

PICTURE THIS...

Next-Generation Digital Photo Frames

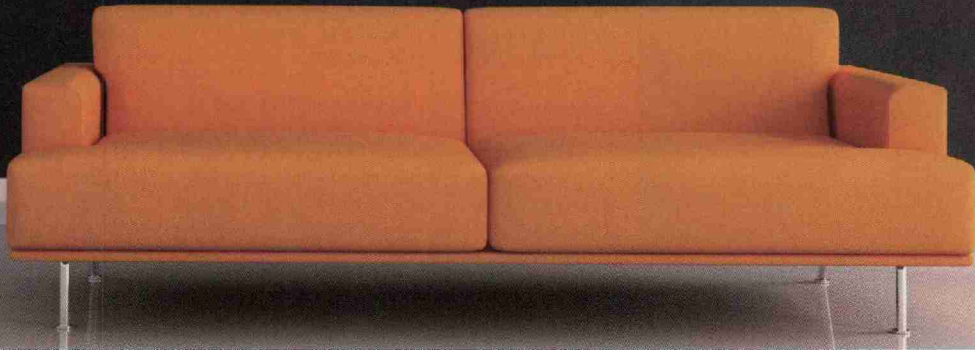
Digital photo frames not only have come down in price, but manufacturers have beefed up their products' capabilities. Today's models store more pictures and display them at higher quality, and more can connect with the Internet than ever before.

By David Elrich

About 3 of 4 U.S. homes now have at least one digital camera, according to Consumer Electronics Association (CEA). That means that digital photos are packed into computers and memory cards across the country. Luckily, today's digital photo frames are more capable than ever before when it comes to storing and showing your treasured moments. It's enough to make you smile without even saying "cheese."

What's better is that prices for digital photo frames have dropped in the past 3 years. The average price for a digital photo frame was projected to be \$76 in 2010, CEA says. That's down \$20 from 2008. Prices are expected to drop another \$5 this year.

As is typically the case when it comes to electronics, the technology that's behind digital photo frames has improved as prices have dropped. Thanks to light-emitting-diode (LED) technology, more



of today's digital photo frames deliver better-quality pictures, even those that are downloaded from the Internet.

GET CONNECTED. Wireless connectivity—specifically, Wi-Fi and Bluetooth (for cellphone transfers)—now can be found in digital photo frames that cost as little as \$100. Just 3 years ago, you would have had to pay almost twice that price to get either wireless capability.

Wireless connectivity allows your digital photo frame to get images from your computer or, as we predicted 3 years ago, through e-mail or websites instead of from an inserted photo memory card, as is typical.

Models that start at about \$120 even have their own dedicated e-mail address, which allows you or others to send photos directly to your digital photo frame. Manufacturers typically don't charge for the first image downloads, the number of which varies by manufacturer. But some charge a subscription fee, which typical-

ly is \$10 for each additional 100 images after you've used up your initial batch.

You should be aware that many digital photo frames are promoted as being Wi-Fi- and Bluetooth-ready. These models start at about \$80, but you have to buy a *dongle*—a small radio transceiver that plugs into a USB jack on your digital photo frame and connects you to your home wireless network—to deliver wireless capability. These dongles are priced at around \$25. So if you want Wi-Fi, you might not save money with a Wi-Fi-capable digital photo frame, compared with a model that has built-in Wi-Fi, and you will have to jump through hoops to achieve wireless connectivity.

BRIGHT IDEAS. Amassing photos is only part of the point of a digital photo frame. You want those images to be as pretty as a picture too. To that end, manufacturers have introduced LED backlighting, which increasingly is found in high-end liquid crystal display high-defi-

nition TVs, to digital photo frames.

LED backlighting delivers brighter images that have enhanced contrast. That combination translates into photos that appear to be more lifelike. At least 12 models have this feature, and manufacturers tell us that you can expect to see more this year, particularly in the 7- and 8-inch screen sizes. Those sizes account for more than 75 percent of digital photo frame sales, according to market-research firm NPD Group. You can find LED backlighting on digital photo frames that start at about \$70.

However, organic LED (OLED), which seemed to be a promising display technology, has fizzled. OLED technology delivers deep blacks and high contrast ratios, which results in purer colors on the display, but prices for the technology are well beyond what most consumers are willing to pay. Kodak introduced a 7.6-inch OLED digital photo frame late in 2008—since discontinued—that was priced at a whopping \$1,000. Experts

Best Buys in Digital Photo Frames

Best Buy Categories

- [P]—Premium selection
- [M]—Midrange selection
- [E]—Economy selection

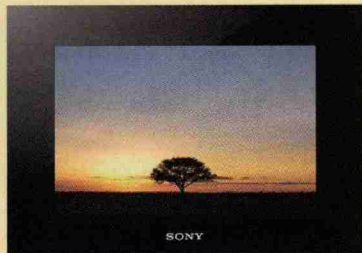


SEE PAGE 72

Best Buys in digital photo frames were selected based on display quality, ease of use, features and design.

Large digital photo frames have displays that are 9 inches and larger; small digital photo frames measure 5.6 to 8 inches.

Unless otherwise specified, all Best Buy digital photo frames have memory-card slots, a USB port for



Sony DPF-XR100

flash drives and computer connectivity, and include a remote control. All digital-photo-frame Best Buys have internal memory and a 1-year warranty.

All wireless digital-photo-frame Best Buys use Wi-Fi networking.

Best Price is a reflection of the lowest retail price that was available at press time and is subject to change.

LARGE DIGITAL PHOTO FRAMES

[P] Sony DPF-XR100

MSRP: \$249; *Best Price*: \$249

>> If you want to see your photos and videos at their best, no model tops the DPF-XR100. It adds enhanced liquid-crystal-display technology to its light-emitting-diode (LED) backlit screen, which adds depth and richness to your images and allows for better viewing from side angles. It also



ViewSonic VFM 1530-11

is one of the few models that plays high-definition AVCHD video; other models typically play only standard-definition video.

Features:

- * Screen: 10.2 in.
- * Multimedia support: AVCHD, Motion JPEG, MPEG-4
- * Storage: 2GB

[M] ViewSonic VFM 1530-11

MSRP: \$199; *Best Price*: \$138

>> You won't find another model in this price range that has the VFM 1530-11's combination of screen size and resolution. Its 1024x768 pixels give this model crisper reproduction than that of the 800x600-

pixel screens that are common in this price range. This model also has a rarely found anti-glare surface to cut down on reflecting light.

Features:

- * Screen: 15 in.
- * Multimedia support: MP3, MPEG-1, MPEG-4
- * Storage: 256MB

[E] Hewlett Packard df1130

MSRP: \$129; *Best Price*: \$129

>> The df1130 has a price that's lower than that of all but a few smaller 10-inch models, and it plays a wider variety of video files than do other models that are in this price range. We like this model's programmable power-on/off capability, which you can set for specific hours of viewing and which saves energy by not staying on all day and night. However, this model has only 128MB of storage.

Features:

- * Screen: 11.3 in.
- * Multimedia support: H.264, Motion JPEG, MP3, Xvid
- * Storage: 128MB

tell us that until there is a manufacturing breakthrough to drive down costs, OLED digital photo frames likely will remain relegated to tiny models, which measure under 3 inches, for the foreseeable future.

TWEAK LINKS. As digital photo frames become more computer-like in their connectivity and display qualities, it's not surprising that they now have more storage capacity at ever-decreasing prices.

Typical storage for a digital frame 3 years ago was 128MB, and you would have paid about \$100 for such a model. Digital photo frames that had 1GB of storage cost at least \$250. Now there are more than 40 models that have at least 1GB of storage. And models that have 2GB of storage, which allow you to store more than 12,000 low-resolution photos, start at about \$100. Digital Foci's Photo Book (\$189), which the company dubs a "digital photo album," has an industry-high 4GB.

Because most digital cameras now cap-

ture video, the ability of a digital photo frame to play back video is a feature that is much more common than it was 3 years ago. You can find video playback on about 50 digital photo frames, which are sometimes called multimedia frames, and that number is growing. You should expect to pay about \$100 for one of these models.

Echoing a trend that is found in other electronic products, a few digital photo frames now have touchscreen controls. Although we expect that you will see more digital photo frames that have touchscreen controls, manufacturers tell us that the technology won't become widespread due to price. Touchscreen digital photo frames start at \$119.

Meanwhile, the ViewSonic 3DPF8 (\$200) incorporates another hot tech trend—3D. The 3DPF8 can display photos from a regular digital camera in 2D, as is the norm, or in 3D, as with HDTV but without the special viewing glasses that TVs require. You



Kodak EasyShare P750

won't get the impact of a 3D movie, of course, but we found that the 3D effect adds depth to an image.

It's likely that interest in 3D digital photo frames will increase as 3D-capable cameras and lenses become more prevalent, but it might take years before 3D's future in digital photo frames is clear. ▶

David Elrich has covered consumer electronics for 27 years. He has written for The New York Times.

SMALL DIGITAL PHOTO FRAMES

[P] Pandigital Photo Mail

MSRP: \$180; Best Price: \$129

>>The Photo Mail's high storage capacity and dedicated e-mail address is a combination that's rare in a small digital photo frame. The dedicated e-mail address allows photos that are sent to this model to be displayed automatically. This model lets you download 300 images without charge, but you'll have to pay about 10 cents apiece to send additional photos to this digital photo frame. You can upgrade this model to Wi-Fi or Bluetooth wireless connectivity by buying an adaptor (\$25).

Features:

- * Screen: 8 in.
- * Multimedia support: AVI, MP3
- * Storage: 1GB

[M] Kodak EasyShare P750

MSRP: \$100; Best Price: \$86

>>You would have to pay about \$90 more to get a small digital photo frame that has more storage

capacity than the EasyShare P750 has. This model also has automatic red-eye removal to improve the appearance of photos—a feature that other models that are in this price range don't have. We found that this model's search function works better than do others that are in this price range. The 8-in. **EasyShare P850** (\$120) is also a Best Buy.

Features:

- * Screen: 7 in.
- * Multimedia support: None
- * Storage: 2GB

[E] Sony DPF-D710

MSRP: \$80; Best Price: \$80

>>The DPF-D710 has screen resolution of 800x480, which means that photos will reproduce more accurately than they do on the 480x234 resolution that is typical of models that are in this price range. This model also displays a wider range of photo files, such as JPEG, TIFF and RAW, than do other economy models. However, it accepts only memory stick and SD/SDHC memory cards.

Features:

- * Screen: 7 in.
- * Multimedia support: None
- * Storage: 128MB

WIRELESS DIGITAL PHOTO FRAMES

[M] eStarling TouchConnect

MSRP: \$200; Best Price: \$190

>>Few digital photo frames can match the Internet capability of the TouchConnect. You can send photos to this model from free Gmail accounts, and it even accepts smartphone videos, which is a rare feature. Also rare: This touchscreen model accepts Really Simple Syndication (RSS) files, which means that it can even display weather reports.

Features:

- * Screen: 10.2 in.
- * Multimedia support: All (through conversion to Xvid) via e-mail
- * Storage: 2GB

[E] Kodak Pulse 7-inch

MSRP: \$130; Best Price: \$101

>>The Pulse 7-inch has a dedi-



Pandigital Photo Mail

cated e-mail address, so you can send photos directly to it from any computer or cellphone, which is a rare feature. What's even better, there's never a charge for this capability. Other models that let you send photos to them via e-mail typically charge \$10 for 100 downloads after an initial free allotment. And you would have to pay at least \$50 more for another wireless model that has touchscreen controls, as this model has.

Features:

- * Screen: 7 in.
- * Multimedia support: None
- * Storage: 512MB

For more information on the above Best Buys, contact the manufacturers directly. See page 64.