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~ Home-Based PCs

# ReadyNetGo ... News

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<http://www.readynetgo.net>

### TIP OF THE MONTH

If you're looking to upgrade your computer, a **CD-RW drive** is an excellent addition. Not only can it read CDs, important for installing files and downloading & running software, CD-RW gives the added function of writing data to disks. You can archive data, backup or transfer important files, and copy CD-ROMs (within copyright laws). CD-RW drives are an excellent replacement for the floppy as they can hold up to 650 MB per disk.

**DVDs** are another option and varieties abound. Many software titles are available on DVD now because of the increased storage capacity. Technical manuals and graphic programs, in particular, are now offered in DVD format. Another common use for DVDs is watching movies and multi-media presentations (especially on laptops).

If you need a lot of removable storage space, **DVD-RAM/ R/ RW** is for you. With up to 17 GB of storage space, these drives are an excellent add-on device.

If cost isn't a factor and you have limited space in your computer bays, get a **combo drive** (such as DVD-ROM/CD-RW) or an external model. Combo drives are rated highly and give you the most function while external models give the most flexibility.

One last point regards the type of interface chosen. If you're looking to use your new drive extensively, purchase a scsi model. IDE interfaces are better for more casual use.

Stay tuned for more on computer interfaces in the next newsletter ... Home-based PCs!

## Choices, Choices ... which one is right for me?

### *How to decide between CD and DVD drives*

Floppy drives (max 1.44 MB) are very limited on storage and have been replaced by other components such as zip drives. While a zip drive is handy, it too offers limited space (max 250 MB). That's where CD-RW and DVD-RAM come in. With increased storage and file transfer capabilities, these drives are a valuable addition to any system. Here's a brief explanation of CD and DVD drives and features to look for:

CD drives come in three types: CD-ROM (reads CD disks), CD-R (reads & writes once) and CD-RW (reads & writes multiple times).

1. CD-ROMs have one speed for reading – you should get at least a 24x. This value indicates how fast information is transferred.
2. CD-R drives read CD-ROMs and write once to CD-R disks. Because of the limitation of CD-R drives, they don't have the same level of production as CD-ROM and CD-RW. There are plenty of CD-R disks available, however, so look at the package carefully when purchasing. CD-Rs can hold 650 MB of data.
3. CD-RWs have three speeds – the fastest X rating is the read speed; the next fastest is the writing speed (CD-R); and the slowest speed is for re-writing data (CD-RW). Look for at least the following for a CD-RW: 10x / 8x / 24x. CD-RWs can hold between 650-700 MB of data and the drives can read CD-R & CD-RW media.
4. Some older CD-ROM drives will not be able to read CD-RW disks because of newer technology constraints. CD-R disks, however, can be read in virtually all CD-ROM drives.

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### WWW (Websites Worth Watching)

1. [www.bookfinder.com](http://www.bookfinder.com) - Find new & used books
2. [www.powells.com](http://www.powells.com) - Famous independent bookstore offers new & used books
3. [www.acnatsci.org](http://www.acnatsci.org) - Academy of Natural Sciences, Philadelphia; describes exhibits, hours, lots more
4. [www.philly.com](http://www.philly.com) - Events, food, sports, health & more
5. [encarta.msn.com/quizzes](http://encarta.msn.com/quizzes) - Test your knowledge with these fun quizzes

DVD drives (and disks) come in five types: DVD-ROM, DVD-RAM, DVD-R, DVD-RW, and DVD+RW. (There are also DVD-video and DVD-audio disks)

1. **DVD-ROM drives:** Read CDs as well as DVDs but they cannot write data.
  - Maximum capacity is 17 GB on a double sided disc. Single layer DVD will hold 4.7 GB and a dual layer, single side disk can hold 8.5 GB. Best for viewing movies and multi-media presentations.
2. **DVD-RAM drives:** Recordable and re-writable disc format. 100,000 rewrite capabilities.
  - Capacity is 4.7 GB per side. Although DVD-RAM disks cannot be read in DVD players and most DVD-ROM drives, DVD-RAM drives can read CDs, CD-RWs and most CD-Rs as well as writing to DVD-RAM. Best for back-ups and archiving data.
3. **DVD-R drives:** Write-once version of DVD.
  - Capacity is 4.7 GB per side. Compatible with DVD players. Best for creating master disks. Very expensive for drive and media.
4. **DVD-RW drives:** 1000-rewrite capabilities.
  - Capacity is 4.7 GB per side. Compatible with some DVD players. Best for video, graphics and authoring applications.
5. **DVD+RW drives:** Re-writable format competing with DVD-RAM.
  - Capacity is 4.7 GB per side. Compatible with virtually all current DVD players and drives. Best for real-time video recording.

To further expand the possibilities, combo drives allow users to get the functionality of individual drives in less space. Some useful combinations:

1. **DVD-RAM/R drives:** Can read DVDs, CDs, CD-R, and CD-RW discs and can read video CDs and DVD-ROM discs. Also writes to DVD-R and DVD-RAM. Best for multimedia use and as an archiving tool. Approximate cost of the drive is \$700. The DVD-RAM media is around \$50 for a double-sided 9.4 GB disk.
2. **CD-RW/DVD-ROM drives:** Can read DVD-ROM, CD-ROM, CD-R, and CD-RW while writing to CD-R and CD-RW. Approximate cost is \$250.

Although cost is higher for these drives, the cost of two separate drives is comparable and you lose valuable drive space if two units are purchased rather than one combo (unless you buy one or two external scsi models).

### Drive comparisons ... in brief:

	CD-ROM	CD-RW	DVD-ROM	DVD-RAM
<b>READ SPEEDS</b>	24x - 72x	24x - 40x	32x - 48x	24x - 32x
<b>WRITE DATA?</b>	No	Yes	No	Yes
<b>STORAGE?</b>	No	650 MB	No	up to 17 GB
<b>COST (est.)</b>	\$75	\$250	\$125	\$500
<b>MEDIA COST</b>	N/A	\$2	N/A	\$25

**Note:** A DVD 1x speed is faster than a CD 1x speed. Ex: a 16x DVD drive = a 48x CD drive.