A Diamond In The Rough: Sigma DP1

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For several years now, I've been clamoring for a camera that Mike Johnston has dubbed the "DMD" -- Decisive Moment Digital. This would be something with a top-quality fixed focal-length lens, a large (read: 4/3 or bigger) sensor, and full manual control. Finally, in early 2008, Sigma launched the DP1: "a full-spec compact digital camera with all the power of DSLR," as its manual says. I was able to borrow one for a week to see how it lives up to its promise.

There's a special category of compact film cameras that doesn't really have an equivalent in digital gear. The Olympus XA and mju:, Canon Canonet, Konica Hexar, Ricoh GR, and Rollei AF-M 35 and their spiritual siblings combine superb optics and full photographic control with rugged and compact build, trading off zoom flexibility and, for some but not all of them, affordability. Digital compacts have taken the "something for everything" way -- they're either super-compact, shirt-pocket, full-auto snapshot cameras, or more or less bulky extreme-superzoom dSLR-likes. Until the Sigma DP1, about the only camera to break this mold was the Ricoh GR and its follower, the GR II. Unfortunately, they are still saddled with the small, somewhat noisy and limited dynamic-range sensors other compacts also use, which means that trading off the zoom didn't really buy all that much added image quality or even lens brightness.

The Sigma DP1 in street-shooting configuration, with the (optional) hood and VF-11 viewfinder attached. On the whole, it handles well set up this way. The lens is very effectively shielded from stray light as well as knocks and smudges, and I find it more natural to take pictures through the viewfinder than off the LCD. It doesn't fit into a pocket as nicely, though, and there's no way to use a lens cap.

The Sigma DP1 represents a direction in digital camera design that I desperately want to succeed. It doesn't attempt to be something for everyone; rather, it is designed for a more narrow mission, and is designed to perform that as well as possible. It combines extremely compact size with a superb 28 mm
equivalent, f/4.0 lens, and an APS-C sized, 4.7 million pixel location Foveon X3 sensor. Its hardware focus wheel indicates that it is designed to be easily used in manual-focus mode. Sigma also makes an accessory viewfinder that fits in the flash hotshoe, which means that it can be used at the eye, like a traditional film camera, rather than by framing from the LCD at arm's length, like most compacts. If someone made cameras to order, the DP1 would be very close to how I'd spec one for myself.

This article is not a comprehensive review of the Sigma DP1. The camera has a quite a few features that I don't even mention. Instead, these are "field notes" about the camera's suitability for a particular type of photographer, and particular kind of photography -- myself, and the kind of pictures I take. Therefore, please takes these thoughts for what they are, and, as always, draw your own conclusions.

**Physical design and build**

The initial impression given by the DP1 is a good one. Fit and finish are very good, with no slop, squeaks, or creaks, although the materials aren't quite as heavy-gauge as in certain other top-drawer compacts. The switches and dials have a solid, positive feel to them, as does the two-position shutter release. The LCD is adequate, but not exceptional. Like most such LCD's, it's not easily usable in bright sunlight: for that, a much stronger backlight or a transreflective backing would be needed. The pop-up flash is a nice touch: normally it stays neatly tucked out of the way in the camera body, and a slider switch releases it when needed. All in all, the DP1 looks and feels pretty much like what you ought to expect -- a well put-together, solid camera with a purposeful look to it, and some rather clever design touches.

The DP1 is designed to allow full manual control. It has no scene modes; the shooting modes are switched from a control wheel, and they're the basic P-A-S-M ones found on most cameras ever since automatic exposure was invented. It has a dedicated manual-focus wheel with a quite a lot of throw and a clear distance scale, positioned right at the thumb. There is also an AE lock button that can be reprogrammed for AF lock. The rest of the control interface is pretty similar to most other compacts -- a four-way arrow key pattern, zoom keys (for digital zooming and image review), a delete button, an LCD mode control button, and a review mode button.

**Accessories**

Sigma manufactures a range of accessories for the DP1. They range from the cute but not really useful to the almost indispensable.

The diminutive EF-140 DG dedicated flash falls squarely into the former category -- it doesn't tilt or swivel and is too small to pack enough punch for bouncing even if it did, so all it does is add a bit of wallop to the necessarily limited onboard flash's performance, and make it possible to do flash photography with the hood attached (the onboard flash is too close to the lens to "see" over it).

At the other end of the scale lies the hood adapter. It works excellently to protect against glare and shield the lens from accidental knocks or fingerprints. It does add a fair bit of bulk to the camera, and it's not possible to use a lens cap with it on (why? It would be easy to design a square lens cap to fit on it), but it makes the camera much, much more "fieldable" -- for street work, I wouldn't leave the house without it.
May Day Picnic. I ended up cropping this photo a bit: I meant to frame it this way, but the VF-11 viewfinder included a quite a bit of extra space around the edges, so I got it wrong in the camera. With time, I'm sure I'd adjust -- but an accurate viewfinder is still nice to have. Generally speaking, my pictures turn out better if I see what I shoot.

The VF-11 accessory viewfinder is somewhere between the two. It's absolutely wonderful that Sigma provides one: it solves the sunlight-visibility problem of the LCD marvelously, and shooting from the eye is stabler and, to me, more natural than shooting at arm's length. Unfortunately, as viewfinders go, the VF-11 doesn't quite cut the mustard. It's small, bright, clear, big, crisp, and nice to look through (similar in these respects to the "pretty good, really" viewfinder on my Leica CL), but it's not much good for framing. It has enough barrel distortion to make it look like a semi-fisheye, while the framelines are ruler-straight, and the field of view delimited by the lines is closer to a 35 mm equivalent than a 28 mm equivalent. That means that it's hard to get verticals lined up properly in it, and harder still to frame precisely. It's a great deal more pleasant to look through than the tiny optical-tunnel viewfinders on most compact cameras that even have them, but for framing the scene it doesn't really do much better.

I've heard good things about the Voigtländer accessory viewfinders which are about the same price (although somewhat bigger), so those might be worth a look.

This Is What I Call A Lens!

The Sigma DP1's reason for being is image quality. It is, after all, among the most expensive compact digitals on the market today, and its feature set is limited. Its main selling point is that it puts a dSLR-quality image in a compact camera.

It delivers. The DP1 is capable of producing image quality that's not merely class-leading, but in a class of its own. No other compact camera comes close, and it puts up a good fight with the full-frame sensor on the aging but still pretty damn good Canon EOS-5D I use for my main camera.

The lens on the DP1 is, without question, one of the very best I've ever come across. It performs impeccably at all apertures and focus distances. In fact, unless the picture was taken at a very close focus distance that would show the depth of field, I would not be able to tell at which aperture a photo was taken without very careful examination of comparison shots taken at the same time of the same subject at different apertures. The corners are dead sharp and there is virtually no distortion. The only lens-related artifact I could find was a touch of lateral CA -- and that only in the background of "hypofocal" pictures where the focus was set to around 3 meters. Aperture for aperture, the Sigma lens handily beats the excellent Canon 24/2.8 I used for my semi-controlled comparison shots. Sigma's long experience at designing optics shows -- things really don't get any better as lenses go.
Above: Sigma DP1 vs. Canon EF 24/2.8 on the EOS-5D: corner of the frame at f/4. Canon at top, Sigma at bottom. It’s pretty clear which one wins. Note: Unless otherwise indicated, all the Canon crops have been downsampled to the DP1’s pixel dimensions.
This is the Sigma at f/11. Yes, the stopped-down frame is a tiny bit sharper, but in practice this much difference is no difference at all.

On a lens with these specifications, bokeh really doesn't matter much -- you'll have to shoot very close up to throw the background significantly out of focus. It would be unreasonable to expect that to be a high design priority for this lens. Still, the DP1's lens isn't half bad in this respect either -- I'd rate its bokeh as about equal to my Canon 35/2.0's.
Joanna admiring spring leaves. You won't get much bokeh unless you get in very close. If you do, it's good enough for the military -- bokeh is never a primary design consideration for this type of lens, but despite this, the DP1 does quite well. This isn't any worse than on my 35/2.0, where it actually does matter.

Let's Pixel-Peep

Lakes of ink, and possibly some blood, have been spilled over the topic of exactly how many "Bayer" megapixels a "Foveon" megapixel counts for. I really don't want to wade into these waters (although I do dip in a toe below). Still, I did shoot some semi-controlled tests against my EOS-5D, so here are a few crops for whatever they're worth. I did most of my comparisons by downsampling the EOS-5D pictures to the same pixel dimensions as the ones from the DP1; they were shot at a slightly different tripod position because the Canon lens was a 24 mm while the Sigma is 28 mm equivalent.

Why the EF 24/2.8? Well, for one thing, I don't have a 28 mm prime for my Canon, and comparing the superb 16.6/4.0 on the DP1 to the short end of a standard zoom on the Canon would have been unfair. For another thing, the 24/2.8 is optically a somewhat similar design to the Sigma -- unlike the 28/2.8, it's a moderately complex, very well-corrected design, with little fancy things like a floating group to maintain consistency across different focus distances. In fact, of my normal-or-wider lenses, only the 50/2.5 Macro produces a sharper frame corner-to-corner.
Canon 24/2.8 on EOS-5D vs Sigma DP1, round two, center of the frame. When it comes to detail, the two are pretty much indistinguishable. Interestingly, neither camera handles the fabric spine of the book next to Amphigorey Also perfectly. The Canon suffers from some color moiré -- the bluish and grayish-blue mottles -- whereas the Sigma has luminance moiré (the horizontal banding along it).

To my eye, when it comes to resolution, the downsampled EOS-5D images are indistinguishable from the native DP1 pictures. When comparing the other way -- converting the DP1 pictures to "Large" size (13.6 MP), then downsampling these to the EOS-5D's native pixel dimensions, it's pretty clear to me that the 5D frames hold noticeably more detail. For example, the double line around the Amphigorey Also title is clearly distinguishable in the Canon frame, but not on the DP1 frame. In practice, this will only make a difference at pretty large print sizes -- we're talking A3 and up. I really don't want any e-mail on this particular topic; here are the pictures, draw your own conclusions.
Resolution compared at the Canon’s native resolution: the DP1 photo has been upsampled in Sigma Photo Pro to “Large” (13.6 MP) size, then downsampled to the Canon’s pixel dimensions. Look again at the blue spine: the weave looks coarser on the Sigma than the Canon. If it weren’t for the moiré, this would actually give a better idea of the texture than the alternative -- blurring away everything below Nyquist. With random textures such as vegetation or sand, this is a definite plus, but with repeating ones, we still see the occasional touch of moiré.

As to imaging artifacts, the DP1 produces almost none. The only one worth mentioning that I saw, either in my test shots or my real-life ones, is a touch of luminance moiré here and there on high-frequency repeating patterns, such as in the crops above. None of my DP1 real-life photos had enough moiré to make any difference in practice; I had to look hard for it, and would not have found it had I not known where to look. In this respect, the Foveon X3 sensor does live up to its reputation -- the pictures are beautifully detailed and very natural-looking right down to the pixel level. Put another way, when messing with them in Photoshop, I often inadvertently zoomed in a notch too much simply because at 100% they looked like I ought to be able to.

Another of the Foveon sensor’s strengths is the way it handles highlights. This is the first digital camera I’ve used in bright sunlight without having any problems at all. Even the default tone curve renders them rather nicely, and the highlight control on Sigma Photo Pro let me recover even more of them. The difference is dramatic, especially compared to other compact digitals.
Evangelical Christians bringing the Good News to Helsinki’s hung-over crowd on May 1. Direct sunlight, white dress, man in black suit also in the scene normally means bad trouble. The DP1 took this type of scene in its stride -- I never lost the highlights on a correctly exposed scene. This is a major advantage when shooting in this type of light!

Available Light

In available light performance, the sensor is about a stop behind the one on my 5D, although the sensor's imaging characteristics deteriorate in a different way from any other digital camera's I've used. The noise pattern is tighter and very pleasant to look at; there's no clumping or blobbing to be seen. On the other hand, past ISO 400, a very low-frequency color blotching starts to appear; it's not pretty and can be tricky to deal with, especially when trying to recover an underexposed frame. For these purposes, consider going black-and-white: the DP1 produces some of the most natural and beautiful B/W tones I've seen from any digital camera.

Joanna in B/W. This is almost the first frame I took with the DP-1. The conversion to black and white is directly from Sigma Photo Pro. I love the way the camera and converter got the tones -- and it somehow came very naturally, without having to do any extensive tweaking. Even though I'd never used SPP before, it took me perhaps five minutes to get this result.
At ISO 100-200, image quality is impeccable and, for all practical purposes, constant. At ISO 400, image quality holds up excellently as long as you're careful not to underexpose -- if you're under a stop and have to push it, some artifacts will start to emerge, much like the 5D at ISO800. The camera's highest built-in sensitivity, ISO 800, is just fine -- a tight, grain-like noise pattern emerges, but downsampled to screen size or printed, the pictures look impeccable. If you underexpose a stop and push the RAW file a notch, you will get a perfectly serviceable ISO 1600, although you may have to start thinking of how to deal with the low-frequency color noise that raises its head. Finally, shooting at ISO 800 but two stops under is clearly a stop too far -- at ISO 3200 equivalent, the shadows get cut off harshly, and horizontal pattern noise shows up in the low midtones.

"Yum, meat!" I took this one at ISO400, near the limits of hand-holdability in a difficult mixed-lighting environment.
At actual pixels it looks like this -- a very fine, tight noise pattern, with no discernible loss of detail. This isn't quite as clean as the EOS-5D at ISO400; it's similar to it at ISO800, only the noise pattern is more pleasant.

However, a low-light camera the DP1 isn't. The f/4.0 aperture of the lens is a significant limitation, and there's no image stabilization. It's pretty easy to reach ISO800, 1/30, and f/4.0 in normal indoor lighting, and pushing beyond that requires a certain amount of trickery -- exceptionally steady hands, a support, flash, or pushing the sensor. Many small-sensor compacts can manage these light levels with less trouble; the Canon G9 for example does a decent ISO200 and serviceable ISO400, has a lens that's a stop brighter, and has optical image stabilization that adds another stop or two's worth of hand-holdability on top of that. Natural-light hand-held photography is not this camera's primary mission. If only Sigma had built it around a lens that's a bit narrower but a stop brighter!
"Art Lunch." Pushing the limits: this one is at ISO800, with a fair bit of "Sigma fill light" and a touch of AE compensation added. I'd say this is pretty close to ISO1600 equivalent. In black and white, it isn't bad at all.

In color and at actual pixels, it's still tolerable, but only just. Notice the low-frequency color blotching -- the shifts from magenta to yellow and back. Note, again, that this is pushed ISO 800, and I really wouldn't want to push it much further. Not in color anyway.
Color Control

There's been a good deal of virtual ink spilled over the Foveon's color characteristics as well. "Sigma yellow" is a phrase that occasionally comes up in catfights over the SD series dSLR's. Indeed, because of the way the Foveon sensor works, it is technically more difficult to reconstruct the color of the original scene -- color separation between the sensor layers isn't as controlled as on color filter array sensors, and it takes some fairly intricate mathematics to get real color from it.

The good news is that it is possible to get natural-looking, pleasing color out of the DP1, and it isn't even too hard. After getting to know Sigma Photo Pro for a week, I found that it wasn't difficult to tweak most photos to look good -- skin tones were healthy, the greens looked green, and there wasn't any suffusion of yellow to assault the eye. The only color-related issue that, at this writing, I haven't fully managed to get under control in SPP are the reds -- they pull towards magenta, and to get them looking right I often had to add a fair bit of hue correction in Photoshop, after white balancing in SPP. Still, as you can see in the book crops in the pixel-peeping section, after this treatment the DP1's color was very close to my reference camera's.

I had no trouble getting pleasing color out of most of my real-life shots, although I did have to do some red adjustment on some of them. A few were somehow hard to pin down, but in the end I'm pretty happy with all of the results.

Balloons! -- They really were pink this time.

The bad news is that it does take a certain amount of tweaking to get that good color. With "everything at Auto," including the conversion, the pictures often turned out distinctly on the pink side. The same went for the preset white balances I tried. The week I had with the camera wasn't enough to fully master Sigma Photo Pro, and I'm fairly confident that in a few more weeks I would have come up with a semi-automated workflow that gets the color right with a minimum of fuss. Still, there it is: the DP1 can do very good color, but it does make you work a bit to get there. A bigger downside is that this significantly limits the usability of in-camera JPEG -- if there is a way to get good color consistently and straight out of the box, I haven't found it, and tweaking the color on JPEGs isn't as easy as on RAW files.
For some reason, "Daylight" white balance with default conversion settings gets me this. "Auto" conversion just makes it a bit contrastier but doesn't affect the color. Auto white-balance also often threw me in the pink, although not always. Go figure.

Still, this was just one white-balance click away, so this is more of a quirk than a serious problem in my book... unless you want to shoot JPEG, that is.

**Sigma Photo Pro**

Another bit of good news is that Sigma Photo Pro, Sigma's RAW conversion software, is pretty good. This is especially important since most RAW converters can't handle X3F files. SPP is not the best or most fluid I've used -- that honor goes to Pixmantec's late, lamented RAW Shooter Premium -- but it's better than some and perfectly serviceable. The color controls are simple, intuitive, and powerful, it's easy to "can" settings for re-use, and it's possible to do pretty neat B/W channel-mixing conversions in it by setting the saturation to zero and then playing with the color wheel. The biggest beef I have with it is that it's a bit slow: it takes several seconds on my box (AMD Athlon 64 X2 4800+, running Windows Vista x64) to render the preview. Conversion itself is pretty quick after that.

**The "Foveon-Versus-Bayer" Thing**
The Sigma DP1 is the first Foveon X3F-equipped camera I've used. Only a week with it is far too short to learn to make the most of the files -- they really do behave that much differently. Therefore, all I can offer at this point are initial impressions: what X3F files felt like to work with for someone with a fair bit of experience dealing with regular color filter array-based files.

The experience is different. In particular, color behaved differently than I'm used to. It seemed somehow harder to pin down -- eyedropper white-balancing worked like I'm used to, more or less, but I had to do a fair bit of tweaking to get the color looking like what I want to, and often I was left with a feeling that there was some residual weirdness in some part of the spectrum, usually in the reds and magentas. These color casts appeared and disappeared rather erratically, depending on the camera sensitivity and the environment lighting. I'm sure more practice would help here, but at this writing I feel that "Bayer color" is easier to deal with.

On the other hand, these X3F files are remarkably free of digital artifacts. They're immensely sharp, and despite the lack of a low-pass filter, there's very little moiré - I only saw it on a very few of my real-life shots, and then only if I was looking for it. Textures are rendered beautifully; detail continues right down to the pixel level, even if some of it is technically "false detail." This gives the pictures a wonderful, "lively" look even when pixel-peeped at very closely. At the pixel level, X3F files are clearly more detailed, more contrasty, and more "alive" than even the extremely good files I get from my EOS-5D.

However, when comparing the X3F pictures against pictures from my EOS-5D that had been downsampled to the same pixel dimensions and sharpened to match, the difference went away. And when doing the comparison the other way -- converting the X3F file to 13.6 MP, then downsampling to the 5D's pixel dimensions -- the 5D looks clearly better.

So, in the end, I can't really say much that hasn't already been said: the X3F files are better, pixel for pixel, but the CFA (Color Filter Array) files hold more detail, receptor for receptor. I don't have any definitive answer to the "how many Bayer megapixels are 4.7 Sigma megapixels" question, other than that it's clearly more than 4.7 but clearly less than 12. If I had a gun to my head, I'd say that I'd rather have this sensor than a 6 MP CFA sensor, but a 10 MP CFA sensor than this one. I would choose this sensor over any "small" one currently on the market, however.

Déjeuner sur l'herbe.

Performance In The Field

So far, so good: fantastic image quality, perfectly serviceable software, nice enough design and build.
Unfortunately -- almost tragically -- we hit a serious snag when considering the fieldability of the camera; how it actually acquits itself in the wild.

The problem is that the camera doesn't make proper use of its three-frame buffer. It locks up when you release the shutter, and doesn't unlock fully until it's finished writing the picture to the card. On the slowish card I had, this took over ten seconds, but I have it on good authority that a fast card will cut this in half or better.

As write times go, that's really not all that bad -- it's about what it took my first serious digital camera, the EOS-10D, to write out a file. Thing is, on all other modern digital cameras I've used, the camera becomes ready to use immediately after the image has been flushed off the sensor and into the buffer, and the sensor has reset itself. The imaging pipeline continues to process and write out the picture, while you're busy taking the next one. On the DP1, this ought to take about 1/3 of a second. It is somewhat more technically challenging to write properly parallelized firmware that lets the camera work this way, but since everyone else has managed it, Sigma ought to be able to do it too.

The unfortunate upshot is that even with a faster card than I used, the DP1 is seriously handicapped in its primary mission -- situational shooting that requires shooting a series of frames in sequence where timing is of the essence. I felt that I was bumping into this limitation almost constantly when shooting street scenes; it left me feeling like I only had one bullet in the gun.

Anarchism On The March. I really would have wanted to snap a few more frames of these marchers, but the camera wouldn't let me -- I can only march backwards without bumping into something for so long. As a result, this is the best I got. At least I wish the cuter anarchist's left hand wouldn't be out of the frame -- perhaps I'd have gotten it right on the second or third frame I would have shot. But 'twas not to be...

The camera isn't the fastest hound in the race in other respects either -- the onboard flash takes a surprising amount of time to charge up and cycle, the lens extends in a somewhat stately fashion, and the auto-focus is just this side of tolerably fast -- but these are comparatively minor issues, and the camera has what is needed to work around them: an accessory shoe for an external flash, the possibility to switch off the LCD and disable auto-power off for the lens, and a manual-focus wheel for the AF. But, sadly, I found no way around the lock-up-while-processing characteristic.

**Automation**

The automatic functions on the DP1 are, on the whole, solid. Metering is excellent. I experimented a bit with its center-weighted average and spot modes, but in the end Evaluative got exposure on the nose -- or close enough -- most of the time, so I left it at that for normal daylight shooting. It's not magical, of
course; in difficult mixed-lighting scenarios you will want to use manual metering, or perhaps the spot metering mode the camera also offers, but it's as good as any metering system I've used.

The DP1's metering handles mixed-lighting scenes like this one just fine.

Auto-focus isn't blazingly fast, but it's not outrageously slow either, and it's fairly precise, although it does appear to have a tendency to lock onto the background when attempting to focus on close-up subjects. However, given the lens's characteristics and the fact that the camera is designed to work well in manual-focus mode, I found it much more fluid to use that way -- in fact, I found it faster and more enjoyable to shoot than cameras that force me to rely on AF, even ones that focus much faster than the Sigma.

The one area of automation where the DP1 struggles is white balance. With the Daylight or Auto presets, the pictures turned out with a pretty strong magenta cast even in plain ol' daylight. As discussed in the "Color" section above, this is generally pretty simple to fix in post-processing, but it does limit the usability of JPEG mode. I didn't have time to experiment with manual white-balance and in any case, that's not really much of a solution for situational shooting when the light changes often. Since this is clearly a RAW camera, though, I'd file this under "niggles and rough edges" rather than "serious flaws" -- but if you are allergic to post-processing, it does mean that the camera probably isn't for you.

Handling

Other than the responsiveness issue, the DP1 handles pretty well, although like most cameras, it could use some refinements.

Specifically, it works fine when used the usual way -- with the LCD on -- but not so well when used with the LCD off, using the accessory viewfinder to frame the pictures. This is a shame, because keeping the LCD off will dramatically increase battery life, as well as make shooting more discreet. It feels as if the accessory viewfinder was something of an afterthought, rather than a designed-in operating mode for the camera. This is not a huge deal, but it's nevertheless a shame, since comparatively small tweaks would make it possible to use the camera's capabilities more fully even without the LCD.

For example, it's possible to bind auto-focus lock (AFL) to the auto-exposure lock (AEL) button. I would expect this to mean that when I press the AEL button, the camera focuses, indicates focus lock, and leaves focus there. On the DP1, it doesn't quite work this way: if AF is locked, the first press unlocks it, and the second re-focuses, and if the LCD is off, the first press switches it on, and the second and third presses unlock and lock AF. When looking at the markers come on and off on the LCD, this is perfectly logical, but when operating the camera at the face, it isn't: to focus using the AEL button, I have to press it either
once, twice, or three times, depending on the state of the camera, and since it's at my eye, I can't see what state it is in. If the button just did its thing -- focus -- no matter what the state of the camera, this problem would go away, and I could pre-focus when shooting without the LCD.

This isn't as big a deal as it would be otherwise, since the camera has that nifty focusing wheel and with this lens, you'll get more or less everything in focus in situational shooting simply by setting it to 2-3 meters or so, no matter the aperture. These are niggles and unnecessary limitations that would be easy to fix simply by making the buttons behave differently when the LCD is switched off.

"Convergence." With this lens, everything's in focus most of the time anyway, so who need auto-focus?

What Is It Good For?

The DP1 is clearly not meant to be a camera for everyone. Most people probably won't even see the point of having something with half the features and twice the price of cameras like the Canon G9 or Nikon P5100. It demands a certain amount of photographic technique, and given its hiccups with automatic and preset white balancing, a willingness to put in some work post-processing. It's a camera designed to do less, but to do what it does better.

If it weren't for the lock-up-while-flushing issue described above, the Sigma DP1 would make for a superb daylight street camera. When used in manual-focus mode, using an accessory viewfinder (even the VF-11, with its limitations), with ISO at 200, aperture at f/5.6, and focus set to 3 meters, it'll get you fabulous image quality with impeccable timing, and you'll have fun doing it too. It's also very compact and discreet -- people react to it very differently than to a dSLR.

Even without image stabilization and with the comparatively dark lens, it also makes an acceptable available-light camera, although I can't honestly say that it does this particular job much better than some of the better small-sensor cameras, with their brighter lenses and image stabilizers.

But, sadly, that locking-up issue is there. It's the elephant in the room that I can't ignore, no matter how much I like the concept, the image quality, and the overall design, even with its little quirks and niggles. That means that I can only recommend the DP1 if you're really certain you can work around this problem. For some people, I'm sure, the image quality makes it worth it, but for people like me who are just as concerned about getting the picture in the box as about the technical quality of the picture, the DP1 isn't quite what it takes yet.

In the end, the DP1 left me wistful. It represents a digital camera design direction I desperately want to
succeed. There is no justice in the world if it proves to be a once-off, rather than the first in a new class of
digital cameras -- worthy successors to the likes of the Konica Hexar, the Ricoh GR, or the Olympus XA.
The size is there, the lens is there, the image quality is there, and basic handling is only a little bit behind
these classics. With one more step Sigma could turn this into the extension of the hand and the eye that makes a truly great camera.

Until then, I'm going to have to regretfully hold off on giving this a full thumbs-up. Sigma has something of a cult following, used to dealing with its quirks and foibles, and I'm pretty sure this following will find ways to work around the DP1's issues as well. The DP1 is just one step away from breaking out into a bigger niche. Let's hope Sigma manage to take that step, and sooner rather than later -- the world needs the camera the DP1 is meant to be, and Sigma with its "think-different" approach deserves to be the one that makes it.

"Round and round." May Day cheer on the other side of the Long Bridge.

Postscript: Things I Would Change

If Sigma manage to fix the lock-up problem, either through a firmware update or in a future model (they have indicated that a DP2 and DP3 are in the works), I'll buy one without hesitation. Sure, it's pricey, but the image quality is fantastic and the control and street-shootability are as good as anything of comparable size out there today. The control interface niggles are just that -- niggles, not showstoppers --, and while I'd prefer a lens that's a bit narrower and, if possible, brighter, the 28/4.0 equivalent is close enough to what I want to get the job done.

However, if I could design the DP1 successor for myself, here's what else I'd change, besides sorting out the performance issue, making the AE lock button behave consistently, and putting in that brighter but narrower lens, and making a more precise accessory viewfinder, even if it ended up a bit bigger and not as bright and sharp all the way to the corners.

1. I'd dump the modal control interface. No more A-S-P-M.
2. I'd add a second control wheel to the front of the camera, opposite the focus wheel, reachable with the forefinger. This would control aperture. It would have click-stops at 1/3 stop intervals, and a stop marked A for Auto at one end of the scale.
3. I'd replace the no-longer-needed mode control wheel with a stacked pair of two wheels, a wider but thinner one below, a narrower but taller one on the top. The bottom wheel would protrude past the rear
Sigma DP1

edge of the camera just enough to be controllable with the thumb.

4. The new top wheel would control shutter speed, ending with B(ulb) and A(uto) at opposite ends of the scale. The "video" function could stay on this wheel. (I'd drop the sound recording function; this is a camera after all, not a dictaphone. If my boss insisted that it has to go in, I'd squeeze it onto this wheel too.)

5. The bottom wheel would control ISO, again running from A(uto) to 100 through 1600 at 1/2 stop intervals. (Yes, I'd extend the ISO range to 1600 -- the quality is good enough for it. Just.)

6. I'd add a click-stop to the infinity end of the focus control wheel, behind which would be (surprise!) A(uto).

This would mean that I could control all of the critical shooting parameters -- focus, aperture, shutter speed, and sensitivity -- with the LCD off, using physical dials, and let the camera control any or all of them simply by setting its wheel to A(uto). That means I could use the camera with the LCD off all day, moving the dials without even taking my eye off the viewfinder: I can remember settings pretty well, and if not, it's easy to count click-stops from the end of the scale.

"Gospel Riders Finland." May Day, 2008. Perhaps some day I'll take the picture even if the vest reads Hell's Angels...