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Reliability & repairs

Don't pay for an extended warranty or for some fixes

Digital cameras are among the more reliable products we track in annual product-reliability surveys conducted by the Consumer Reports National Research Center. Fewer than 10 percent require repairs in their first three or four years of life. Brand-to-brand differences are generally modest. But statistics won't help if you're among the unlucky camera owners who will wrestle with a repair.

If you have a broken camera, or worry that you'll end up with one, here's what you need to know:

THE WORD ON WARRANTIES

Most cameras come with a one-year parts-and-labor warranty. A significant exclusion, however, is damage from dropping or otherwise mistreating the camera. Nonetheless, three out of four owners of broken cameras that were covered under the factory warranty reported that the warranty was honored completely.

About 15 percent of people who bought a digital camera bought an extended warranty for it, according to another of our surveys. But such coverage for cameras, as for most other products, is generally a poor buy. Survey respondents who bought extended warranties paid an average of $50. Those who did not have warranty coverage and paid for a camera repair spent an average of $120. So with a warranty you're essentially spending $50 to protect yourself from paying for a repair that would cost only about $70 more, on average, and has just a 1-in-10 probability of occurring.

CR's take. Skip the extra warranty coverage. Instead, consider no-cost ways to extend coverage, including buying with a credit card. Many premium cards extend factory warranties for up to a year.

WEIGHING A REPAIR

If your camera quits working or starts acting up, first try troubleshooting. In addition to consulting the user manual, try online forums. They might provide a do-it-yourself fix or allow you to read about others' experiences and find out what a repair might cost, without having to pay for an estimate. Such a fee is required at some repair shops.

As a rule, don't make a repair if the bill will come to more than half the cost of replacing the camera. Even if the bill will be less, you might not want to fix a camera that's more than three or four years old, especially if it's a point-and-shoot. A replacement probably will have better performance and features. Repairs might be worth considering for older SLRs, however, especially if you've invested in a number of lenses that may not work as well with a replacement camera body, even of the same brand (check with the camera manufacturer). Repairs are probably worthwhile for one- to two-year-old cameras of all types.

How quickly you want or need the camera may factor into your decision. Among survey respondents who repaired a camera not covered by a warranty, delays were the biggest complaint; more than 40 percent of fixes took more than two weeks. One in five owners complained of excessive repair costs. Overall, 57 percent of such respondents were highly satisfied, a rate that's better than that of computers but lower than that of TVs.

If you decide on a repair, you might be able to find one of the dwindling number of camera shops that fix cameras. Otherwise, you'll need to contact the manufacturer and ship the camera to an authorized repair center.

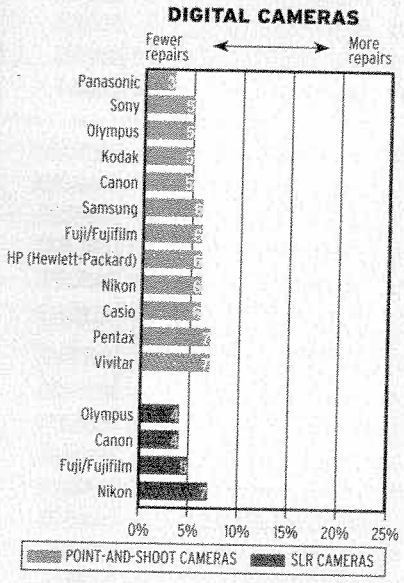
How brands compare

Digital cameras are generally reliable, but their repair record does vary somewhat by brand and type. Data culled from more than 221,000 responses about cameras from our Annual Product Reliability Survey show that most brands of point-and-shoot types and also SLRs have differed in reliability score by fewer than the 3 points that's statistically meaningful.

However, among SLR brands, Canon and Olympus have been more reliable than Nikon. In the point-and-shoot category, Panasonic has had a meaningful difference in reliability over Pentax and Vivitar.

Overall by type, there's no meaningful difference in reliability between SLRs and point-and-shoots.

Models within a brand may vary, and changes in design or manufacture may affect reliability.



This graph shows the percentage of digital cameras bought between 2004 and 2007 that have ever been repaired or had a serious problem. Differences of fewer than 3 points are not meaningful. Data are based on more than 221,000 responses about digital cameras to the Annual Product Reliability Survey conducted by the Consumer Reports National Research Center and have been adjusted to eliminate differences linked to age and use.

CR Quick Recommendations

The **Ratings** list models by overall performance. *Quick Picks* stand out for their combination of price and performance, or other reasons noted. For some models, we note successors that we haven't yet tested and whether they offer more or less than the 200 to 300 or so shots per charge and 2½ inches or so of LCD screen of most tested models. Several Olympus point-and-shoot and Canon subcompact models were discontinued as we went to press, and their successors didn't arrive in time to be tested for this report.

QUICK PICKS

Best cameras that fit in a pocket:

1 **Sony** (12 MP) $300
2 **Sony** (7 MP) $280

These have the best image quality among the subcompacts, along with excellent next-shot delay and dynamic range. (1) has an extremely high maximum ISO while maintaining best quality, making it well-suited for shooting in low light without a flash, and above-average battery life. It also has an optical viewfinder. (Also available: the newer Sony Cyber-shot DSC-W300, $350, with 13.6 megapixels and a slightly larger LCD.) (2) is the best subcompact for first-shot delay and has the biggest (3-inch) LCD. It also features a nontelescoping lens and a Smile Shutter mode. Both cameras have face detection.

Best pocket cameras for less:

4 **Pentax** (8 MP) $220
5 **Kodak** (8 MP) $120

Each offers advantages that compensate for their shortcomings, which include longer first-shot delays and lower image quality than the Sonys (1, 2). (4) has the longest zoom (7x) by far among the subcompacts, though battery life (at 180 shots per charge) and the maximum ISO setting (80) that yields shots with best quality is below most other tested cameras. (5) is a fine value with excellent next-shot delay.

Best compacts for most people:

14 **Canon** (12 MP) $350
15 **Canon** (8 MP) $180, CR Best Buy
19 **Canon** (8 MP) $300

All are among the best compacts for image quality and versatility. (14) and (15) have viewfinders, 6x zoom, and manual controls and focus. (14) has very good next-shot delay, allows use of a fairly high maximum ISO setting (400) with best quality, and has excellent dynamic range

Continued

1 **Sony**

15 **Canon**

16 **Canon**

Ratings point-and-shoot cameras

• **Availability** Most models at stores through September 2008.

Excellent · Very good · Good · Fair · Poor

Within types, in performance order. Blue key numbers indicate Quick Picks.

Key number	Brand & model	Price	Overall score (0–100; P F G VG E)	Megapixels	Weight (oz.)	Optical zoom	Image quality	First-shot delay	Next-shot delay	Versatility	Dynamic range	Max. ISO with best quality	Image stabilizer	Face detection	Wide angle	Manual controls
SUBCOMPACT CAMERAS *For those who need a camera that fits in a purse or pocket.*																
1	**Sony** Cyber-shot DSC-W200	$300	73	12	6	3x	◓	○	●	◓	●	1600	•	•		
2	**Sony** Cyber-shot DSC-T70	280	67	7	5	3x	◓	◓	●	◓	●	200	•	•		
3	**Canon** PowerShot SD850 IS ELPH	250	66	8	7	4x	◓	○	●	●	●	200	•	•		
4	**Pentax** Optio Z10	220	64	8	5	7x	○	◒	○	●	●	80	•	•		
5	**Kodak** EasyShare M853	120	61	8	5	3x	○	◒	●	◓	◓	200	•			
6	**Nikon** Coolpix L12	170	60	7	6	3x	○	◒	◓	◓	◓	400	•	•		
7	**Samsung** NV10	260	60	10	6	3x	○	◒	◓	◓	●	100	•			•
8	**Nikon** Coolpix L15	140	59	8	6	3x	○	◒	◓	◓	○	64	•	•		
9	**Samsung** NV3	210	57	7	6	3x	○	◒	○	◓	●	100	•			
10	**Kodak** EasyShare M883	180	55	8	5	3x	○	◒	◓	◓	◓	64	•	•		
11	**HP** Photosmart R742	150	55	7	5	3x	○	◒	◓	○	●	100	•			
12	**GE** G1	130	55	7	5	3x	○	◒	◓	◓	◓	[1]	•	•		
13	**Sanyo** VPC-T700	100	50	7	4	3x	○	○	◓	◓	○	50				
COMPACT CAMERAS *For those who want the basics at a low price or advanced features.*																
14	**Canon** PowerShot A650 IS	350	74	12	14	6x	◓	○	◓	●	●	400	•	•		•
CR BEST BUY 15	**Canon** PowerShot A720 IS	180	71	8	9	6x	◓	○	◓	●	◓	100	•	•		•
16	**Canon** PowerShot G9	460	71	12	13	6x	◓	○	◓	●	◓	400	•	•		•
17	**Nikon** Coolpix P5100	310	69	12	8	3.5x	◓	◒	◓	●	◓	100	•	•		•
18	**Samsung** NV20	280	68	12	6	3x	◓	○	●	◓	◓	100	•	•		•
19	**Canon** PowerShot SD870 IS ELPH	300	67	8	13	3.8x	◓	◓	●	●	●	100	•	•	•	
20	**Panasonic** Lumix DMC-FX100	320	66	12	6	3.6x	○	○	●	◓	○	800	•		•	
21	**Kodak** EasyShare V1253	210	65	12	6	3x	○	◓	●	◓	○	400	•			
22	**Samsung** i85	270	65	8	6	5x	◓	◒	◓	◓	◓	400	•	•		
23	**Fujifilm** FinePix F50fd	230	64	12	6	3x	○	○	◓	◓	◓	200	•	•		•
24	**HP** Photosmart R837	210	63	7	6	3x	○	◓	●	◓	○	100	•			
25	**HP** Photosmart M737	140	62	8	7	3x	◓	○	◓	○	◓	auto	•			
26	**HP** Photosmart R937	230	61	8	8	3x	○	○	●	◓	○	auto	•			
27	**Fujifilm** FinePix F480	130	58	8	6	4x	○	◒	◒	◓	◓	200	•		•	
28	**Samsung** NV7 OPS	230	55	7	10	7x	◒	◒	◒	◓	○	[1]	•			•
29	**Polaroid** m737t	100	45	7	6	3x	◒	◒	○	◓	◓	[1]	•	•		•

[1] *Model produced images with noticeable flaws at every ISO setting, though these may be less obvious on small prints.*

19 **Canon**

31 **Sony**

33 **Panasonic**

35 **Canon**

	Brand & model	Price	Overall score	Specifications			Test results								Features			
Key number			0 P F G VG E 100	Megapixels	Weight (oz.)	Optical zoom	Image quality	First-shot delay	Next-shot delay	Versatility	Dynamic range	Max. ISO with best quality	Image stabilizer	Face detection	Wide angle	Manual controls
	SUPERZOOM CAMERAS *For people who need an extremely versatile zoom lens.*															
30	**Sony** Cyber-shot DSC-H9	$390	74	8	15	15x	◓	◓	●	●	●	200	•	•		•
BEST BUY 31	**Sony** Cyber-shot DSC-H3	250	72	8	10	10x	◓	◓	●	◓	●	200	•	•		•
32	**Leica** V-Lux 1	850	72	10	26	12x	◓	○	●	●	●	400	•			•
33	**Panasonic** Lumix DMC-FZ18	310	69	8	14	18x	○	○	●	●	●	400	•	•	•	•
34	**Fujifilm** FinePix S700	190	66	7	14	10x	○	○	◓	●	●	200	•			•
BEST BUY 35	**Canon** PowerShot SX100 IS	230	66	8	11	10x	◓	○	●	●	◓	100	•	•		•
36	**Fujifilm** FinePix S8000fd	320	66	8	18	18x	○	◒	◓	●	●	100	•	•	•	•
37	**Canon** PowerShot S5 IS	330	66	8	19	12x	○	○	●	●	◓	200	•	•		•
38	**Olympus** SP-560 UZ	350	66	8	16	18x	○	◒	◓	●	◓	100	•	•	•	•
39	**Panasonic** Lumix DMC-TZ3	240	63	7	9	10x	○	◒	◓	◓	◒	400	•		•	
40	**Canon** PowerShot TX1	380	62	7	9	10x	○	◒	●	●	◓	100	•	•		

Guide to the Ratings

Overall score is based mainly on image quality, the presence of useful features, battery life, and weight. Displayed scores are rounded; models are listed in order of precise overall score. **Megapixels** is the number of pixels, in millions, on the sensor. **Weight** includes battery and included memory. **Optical zoom** refers to the ratio of focal lengths in the camera's lens. **Image quality** combines analytical tests and expert judgments on a reference monitor of images made with each camera's best resolution and compression settings. Image-quality scores are not comparable with SLR scores, which are factored differently. **First-shot delay** (often referred to as shutter lag) is how quickly the camera can take its first shot once powered up. The fastest took about ½ second; the slowest took 1 second or longer. **Next-shot delay** is how quickly the camera can take its next photo. Less than 2 seconds is excellent; less than 3, very good; less than 5, good; and less than 7, fair. **Versatility** is our assessment of a camera's physical controls, useful features, menu system, and the degree to which you can adjust specific settings. **Dynamic range** uses analytical tests to indicate how wide a range of dark, middle, and light tones a camera can capture in a single scene, while still being able to produce a good-quality image. **Max. ISO with best quality** indicates the highest ISO setting you can select and still produce a good-quality image. It's based on analytical tests of an image's visual noise (unwanted "grain" or tiny spots of false color) and indicates which models should excel in low-light situations. **Image stabilizer** shows which models have that steadying feature. **Face detection** senses faces and automatically sets the focus, exposure, and color balance. **Wide angle** shows which have a lens that zooms as wide as the equivalent of a 28mm film-camera lens. **Manual controls** let you adjust shutter speed and lens opening. **Price** is approximate retail.

Quick Picks, continued

and an exceptionally long battery life (500 shots). It's also one of the few compacts with a swiveling LCD. (15), the lightest camera of this group, has an unusually long battery life (400 shots), and very good next-shot delay and dynamic range. (19) has very good first-shot delay, excellent next-shot delay, and excellent dynamic range. It's very small, if a bit heavy, for a compact and has a 3.8x zoom with wide-angle capability and a 2.9-inch LCD. But it lacks a viewfinder.

For flexible editing and composition:

16 **Canon** (12 MP) $460

This full-featured compact has very good image quality and next-shot delay, good first-shot delay, and very good dynamic range, and it allows use of a fairly high maximum ISO setting (400) while maintaining best image quality. It also has a 6x zoom, manual controls, manual focus, optical viewfinder, and face detection. Unlike its predecessor (the PowerShot G7), it has RAW-file capability and a 2.9-inch LCD.

If a long zoom is a priority:

30 **Sony** (8 MP) $390
31 **Sony** (8 MP) $250, CR Best Buy
33 **Panasonic** (8 MP) $310
35 **Canon** (8 MP) $230, CR Best Buy

All are fine performers that offer at least 10x zoom. The Sony (30) has a 2.9-inch LCD that swivels, a night shooting mode, and a lens that zooms while shooting video. (Also available: the 9-megapixel Cyber-shot DSC-H50, $400, with noise-reduction features and Smile Shutter mode.) The Sony (31) is less expensive, lighter, and much more compact than its brandmate, but it has a smaller zoom range and no viewfinder or swiveling LCD. (Also available: the 8-megapixel, Cyber-shot DSC-H10, $300, with a 3-inch LCD.) (33) has the largest zoom range in this group and is the only model in this group with RAW-file capability. (35) is Canon's first budget superzoom and uses AA batteries, getting an unusually high 400 shots per charge. But it lacks a viewfinder.

SLRs

Performance is high but can vary a lot

Even the lowest-cost single-lens reflex cameras are faster and can handle most challenging conditions better than point-and-shoot cameras. But our latest tests still found real performance differences among the 16 SLRs we tested.

Basic leaders. Among basic SLRs, the top-rated Nikon D80, $900, stood out for its all-round performance, including excellent ability to capture a wide range of dark and light tones and the ability to minimize image flaws in low light at ISO settings up to 1600.

Choose an SLR if you need:

- Very high-quality images
- Quick response
- Better low-light performance
- Great versatility
- A lot of creative control

Yet almost as impressive and far less expensive was the Olympus Evolt E-410, $450, which also maintained image quality up to ISO 1600. (The Evolt E-410 may be hard to find. A successor, the E-420, $500, was set to ship this spring.)

Rare excellence. Two advanced SLRs were alone in producing excellent images. The Nikon D300, $1,800, was by far the best SLR for shooting handheld in low light without a flash because of its ability to maintain image quality at ISO settings up to 3200. Both the D300 and the Canon EOS 40D Digital, $1,300, can produce images with exceptional tonal gradations and wide color ranges. With its low cost, the EOS 40D was our only Quick Pick for an advanced SLR.

A pair of low-light weaklings. Two SLRs with prices that belied their performance in low light were the basic Sigma SD14, $1,300, and the advanced Sony DSLR-A700, $1,400. They were able to minimize image flaws only up to a sensitivity of ISO 400. That's subpar for an SLR and lower than even two of the rated point-and-shoots. Also, the SD14's image quality was bested by several SLRs costing less than half as much.

Get focused on lenses

The quality of the SLR lens you use profoundly affects the resulting image quality. But the variety of lenses available can be confusing. Here's how to shop:

Consider buying just the camera. If you already own compatible lenses consider an SLR without a lens (body only). It will cost less and you can buy other lenses later. A caveat: If you use lenses from a film SLR or older digital SLR with a new model, depending on how old they are, the lenses might not autofocus or offer all metering options. Most SLRs are also bundled with at least one lens, known as a "kit lens." Bought separately, such lenses typically cost $150 to $300. Kits are less expensive than buying the camera body and kit lens separately, but kit lenses, though competent, might not perform as well as many other lenses.

Match the lens type to your needs. The most common types of bundled lenses are zooms, with adjustable focal lengths. Telephoto zooms, such as 75mm to 300mm, are for distant subjects; wide-angles such as 12mm to 24mm are for wider shots. Fixed (or prime) lenses have a focal length you can't adjust, have better image quality and can autofocus more quickly than zooms of similar focal lengths, and cost less.

Consider the camera. A lens's effective focal length is also determined by the magnification factor of the SLR with which it is used. Most Nikon SLRs have a 1.5x factor, which changes the effective focal length of a 50mm lens to 75mm. An Olympus SLR's 2x factor would change a 50mm lens to 100mm. For more details, see the camera maker's Web site. (Some pricey professional SLRs, not included in our tests, have a 1x magnification factor.)

VARIETY **Zoom lenses range from wide to telephoto.**

Weigh brand, quality, and cost. Major camera manufacturers offer their own brands of lenses. Prices can run from hundreds to thousands for the best, which minimize the light you need for crisp images. But for many cameras, there are also less expensive lenses, from brands like Tamron and Sigma. And even among brand-name lenses, there can be significant price differences. Lenses sold with a manufacturer's warranty that's valid in the U.S. cost more than imported, so-called gray-market lenses, which might have a warranty not valid in the U.S.

Features trickle up. We've also noticed a continuing migration of features from point-and-shoots up to SLRs. The most conspicuous, live view, is now found on half of the tested SLRs. SLR newcomer Sony has made the live view feature on its 10-megapixel DSLR-A300, $700, perform more like that of a point-and-shoot by speeding up the camera's ability to autofocus when you compose on the LCD. We haven't tested the DSLR-A300.

Face detection, now widespread in point-and-shoots, has shown up in a couple of SLRs, including one rated model, the Panasonic Lumix DMC-L10. More SLRs are also using SD and SDHC memory cards. Even as SLRs become more like point-and-shoots, conspicuous functional differences remain between the two groups, such as image and viewfinder quality and body construction, which is why we score them differently.

SLR enhancements continue. One of our Quick Picks, the basic Olympus Evolt E-510, has several metering systems, including two special spot meters. And systems for removing dust from internal sensors, features only SLRs need, have become far more common.

Every few weeks, it seems, a manufacturer tries to leapfrog the pack with a smaller, improved, higher-resolution SLR. Canon recently shipped the $800, 12-megapixel Rebel XSi, successor to the Rebel XTi, adding live view and the color and tone-enhancing capability found in the EOS 40D. Nikon recently expanded its basic SLR line with the $750, 10-megapixel D60, which has sensor-cleaning technology that its D40x lacks. We'll be testing both of these models soon.

HOW TO CHOOSE

Select an SLR level. If you're thinking of trading up from a point-and-shoot, a basic SLR is the place to start. There are fewer controls, easier-to-read graphic interfaces, and fewer options. Advanced SLRs are more rugged, weather-resistant, and versatile, but also bulkier and heavier. Many of their features can be daunting if you're not highly experienced.

Know the system and brand. When you buy an SLR, you're potentially buying into a family of lenses and integrated accessories, such as external flashes. Those from the camera maker are often pricier than ones made by other companies, but they will be compatible and will take full advantage of the camera's features. Olympus and Panasonic SLRs are exceptions. They use a system known as "four thirds" that ensures compatibility with standardized components made by other manufacturers.

Don't scrimp on performance. While all the SLRs we tested are competent, narrow your choice to those models that are at least very good for image quality and versatility, and can shoot to at least 800 ISO without image flaws. That includes most rated models. Battery life is important too; most better performers offered more than 400 shots per charge.

Know about IS. Image stabilization, a technology found on most point-and-shoots and SLRs, compensates for shake in a handheld camera. It lets you use a slower shutter speed while minimizing blur, although it won't compensate for a subject's motion. There are two IS types: lens-based ("L" in the Ratings) and body-based ("B" in the Ratings).

Lens-based stabilization is used by Canon, Fujifilm, Nikon, Panasonic, and Sigma. Using it requires a lens with built-in IS, which costs more than one without. We have found that lens-based stabilization works a bit better than the other type, body-based.

Body-based stabilization, used by Sony, Olympus, and Pentax, is built into the camera's body. Every lens used with that camera, including wide-angle lenses (which need less stabilization), gets the benefits. That saves you money because you don't have to buy pricier lenses. Of course, there is another, low-tech way to stabilize any camera: Use a tripod.

Search for special features. Decide on any unusual capabilities you need. For example, if you often shoot in crowds, look for a swiveling LCD and live view, so that you can see shots taken from hard-to-reach angles. Other things to consider: which file formats a camera supports and whether it's one of the few models with wireless capability.

Get some hands-on experience. Go to a store and get a feel for the SLR you're considering. Make sure it's comfortable to hold, not too heavy, and that all buttons and controls are intuitive and logically positioned. Be sure to use the viewfinder, especially if you wear glasses.

TLC for your SLR

Here's how to keep your SLR humming:

Keep the sensor clean. Because SLR lenses can be taken off the camera, dust can easily enter the body and produce spots on your photos—even in models that have built-in sensor cleaning. For cleaning, a camera under warranty should be sent directly to the manufacturer. A camera repair shop is fine for one not under warranty. If you have the expertise to clean a camera yourself, read the manual closely and never touch the sensor.

Keep the lens clean. To remove dust or dirt, use a hand-operated blower, microfiber cloth, or a lens-cleaning solution and a lint-free lens tissue. Never use abrasives or solvents.

Update software. SLRs use built-in software, called firmware, which is often updated online to fix bugs or add features. Check the manufacturer's site periodically. If a listed update seems worth the effort, follow the instructions to the letter. For updates, the battery must be fully charged so that the camera remains on.

COVER UP For $50 to $80, rubber Camera Armor can protect an SLR. See www.camerarmor.com.

2 Olympus

6 Nikon

12 Canon

Ratings SLR cameras

* **Availability** Most models at stores through early fall.

Excellent · Very good · Good · Fair · Poor

Within types, in performance order. Blue **key numbers indicate Quick Picks.**

Key number	Brand & model	Price	Overall score (Lens included; 0 P F G VG E 100)	Specifications: Megapixels	Specifications: Weight (oz.)	Test results: Image quality	Test results: Versatility	Test results: Dynamic range	Test results: Max. ISO with best quality	Test results: Battery life	Features: Image stabilizer	Features: Live view
	BASIC SLRs *For those who want simplicity.*											
1	**Nikon** D80	$ 900	68	10	24	◓	◓	●	1600	600	L	
2	**Olympus** Evolt E-510	550	66	10	16.4	◓	◓	◓	800	650	B	•
3	**Panasonic** Lumix DMC-L10	1,300 •	66	10	19	◓	◓	◓	800	450	L	•
4	**Olympus** Evolt E-410	450	63	10	15.3	◓	◓	◓	1600	500	L [1]	•
5	**Canon** Digital Rebel XTi	600	61	10	20	◓	○	●	800	500	L	
6	**Nikon** D40x	630	60	10	19.2	◓	◓	●	800	470	L	
7	**Nikon** D40	550 •	57	6	19.2	◓	○	●	800	470	L	
8	**Panasonic** Lumix DMC-L1	1,500 •	57	7	21.3	○	○	●	800	450	L	•
9	**Sigma** SD14	1,300	50	5 [2]	26.5	○	○	●	400	500	L	
10	**Pentax** K100D	600 •	46	6	22.8	◓	○	●	800	300	B	
	ADVANCED SLRs *For those who want advanced features, controls, and performance.*											
11	**Nikon** D300	1,800	79	12	32	●	●	●	3200	1000	L	•
12	**Canon** EOS 40D Digital	1,300	78	10	28.8	●	●	●	800	800	L	•
13	**Olympus** E-3 Digital	1,700	75	10	31.6	◓	◓	●	800	610	B	•
14	**Sony** DSLR-A700	1,400	72	12	27.2	◓	◓	●	400	650	B	
15	**Fujifilm** FinePix S5 Pro	1,700	69	12	32	◓	◓	●	1600	400	L	•
16	**Pentax** K10D	900 •	53	10	28	◓	○	●	800	480	B	

1. *Stabilizer only available with non-Olympus lenses.* 2. *Uses Foveon technology; effective resolution is similar to that of other models.*

Guide to the Ratings

Overall score is for the body only and based mainly on image quality, ease of use, versatility, and battery life. Flash, viewfinder, weight, and body construction are also considered. Displayed scores are rounded; models are listed in order of precise overall score. **Megapixels** is the number of pixels, in millions, on the sensor. **Weight** is for the body only, including battery and memory card. **Image quality** combines analytical tests and expert judgments on a reference monitor of images made with the camera's best resolution and compression. Dynamic range and maximum ISO for best quality are factors. **Versatility** is our assessment of a camera's physical controls, useful features, menu system, and the degree to which you can adjust settings. **Dynamic range** uses tests to indicate how wide a range of dark, middle, and light tones a camera captures in a scene, while still producing a good-quality image and fine detail. **Max. ISO with best quality** indicates the highest ISO setting that can produce a good-quality image. It's based on analytical tests of an image's flaws (unwanted "grain" or specks of false color) and indicates which models should excel in low light. **Battery life** is the number of high-resolution photos taken with the batteries supplied. **Image stabilizer** shows which type of image stabilization a camera uses, lens-based (L) or body-based (B). **Live view** lets you compose directly on the camera's LCD, as you would on a point-and-shoot. **Price** is approximate retail for the body only, except for these bundled-kit lenses: Panasonic (3,8) 14-50mm, Nikon (7) 18-55mm, and Pentax (10,16) 18-55mm. For models that don't come bundled with a lens, expect to pay $150 to $300 extra for the equivalent of a kit lens. Models were tested with a high-quality, 50-mm, same-brand lens.

CR Quick Recommendations

Most models were fine overall performers. Image-quality scores aren't comparable with those of point-and-shoots because the two types are factored differently. Based on data from our latest subscriber survey, Olympus, Canon, Fujifilm, and Nikon have been very reliable SLR brands for the past few years. The **Ratings** list models by overall performance. Quick Picks considers factors such as price and availability.

QUICK PICKS

For a basic SLR:

2 **Olympus** (10 MP) $550
6 **Nikon** (10 MP) $630

The Olympus has a through-the-lens, live-view LCD with autofocus and 10x magnification, useful for manual focus. It has hardware-based dust removal, spot metering with a shadow- and highlight-based spot, and unlimited continuous shooting with HQ-quality JPEG. (Also available in July: the E-520.) The Nikon has spot metering and in-camera image correction, such as cropping and filter effects, plus software-based dust removal. It can also shoot three frames per second, continuously, for up to 100 JPEG images. It's a better value for most than its more rugged sibling, (1). Both of these Quick Picks also have older siblings that are good values, though the Olympus (4) lacks its brandmate's built-in image stabilizer and the Nikon (7) has lower resolution (6 megapixels) than its successor. (Also available: the Nikon D60, $750, which has an image-stabilized kit zoom lens.) Both have a mostly plastic body, making them lightweight for SLRs, but potentially more vulnerable to rough handling.

For a more advanced SLR:

12 **Canon** (10 MP) $1,300

This has excellent image quality and dynamic range at an attractive price. (It's also available with a 28-135mm kit zoom lens for $1,500.) It has a maximum ISO with best quality of 800 and is very versatile. It has live view with autofocus, for composing shots directly on the 3-inch LCD, with an option of 5x or 10x magnification. There are also burst modes of 6.5 frames per second for up to 75 JPEGs or up to 17 RAW files. The exterior is made of a magnesium alloy, making the camera a bit heavier, and potentially tougher, than most basic SLRs. There's a hardware- and software-based dust-cleaning system. And its 14-bit A/D converter can produce images with finer tonal gradations and wider color ranges than earlier Canon models.