

Ansmann in Total Charge

John Henshall takes a close look at the most important aspect of digital imaging – battery power

Are you old enough to remember the days when SLR cameras were purely mechanical devices and exposure meters had photocells which generated their own electricity to move their pointers?

My Pentax S1 camera and Weston Master V were such devices. I never had to think about batteries – they were for torches and the lights on my bike. That was all.

In this digital age just about everything seems to need electrical power. And today all our portable equipment needs this power in battery form.

If there was just one kind of battery, which powered every piece of electronic photographic equipment, things would be much simpler. But there isn't, and the number of different types of battery seems to grow each time there's a new piece of equipment.

Have you ever stopped to consider why this may be?

It wouldn't take too cynical a person to imagine that it might be because the profit made from camera-specific batteries is well worth having.

In fact, if you look at the tumbling prices of DSLR cameras these days, things are similar to the sale of razors.

You can now get a DSLR from under £400, or a DSLR kit with a basic zoom lens for around £450. This is very much like buying that fancy razor with just three blades to get you hooked, er, I mean started.

The razor handle is almost free. It's the replacement blades that they make the money on. And they're expensive.

Photography used to enjoy a similar model. The photographic 'razor blades' were the film and chemicals. But digital



Ansmann's versatile Digi Charger Plus

has got rid of those consumables. It's like a razor that never goes blunt.

So what can the manufacturers make their money on now?

Accessories, that's what.

Look at the price of lenses for your new DSLR. Good lenses will cost more than the camera itself. And it's not just lenses that you'll need.

How long will the battery for your new DSLR last between charges? Are you sure you believe what the manufacturer says? Could you really chance working for a whole day with the one and only battery supplied with the

camera? Of course not.

A DSLR without battery power is as useless as a car without fuel.

So you have to buy more batteries – and more chargers for them, unless you don't mind setting your alarm to wake you every couple of hours throughout the night to change over the batteries as each one becomes fully charged.

There's little alternative to buying extra chargers because all your batteries must be charged by morning. And, of course, you'll need a multi-way adaptor for the mains, so that you can plug them all into that single hotel power outlet.

You need all this for every piece of equipment which uses a different battery. These days, that means most.

And have you ever forgotten to pack the charger for that one piece of equipment with the 'unique' battery? I know I have.

It's times like that when you realise how wonderful it is to have a Fujifilm FinePix S1 or S2 or S3 Pro which uses bog-standard AA-size cells. At least you can still get by because you can easily buy disposable AA batteries anywhere.

Other manufacturers deride the use of AAs, saying that they don't deliver sufficient power. Well, I can tell them that I've never had a problem.

Years ago the Kodak DCS200 had four rechargeable Nickel Cadmium (NiCd) AA batteries which each had a capacity of 600mAh. That's 'Milli-Ampere hours' or 'mAh' – a measure of how much charge capacity the battery will hold.

NiCd batteries suffered from a 'memory effect', which meant that – if you didn't fully discharge them before re-charging them – they wouldn't accept a full charge and 'thought' they were full when they weren't. So re-charged batteries failed after a very short time.

Then Nickel Metal Hydride – NiMH – rechargeable batteries came along, with no memory effect.

I was delighted to find these in the amazingly high capacity of 1150mAh at Radio Shack in the US. Wow. That was almost twice the capacity of those pesky old NiCds.

Another consideration against NiCds is that they are one of the least environmentally friendly cells you could find. If you have any left, it's time you replaced them now. They have already been banned in some countries, just as the use of Cadmium (yellow) was banned in paint some years ago.

NiMH batteries aren't toxic and have a much higher capacity than NiCd. Their only disadvantage is that they slowly lose their charge if not used. This means that they are best suited to high-drain devices – such as digital camera equipment – rather than devices such as remote controls or smoke alarms, which have very low power requirements over a very long period.

NiMH battery capacities have increased year on year. Four years ago I discovered Ansmann 2000mAh AA cells from www.digibattery.co.uk and found these batteries – and the associated Ansmann chargers – to be the best, most professional I could find on the market.

Over the past few years, Ansmann has

increased capacities until it now has 2700mAh AA cells – that's four and a half times the capacity of those NiCds in the Kodak DCS200.

I don't know where the increases in capacity will end. Perhaps when the casing would become too thin and weak to permit a further increase in the volume of the innards?

Ansmann also produces 1000mAh cells in the tiny AAA size.

Other battery types include Lithium Ion – Li-Ion – rechargeable. These should not be confused with Lithium batteries, which are non-rechargeable being a completely different technology.

Li-Ion are sometimes used as camera-specific batteries. They are often flat or rectangular in shape. Although they have very high capacity-to-weight ratios their main disadvantage is high cost.

So we have NiCd, NiMH, Li-Ion all in different shapes, sizes and voltages. And every battery type needs its own dedicated charger, right?

Well no. That's not right.

Ansmann's **Digi Charger Plus** will charge over a hundred different types of battery, including AA, AAA and cameras from Canon, Casio, Fuji, JVC, Kodak, Konica, Kyocera, Leica, Minolta, Nikon, Olympus, Panasonic, Pentax, Polaroid, RCA, Ricoh, Samsung, Sanyo, Sharp, Sony, Thomson and Toshiba.

Not all at once, of course, but all of them can be charged using just one Digi Charger Plus model.

This is a truly remarkable product. It comes with both mains and car power adaptors and two battery adaptor plates which clip to the base unit to allow the wide range of batteries to be recharged.

One clip-on adaptor plate is for four AA (Mignon) or AAA (Micro) cylindrical cells, the other is for rectangular Li-Ion 3.6–7.4 V packs.

The unit automatically detects what type and Voltage the battery is and sets the charging accordingly. The user does not need to set anything.

When the charger has detected the battery, it emits a single long 'beep' sound and charging commences. A green LED flashes to indicate that charging is in progress. The yellow LED indicates the Voltage of the battery.

When charging is completed, the green light becomes steady and the unit emits three 'beep' sounds. Ansmann recommends that the battery is left in place for a further thirty minutes to receive a full top-up charge at the end of the fast charge period. In fact, batteries can be left in place until they are

required, without risk of damage. A safety timer switches the unit off after approximately eight hours.

If a problem is detected, the red 'Power' and green 'Charge' LEDs flash continuously, indicating either a faulty battery or one which cannot be charged.

The charger uses the best Ansmann charging techniques, as used in the larger charger units – Delta V for NiCd and NiMH, V Max for Li-Ion. The unit protects batteries from overcharging – essential to ensure battery longevity.

The Ansmann Digi Charger Plus is a design miracle. With a multitude of gold pins, my only concern is that I may accidentally bend some of them in the bag one day. A special bag would be a good thing to supply with the kit.

The basic unit is 13cm long and weighs only 82g, plus 32g for each of the adaptor plates.

At 400g, the AC power adaptor is a bit of a brick, of course, but the 12V DC car adaptor weighs only 38g and enables you always to have a battery on charge whilst travelling or on location.

One problem I have found is that some of the major photographic dealers do not stock Ansmann products.

There may be a number of reasons for this – none of them to do with product design or reliability but more likely to do with profit.

The larger dealers often source their 'own brand' products direct from suppliers in China and elsewhere in the far east. Products from China are inexpensive and profits can be high, so there is less incentive to buy from a German company – such as Ansmann – with lower margins. Indeed, many of Ansmann's products are actually made in China.

In fact China will be the number one country to benefit from the digital photography revolution – not because it makes the cameras but because it seems to make almost every possible accessory. And, as I noted earlier, that's where the money is.

For dealers, just one charger which covers almost all batteries isn't likely to generate as much revenue as a whole shop full of different chargers – one for each battery type. But for us it's a darned sight more convenient.

But don't let this put you off finding Ansmann products. You can find a list of distributors in the UK and abroad at www.ansmann.co.uk.

For me, Ansmann are the battery power experts I've relied on for years and I wouldn't want to settle for less.