

SPRING PARK FILM MAKERS TECH TALK No.1

Guide to SD/SDHC Camcorder Memory Cards



One of the fastest growing areas of the camcorder market is models that use removable flash memory cards to store video footage. While camcorders have long included flash memory card slots for saving still photos, it's only recently that they've started using flash memory cards to replace tape, DVD and hard drives as the main storage medium in a camcorder.

SD/SDHC Cards

Every camcorder manufacturer except Sony uses Secure Digital (SD) and its close cousin Secure Digital High Capacity (SDHC) for their flash memory card-based camcorders. Some flash memory card makers such as Sandisk have begun marketing select SD and SDHC cards as "video" cards. But just because it calls itself a video card doesn't mean it's the right one for your camcorder. There are key differences you'll have to be aware of.

SD/SDHC Card Capacities

SD cards are only available up to 2GB capacities, while SDHC cards are available in 4GB, 8GB, 16GB and 32GB capacities. The higher the capacity, the more video the card can store. If you're purchasing a standard definition camcorder, you can get away with purchasing an SD card. If you're considering a high definition camcorder that uses flash memory cards, you will need to purchase an SDHC card.

Compatibility

While there may be a few hidden exceptions, the overwhelming majority of camcorders on the market accept both SD and SDHC memory cards. If your camcorder says it's compatible with SDHC cards, it can also accept SD cards. However, if it only accepts SD cards, it cannot accept SDHC cards. Even if your camcorder accepts SDHC cards, it may not support all cards. Lower cost camcorders may not support higher capacity (16GB, 32GB) SDHC cards. You'll have to dig around in the fine print to be sure that higher capacities cards are supported.

Speed

One crucial element that's often overlooked when evaluating SD/SDHC cards for use in a camcorder is speed. In fact, the speed of a memory card is critical, especially when filming with a high definition camcorder.

To make a long story short, slower SD/SDHC cards can be overwhelmed by the amount of data being fed to them by a digital camcorder. Put a slower card into your camcorder, and it may not even record at all.

What Speed Do You Need?

To help you find the right speed, SD/SDHC cards are broken down into four classes: Class 2, Class 4, Class 6 and Class 10. Class 2 cards offer a minimum sustained data rate of 2 megabytes per second (MBps), Class 4 of 4MBps and Class 6 of 6MBps and Class 10 of 10MBps. Depending on which manufacturer is selling the card, the speed class will either be prominently displayed or buried in the specs. Either way, look for it.

For standard definition camcorders, an SD/SDHC card with a Class 2 speed is all you would need. It's fast enough to handle the highest quality standard definition video you can record. For high definition camcorders, you're safest going with a Class 6 card. While you may be tempted to spring for a Class 10 card, you'll be paying for performance you don't need in a digital camcorder.

What's Next?

SDHC cards will be on the market for a while yet, but a successor has already been announced. The SDXC card will look like your average SD/SDHC card, but will eventually boast capacities as high as 2TB and data speeds as high as 300MBps. It will take years to hit those performance specs, of course, but it's fun imagining what type of camcorder would need such a high-powered card.

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