-5N definitely improves the user experience, but you'll want to set up the camera in your preferred mode and try to stay out of the menu as much as possible.

» VERDICT

The NEX family offers two models each with their own character and appeal. If you're looking for a flexible format that mimics DSLR shooting modes, the NEX-5N and NEX-7 will reward with good image quality at an affordable price.

» RATING **9/10**



CLUTTER FREE

The NEX-5N is more than a snap-shooter and less than a DSLR, with lots of features hidden inside and very few dials to clutter the outside.

TOUCH FRIENDLY

While the menu system on the Sony NEX range may be its least appealing feature, the NEX-5N has the advantage over the NEX-7 with touch-screen controls.

User friendly features

Accessing features like the Sweep Panorama will need a little practice, but are worth the effort. This is one of the best executions of panoramic stitch on the market. Simply hold down the shutter and swing the camera through 180 degrees of scenery, maybe even 270 degrees if you're lucky. Each JPEG frame is analysed and stitched into a long panorama shot within seconds. When you preview the Sweep Panorama images, the NEX pans the image across your screen, which makes for impressive presentations.

An easily overlooked feature, nested inside the Scene Modes of the user interface, is the Twilight shooting mode (right). This is basically a multi-shot system that grabs a series of frames and realigns them to remove hand shake and discount sensor noise. The results are impressive and very useful for snap shots after dark.

In low light you get a little hunt from the autofocus system on the NEX models. Unlike the Alpha SLT range, these bodies use Contrast Detection instead of the more advanced Phase Detection. In most situations the difference is not obvious, but you never forget that this is a very compact system and not a super-fast DSLR.

Hidden inside the camera firmware is a new feature designed to squeeze maximum image performance out of the E-mount lenses. Three aspects of lens aberration correction are implemented to match the unique characteristics of each lens design: Chromatic Aberration, Vignetting and Distortion are separately analysed and adjusted with each JPEG capture. You can selectively disable these corrections in the menu if you prefer, but RAW files don't benefit from the technology.



■ **Multi-shot HDR**
Shot with NEX-5N; 30mm f/3.5
Macro lens; 1/30sec; f/4; ISO 800;
handheld in Twilight Mode

NEX-5N HOT FEATURES

- » 16MP sensor is about perfect for this sized system
- » Touch screen controls are excellent
- » Articulated rear screen is sharp and useful
- » Electronic first curtain shutter
- » Lens aberration correction
- » 1080 60i/p video capture

Big daddy NEX-7

Inside the NEX-7 is a lot like the earlier versions, but on the outside it's a whole new camera. Larger and chunkier, it loses a little of the miniature charm of the NEX-5, looking like a scaled down DSLR instead of an over-stuffed NEX. It's got a lot more buttons, some more useful than others, but lacks the touch screen and multi-function port. A nifty flash unit leaps into action at the press of a button,



■ **Sony NEX-5N**
Complete with its gorgeously compact 16mm “pancake” lens



■ **Macro gold**
Shot with NEX-5N; 30mm f/3.5
Macro lens; 1/60sec; f/3.5; ISO
1000; focal length 30mm

plus a hot-shoe mount lets you add serious flash gear if you need it.

The power switch on the NEX-7 faces the front and feels intuitive to toggle on or off. It's the opposite of the NEX-5N, which takes a little getting used to. Two independent jog dials are paired on the rear, well placed for easy access with your right thumb. As you switch shooting modes, the function of these dials changes behaviour.

An additional unmarked button sits next to the shutter and activates a range of controls

for adjusting colour modes, white balance, dynamic range functions, bracketing, exposure compensation and focus modes. It works in tandem with the equally stealthy jog dials, and proves a quicker way to fine-tune your imaging style instead of delving into the user interface on the rear screen.

An interesting addition to the external controls is a toggle that embraces a button for grabbing exposure lock or toggling the autofocus. Like the bigger Alpha SLT range, the manual focus mode uses peaking

“These are serious alternatives to the Fuji X100 and Leica X1, for less money”

to highlight on screen where your focus is good. Combining these functions is innovative and effective.

With a 3.0" screen behind the E-mount, there's very little room to start adding lots of dials and buttons, so getting the most from each dial is essential. Side ports on the camera body to access USB, HDMI and microphone slots are hidden behind nicely designed flap covers. This is an upgrade from the less sturdy, but adequate, version on the NEX-5N.

Following through on a different design brief compared to earlier NEX models, the NEX-7 has an electronic viewfinder in addition to the rear screen. This is a similar setup to the SLT range of Alphas and borrows the same technology. A sensor detects when your eyes are peeping through the EVF and diverts the screen output to the viewfinder. There's even a little dial control to adjust the diopter of the viewfinder, to cater for varying levels of eyesight.



■ **Solid State**
Of the two NEX models, the NEX-7 is of a slightly sturdier, chunkier build – and so feels more like a cut-down DSLR.

■ **Sony NEX-7**
A near-perfect marriage of style and substance

» DETAILS	
NEX-7	
Manufacturer: Sony	
Website: sony.com.au	
RRP NEX-7 with 18-55mm lens:	\$1699
Sensor: APS-C sized Exmor CMOS at 24.3MP	
Processor: BIONZ	
Display: 3" TFT with 920,000 pixels	
Viewfinder: Electronic OLED 1024x768 display	
Sensitivity Range: 100-16000 ISO	
Weight: 353g (body without lens)	
Media: SD/SDHC cards	

Mighty small NEX-5N

This is my pick of the NEX series, because it's the most compact and has been stripped of all but the most necessary controls. Specific features listed on the NEX-7 are not found on the smaller, cheaper model, such as the AF/MF selector, dual dial switches and built-in EVF.

Even flash is seen as optional rather than essential, with an external module that clips into the multi-function port. The same multi-function port that accepts the flash head can be used to slot an optional EVF unit

that replicates the EVF of the NEX-7, although not nearly as elegantly integrated.

One thing the NEX-5N features that the NEX-7 does not is a touch screen. This makes the user interface work a little better, and makes rummaging about in search of a feature much less annoying. This adds much value to the camera, especially given the modest price tag.

HDMI and USB ports are tucked into the side of the body, while the memory card slot is hidden next to the battery. The top of the camera reveals only the shutter, power switch, preview button and

movie trigger. If you want more buttons than that you'll have to look at the bigger NEX-7.

Conclusion

To me the NEX-5N represents what the E-mount system is all about, a good size sensor with nice lenses and a very compact form factor. This is more than a snap-shooter and less than a DSLR, with lots of features hidden inside and very few dials to clutter the outside. At 16.1MP it offers more pixels than the optics can match anyway, and looks far more sensible than the 24.3MP specs of the NEX-7.

Lenses

Sony 30mm f/3.5 Macro

THIS LENS ADDS an excellent macro option to the NEX camera series. On the APS-C sized Exmor sensor the 30mm Macro lens is effectively a standard lens, just short of a 50mm focal length. This means it's a useful general purpose lens for portraits, urban scenes or food photography. It's main feature is getting up close to very small objects, extremely up close in fact.

Used in conjunction with focus peaking you get very fine control over what is invariably a world of narrow depths of field. Autofocus on the NEX series works well with this lens too, so you can be very lazy with your photography and move freely from still life to macro life. To get the maximum macro you have to get so close that the lens blocks out most available light. There's a reason why most macro lenses are built closer to a 100mm focal length instead of 30mm, and this is it.



» DETAILS	
Manufacturer: Sony	
Website: sony.com.au	
RRP: \$399	
Focal Length: 30mm equivalent to 45mm on a full frame DSLR	
FOV: 50.4 degrees	
Elements: 6 groups, 7 elements (3 aspheric surfaces)	
Dimensions: 62mm diameter and 55.5mm deep	
Filter Thread: 49mm	
Weight: 138g	

Sony 55-210mm f/4.5-6.3

THIS TELEPHOTO ZOOM is a slow lens with moderate performance. If you really need a telephoto for your NEX camera, then you either buy this one, or get the A-mount adapter and shop from the Alpha SLT range of lenses.

You don't get autofocus with the A-mount adaptor, however, so you're stuck without fast focus ability either way.

The lens itself is much larger than the camera body, but includes an optical image stabiliser to help reduce camera shake at long focal lengths.



» DETAILS	
Manufacturer: Sony	
Website: sony.com.au	
RRP: \$499	
Focal Length: 55-210mm equivalent to 82.5-315mm on a full frame DSLR	
FOV: 28.8 degrees – 7.7 degrees	
Elements: 9 groups, 13 elements (2 aspheric surfaces)	
Dimensions: 64mm diameter and 108mm deep	
Filter Thread: 49mm	
Weight: 345g	

Sony 16mm f/2.8

THE 16MM PANCAKE LENS is the best of the E-mount bunch, offering a decent f/2.8 wide open aperture – plus it's by far the smallest and most compact.

When mounted onto the NEX cameras, the 16mm f/2.8 effectively delivers 24mm of wide angle.

If you can live without zoom and just want compact quality, this lens makes the NEX easy to pack – with image quality comparable to smaller DSLR models.



» DETAILS	
Manufacturer: Sony	
Website: sony.com.au	
RRP: \$349	
Focal Length: 16mm equivalent to 24mm on a full frame DSLR	
FOV: 83 degrees	
Elements: 5 groups, 5 elements (1 aspheric surfaces)	
Dimensions: 62mm diameter and 22.5mm deep	
Filter Thread: 49mm	
Weight: 67g	

Tamron 18-200mm 3.5/6.3 DI III VC

YOU COULD BUY a very nice NEX camera for the price of this lens, but it will allow you to replace two lenses for one. Covering the full range from 18mm to 200mm, the Tamron option starts at a respectable f/3.5 aperture and dims a little at the telephoto end to f/6.3.

Tamron offer their own Vibration Control (image stabilisation mode) for this lens, something of a necessity with such a light shooting rig combined with long focal lengths.

The stepping motor that drives the autofocus is well matched to the contrast detection system of the NEX series, allowing for quiet and snappy focus lock. The minimum focal length is pretty good too, allowing for close-up photography a step back from the macro level.

Choice of silver or black is available to match with your NEX body.



» DETAILS	
Manufacturer: Tamron	
Website: tamron.com.au	
RRP: \$849	
Focal Length: 18-200mm equivalent to 27-300mm on a full frame DSLR	
FOV: 76.3 degrees – 8.1 degrees	
Elements: 13 groups, 17 elements	
Dimensions: 68mm diameter and 97mm deep	
Filter Thread: 62mm	
Weight: 460g	