

Media Made Easy April 2005 Newsletter

News and Events:

- ?? The FCC has pushed back the July 2006 deadline for cable companies to replace set top box decoders with cable cards capable of decoding HDTV.
<http://www.engadget.com/entry/1234000343040219/>
- ?? CNET is reporting that TiVo is in talks with Google and Yahoo about offering services that would allow you to search for video content online and then download the content to your TiVo box for viewing. TiVo is walking a fine line between the cable companies (who want to control access to content sources) and Internet companies who might actually develop new ways of enjoying entertainment.
- ?? MTV announced plans to launch a Web-base video channel called "MTV Overdrive" later this month. Content will include News, Music, On TV and Movies. Broadcasts will be done using Windows Media Video. They plan on releasing a version optimized for Windows XP Media Center Edition - look for it soon in Online Spotlight!
- ?? Napster reports a 53% increase in subscriptions for their fourth quarter. They are catching up quickly with iTunes. Watch out Steve Jobs!

April's Feature Topic - High Definition Television "I want my HDTV"

A frequent topic of your questions and emails is the topic of high-definition television. Let's give you a brief primer on HDTV and discuss how it applies to personal video recorders in general and Media Center specifically.

What is DTV?

Digital Television is a system for delivering, receiving and viewing high quality video and stereo (surround) audio. The goal is to offer improved picture and sound quality and to allow new digital services that require an improved transmission capability. The FCC has mandated that DTV signals be freely available off the air (read over the air) in every locality nationwide that has analog television.

How does it compare to regular TV?

Standard definition television broadcasts (SDTV) and high definition television broadcasts (HDTV) both use the VHF and UHF frequency bands (hence the FCC regulates them). The difference is that regular television uses amplitude modulation (AM) to carry the pictures and frequency modulation (FM) to carry the sound, while DTV transmits "packets" of data (0's and 1's) using different multiplexing or modulation schemes.

Why is it important?

The FCC has mandated that all broadcasters convert to DTV - not because it offers better pictures and sound to the consumer - because the FCC wants to get some of their frequencies back (so they can sell/lease them on the open market). The deadline is supposed to be January 1, 2007. That date may be pushed back for a variety of reasons. What's important is to realize that it will be happening in the near future.

Will I have to buy an HDTV?

Not right away. The lowest resolution in the HDTV standard is called 480i. Analog TV's currently support 640 X480 lines - 640 scan lines wide by 480 scan lines top to bottom of the screen. The 480i digital signal will play on a standard analog television, however you will need some type of decoder box to decrypt the broadcast signal (0's and 1's plus any encryption protection schemes) into an analog signal for viewing.

What are the advantages of HDTV?

HDTV offers higher resolution rates so that the pictures are much better (crisper and with greater detail) and it offers digital surround sound for improved audio. If you've never seen an HDTV you should really check one out at your local electronics store. The picture is fantastic.

What does it cost to migrate to HDTV?

There are two costs to going with HDTV. The first cost is for a high-definition display. There are several types available including plasma, projection, projectors and LCD displays. They have a much higher price than an analog screen. The second cost is for the equipment to decode the HDTV signal. Currently true HDTV decoders cost several thousand dollars, so they are aimed at a high-end market.

How do you get HDTV programming?

There are several broadcast sources for HDTV. As stated earlier the FCC has mandated that all broadcasters offer an HDTV signal by 2007.

Many broadcasters currently offer HDTV over the air (OTA). OTA broadcasts are sent out into the air in VHF and UHF frequencies - just like the old days before we had cable and satellite. It's likely that your local metropolitan network stations are broadcasting in HDTV OTA today.

Satellite and cable providers also offer HDTV. In many cases the set top boxes that you get when signing up for your service do not offer true full HDTV support. They will offer a noticeable increase in picture quality though. As we stated above, true HDTV decoders are very expensive. What the picture looks like is dependent upon three things: Does the provider broadcast in HDTV? Does your decoder equipment support HDTV decoding (the signal is compressed and must be reassembled by the set top box)? Does your display support HDTV? If the answer to all three questions is yes, then you are watching true HDTV.

There are also specialty providers that offer HDTV-only programming. They typically use satellite dishes and high-end decoder boxes to get the signal to you. They are more costly than basic cable/satellite service.

How do personal video recorders (PVRs) support HDTV?

Most PVRs don't currently support true HDTV recording. TiVo does offer an HDTV recorder, but it is very expensive and only works with DirecTV. DirecTV sends a signal format that can record directly to the hard drive on that TiVo unit. TiVo at this point has no specific plans to bring a standalone HDTV TiVo to market.

DirectTV has made a very large investment in HDTV programming and infrastructure. Most of the other providers would need to invest large capital in upgrading their infrastructure to support full HDTV broadcasting. That is why you probably only have a dozen or so channels on your cable/satellite system in HDTV (and even then not all day long). The holdup isn't the broadcasters (they've already been forced to upgrade their infrastructure) it is the service providers.

So what happens if the broadcasters and the service providers delivered HDTV programming? That would get you viewing HDTV...but what about recording. If you take a look at your cable/satellite set top box you aren't likely to see an "YpbPr" or "RGB" high definition output. Instead you'll probably see a coaxial output and maybe composite (RCA yellow) and S-video connector. This means that any output to your HDTV display will be down sampled to fit a format supported by coaxial, composite or S-video. You might still notice an improved picture quality (since HDTV signals do tend to clean up nicer than analog signals) but you're not getting HDTV to your display or your PVR.

How do I get HDTV to my PVR?

Currently you can only record in HDTV from OTA sources using a PVR and an HDTV antenna.

The FCC and the PVR makers have been pushing the service providers to switch over to "CableCards" technology. These cards would be capable of receiving HDTV signals and decoding them and decrypting them (if the signal is copyright protected) for recording and playback. The "CableCard" could be placed in TV's, PVR's and PC's. At that point manufacturers could implement all sorts of devices to take advantage of HDTV. Sounds like a great idea right?

Not so fast! The cable/satellite providers are fighting this concept tooth and nail for several reasons. The first is that they want to control what you see and do on the TV, not surrender it to hardware manufacturers and PVR companies. The second is that they want to entice you into purchasing online goods and services through their interface (so they can get a piece of the action). The third is that cable card technology is built to be one directional so it eliminates the ability to do pay-per-view and on-demand movie rentals...the cable companies have grown fat on these services. Needless to say there is a big conflict of interest in them supporting the idea.

The deadline for "CableCard" to be implemented has recently been pushed back to July 2007. We wouldn't be surprised if it was delayed even further. For more information please see this article <http://www.engadget.com/entry/1234000343040219>.

Where does that leave you? With only OTA HDTV for now.

So when can we get an HDTV PVR?

Although there hasn't been an official announcement, Microsoft is developing a cable card solution for delivering HDTV recording support for Media Center. It remains to be seen how they will get buy in from the service providers, but it's good to hear that they are going forward and getting something done. We should see something with the update release to Windows? XP Media Center Edition 2005 this fall. Microsoft is also in a possible conflict position since they are working with service providers on other projects. We'll have to see how it plays out.

If Microsoft can lead all the parties towards true HDTV PVR, then they could really see Media Center reach the mainstream not just the enthusiast market. I want my HDTV!

Tip for April

Have you been searching for a previous channel button on your Media Center remote control? You don't need one to return to the last channel...just press the OK button and you'll be back to the previous channel.

What's new from Media Made Easy

We are preparing to launch a service for creating special event videos. The service will take your home movies and digital or hard copy pictures and transform them into a polished DVD suitable for presentation as a gift. Your memories are set to a music soundtrack. We will offer titles, opening and closing credits, narration and time-relevant newsreel clips as add-on features.

These DVD's make perfect gifts to someone special in your life. Play them at a birthday party or award presentation. Details will be posted to our website later this week.

Have questions, comments or ideas for us? Please email us with request for topics for the next newsletter. We want to get you the information you've been looking for.
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