



# Digital TV News

## *What You Need to Know About the Digital Television Transition - Updated for February 2009*

The North American switch from analog to digital broadcasting (DTV), originally scheduled for February 17, 2009, has been delayed. Congress has given TV stations the option of continuing their analog broadcasts until June 12, 2009. Stations can also opt to convert before June 12, and Public TV 13 plans to make the switch in mid-May. For more details on our conversion plans, see page 3.

With the switch to DTV, Public TV 13 will be able to offer high-definition pictures, better sound quality and more free programming choices. In order to prepare our viewers for the analog shut-off, we're providing monthly updates in our *FanFare* program guide and on our Web site, [www.nmu.edu/wnmuv](http://www.nmu.edu/wnmuv). This newsletter is a compilation of information that you need to know to keep Public TV 13 on your television.

### **Why the change?**

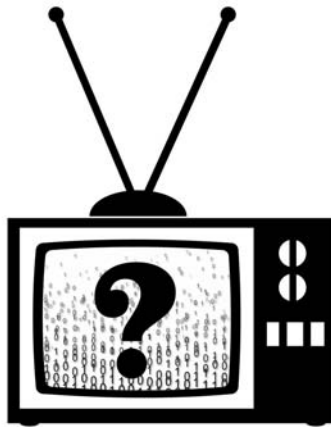
The switch to digital TV is happening worldwide, and has been in the works for many years. In 2002, local stations began plans to switch to digital after the U.S. Congress mandated the transition to DTV for the many benefits it provides.

### **What are the benefits?**

DTV is a more efficient and higher quality broadcast technology and takes up less space on the air, or spectrum, allowing stations to send multiple channels of programming. DTV can also broadcast high-definition which, when watched on an HD TV set, gives a much better looking picture. Additionally, it opens extra spectrum for use by emergency responders (police, fire, medical).

### **When will the change take place?**

Your local TV stations have been broadcasting digital TV since 2004 when the government mandated that all stations begin digital broadcasts. Many stations chose to keep these initial digital broadcasts low power (reaching a limited area) in order to save on energy bills. So some of your U.P. and Northern Wisconsin neighbors have been watching digital stations for years. Until June 2009, the choice is up to you whether you wish to



invest in a new television receiver to get the digital channels. But by June 12, 2009, stations will be forced to turn off their analog transmitters and make the switch to digital-only. At that time you will need to make a change in order keep receiving local stations off the air (via antenna.)

### **How will the conversion affect me?**

Cable television viewers will not notice a change. Viewers who receive over-the-air television signals through antennas, and do not subscribe to cable, will need to take action to continue receiving their local TV stations. If you have access to cable service at your location, subscribing is an option. But, if you are one of many area residents who watch TV over-the-air and do not have access to cable service, you will need to either purchase a converter box that can enable your current

television to receive DTV, or purchase a new digital television set with a built-in digital tuner. Note that popular satellite systems like DirectTV and Dish Network do not yet offer local stations in the U.P.

### **What is the converter box coupon program?**

To help consumers purchase a converter box, the Federal government has a coupon program to reduce the cost. (Converter boxes cost \$50-\$70; each coupon is worth \$40.) Currently, the budget for coupons has been exhausted, but funding is likely to be renewed and you can still register for coupons and get on a waiting list. To learn more about the program, including how to request coupons, redemption instructions, and where converter boxes are sold, go online and visit [www.dtv2009.gov](http://www.dtv2009.gov) or call **1-888-DTV-2009**, toll-free, to request a coupon or to receive coupon program information.

#### ***Consumer Tips:***

- Beware the bargain bin. Obsolete analog TVs must carry a warning label, advising you that the TV will not receive over-the-air broadcasts after the conversion.
- Government coupons can not be used toward buying digital TVs or more "deluxe" devices like DVD recorders.

## How can I continue to watch my local stations?

Local stations have some choices about how they handle the conversion. Some stations (like Public TV 13) will install new full-power digital transmitters that will reach roughly the same area as their current analog signals. Other stations may choose to continue low-power digital broadcasts, and not make the switch to full power. Some stations currently use low-power analog translators, which are not subject to the June 2009 shut-off, and those translators will remain in operation until they are forced to switch them over at some future date. You can expect some interruptions in local broadcasts, but the exact nature of those interruptions will depend on various factors: your location, your local terrain, and how each station chooses to implement the conversion.

No matter how your local stations handle the conversion, you will eventually need to obtain some new equipment in order to continue watching over-the-air TV. One of your choices is a DTV converter box which makes it possible to see digitally broadcast television programs on an older analog TV set, and allows people to keep their free, over-the-air TV service. DTV converter boxes, available in local stores and from online retailers, cost between \$50 and \$70. There is a one-time cost for the converter box and it does not require a monthly service fee.

You may also choose to buy a new digital television set, or a DVD recorder that includes a digital tuner, or switch to cable TV, if it's available in your area.

## What about cable?

Cable viewers should not notice the change. Some Upper Peninsula cable operators receive our Public TV 13 signal over the air, so there may be brief inter-

ruptions in programming during the time we are converting our transmitter (see page 3 for more about our conversion plans.) Charter Cable receives our signal directly from our studios, so most Charter viewers will continue to receive Public TV 13 without interruption.

Cable companies are required to carry both analog and digital signals until 2012. This means that if your analog set is connected to cable service, you have more time to make a change, but eventually you may have to invest in new equipment or pay higher service fees. Cable subscribers who have older TVs in their homes that are not connected to cable may want to make plans to receive over-the-air digital broadcasts – you may want to get a digital converter box to be ready in case of cable outages.

Charter Cable subscribers will get a bonus after the conversion – Charter will be carrying all of our multicasting program streams, so Charter channel 13 will become multiple channels. If you subscribe to other cable systems, it's a good idea to contact your provider to find out their plans for after the conversion.

## What options do I have for buying a new TV?

New digital televisions come in a range of sizes, prices and screen types. Available sets range from classic, standard-definition (SD) "tube" screens under \$200, to giant high-definition (HD) LCD and plasma screens over \$5000! There are plenty of good digital TVs in between, but shop carefully and make sure you are buying a set that includes an ATSC digital tuner for receiving digital signals off the air. Digital sets come in both SD and HD, so make sure you know which you are getting. You won't get the full benefit of high-definition picture and high-quality sound with-

## DTV Definitions:

- **DTV:** Digital television, a new format of broadcasting being adopted world-wide.
- **Analog TV:** The older format of broadcasting, used since TV's beginning.
- **HDTV:** High definition TV – a form of digital TV with a higher quality picture.
- **SD:** Standard definition TV – a form of digital TV with a lower-quality picture that still looks better than analog.
- **Digital-ready:** TV sets that don't include a built-in digital tuner; also called "digital monitor," "HDTV monitor," or "HDTV ready."
- **ATSC:** The type of digital broadcasting being adopted in North America (ATSC stands for Advanced Television Systems Committee.)
- **Multicasting:** Multiple channels of programming delivered simultaneously by a single digital TV station.
- **NTIA:** National Telecommunications and Information Administration, a U.S. government agency that administers the converter box coupon program.
- **CECB:** Coupon-eligible converter box, certified by the NTIA for purchase with government coupons.

out an HD set. And beware of "bargain bin" TVs – obsolete analog sets must carry a warning label, and some retailers have been fined for non-compliance.

## Why haven't I received my converter box coupons?

Public TV 13 is not involved in either distributing the coupons or redeeming them, so we can't tell you exactly when you will receive them. You can check the status of your coupons on the government's Web site, [www.dtv2009.gov](http://www.dtv2009.gov). Click on "Where are my coupons?" to get to the page where you can their status.

## When will TV13's DTV station be on the air?

WNMU-DT has been broadcasting in low-power digital in the Marquette area since July, 2004, when the government mandated that all stations begin digital broadcasts. Currently, our digital channel is broadcast on channel 33 (UHF), via a low-powered transmitter in Marquette Township. Viewers outside the Marquette area are likely not able to receive this signal. Charter Cable customers can also get WNMU-DT on the HD tier.

Construction of our new digital control room at Public TV 13's studios on the Northern Michigan University campus is complete. The next step will be to install a new digital transmitter and antenna at our transmitter/tower site in Ely Township.

Since the Congress voted to delay the analog shutoff, Public TV 13 is opting to continue broadcasting in analog until some time in May.

We anticipate being off the air (but still on Charter Cable) for a few days in mid-May for installation of our new transmitter and antenna. You will hear more about this interruption in our broadcasts when we determine the exact date. After construction is complete, WNMU-TV plans to broadcast in digital only, on Channel 13 digital (VHF), 24 hours a day. We intend to duplicate our current channel 13 analog coverage area as much as possible.

The conversion will also require us to turn off our low-power digital transmitter in Marquette Township, so Marquette-area over-the-air viewers will lose Channel 33 digital at that time. If you live close to Marquette, but at a higher elevation, you might be one of those lucky people who can receive our digital channel over-the-

air both now and in the future. Otherwise, Marquette-area viewers may have to rely on cable. The good news is that Charter Cable will be carrying all of our multicasting program streams, so Charter channel 13 will become multiple channels.

## Is Digital TV13 one channel or more?

WNMU-DT, Channel 13 digital, is one channel, but with DTV we have the option of "multicasting" – delivering more than one program choice at the same time. As of February 1, we offer three digital program streams: 13.1, our Public TV 13 local programming schedule in standard definition (SD); 13.2, "TV13/HD," our high-definition (HD) broadcast of the PBS HD schedule; and 13.3, which we are calling "TV13/Plus," which will present the PBS schedule on a 3-hour delay in SD. In the future, we plan to program "TV13/Plus" with more locally-produced programs and content from other sources.

## What if I have a dish?

Satellite systems like DirectTV and Dish Network do not yet offer local stations in the U.P. If you subscribe to one of these services, you're probably watching Public TV 13 via an over-the-air antenna, and you will need to take action in order to continue watching local stations.

## Why can't I receive your DTV signal with my converter box?

The problem most likely has to do with location. Our channel 33 signal is low power and only reaches folks in the Marquette area. As we explained above, that will all change in May. At that time, viewers now getting a clear signal on analog Channel 13 should be able to receive our digital Channel 13.

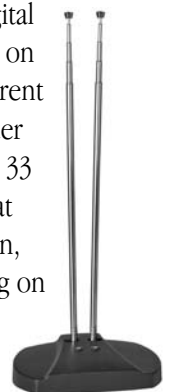
## DTV Definitions:

- **Over-the-Air:** TV broadcasts received in your home through an antenna.
- **Translators:** Low-power transmitters that extend the range of local TV stations over longer distances or high terrain.
- **Analog Cable:** Traditional cable television, delivered through a wire that connects directly to your television set.
- **Digital Cable:** A more efficient form of cable television with an expanded range of channels (for an extra fee) usually delivered through a set-top box. Can be viewed on analog or digital TVs.
- **HD Cable:** Cable channels that provide a high-definition picture when viewed on an HD television set.
- **Analog Pass-through:** A feature of set-top converter boxes that allows analog signals to be viewed.
- **Down-converting:** Changing a high-definition picture into a standard-definition picture for viewing on a non-HD set.

## Will my old VHF antenna work with DTV13?

When we complete the digital conversion, we will remain on channel 13 (VHF). Our current low-power digital transmitter in Marquette is on channel 33 (UHF), but we will turn that off as part of the conversion, and we will be broadcasting on channel 13 (VHF) only.

Your current antenna will work with digital signals (when attached to a converter box or new digital TV), but depending on your location, you may need to boost your antenna's power or height. Reception will vary (as it does now) with your distance from our transmitter and the local terrain.



## Will I get HD with my converter box?

A DTV set-top converter box will let you watch down-converted HD channels on your old TV, but you won't see a high-definition picture unless you get a new HD set. Although they are not HD, down-converted digital broadcasts will make your old set look much better than before.

## What if I do nothing?

If you own any TVs that receive television with an antenna only (for example, via "rabbit ears" with no cable or satellite service) and you do not take action, you will not be able to receive a television signal in your home after June 12, 2009.

## How do I know if my TV set has a digital tuner?

The best way to determine if your TV has a built-in digital tuner is to consult your owner's manual. You may also be able to find information about your TV set on the manufacturer's Web site. Some TVs with digital tuners have labels containing the words "integrated digital tuner," "digital receiver," "digital tuner," "DTV," or "ATSC." If your set is labeled "digital monitor," "HDTV monitor," "digital ready," or "HDTV ready," this does not necessarily mean it has a built-in digital tuner.

## Help your neighbor!

You've taken the time to become educated about the digital TV conversion by reading this newsletter and doing your

### *Tech Tips:*

#### *Receiving Digital Signals*

- Viewers of over-the-air broadcasts may have a different experience with digital signals as compared to analog signals after the conversion. Digital signals are more likely to be deflected by topographical features than are analog signals, and rather than degrading gradually into snow, the picture drops out completely when signals are interrupted. Some viewers will need to invest in a new antenna.
- If a converter box is installed before the digital transition, and you want to watch both analog and digital TV stations, you will need a splitter or A/B switch for your antenna, or a converter box that can pass through analog signals (see Analog Pass-through tip at left.)

research. Now you can help us spread the word by asking your friends and neighbors if they know about the future of TV. If you come across someone who might need assistance, please share this newsletter with them. You can apply for converter box coupons for a friend or relative, or let them know how you got yours.

Public TV 13 is also offering in-person DTV presentations for local community groups. If your group is interested in hosting a speaker from Public TV 13, please give us a call at 800-227-9668.

*Thanks for helping us keep  
Public TV 13 on your TV,  
and your neighbor's!*

### *Consumer Tip:*

#### *Analog Pass-through*

- When buying a set-top box, you might want to consider looking for a box that provides analog pass-through, which will make watching a mix of analog and digital channels much easier. Only a small percentage of boxes on the market have this feature. If you watch translator stations that are not required to switch to digital in 2009 (like the WLUC-TV6 translators W14CE in Escanaba, and W07DB in Marquette) you will want to make sure you can watch both digital and analog channels with a pass-through capable box, or a splitter or A/B device that can switch inputs to your television.

### *Useful Web Links:*

Converter box coupons: [dtu2009.gov](http://dtu2009.gov) or call **1-888-DTV-2009**

How to hook up your converter box: [Digitaltips.org](http://Digitaltips.org) or [dtvtransition.org](http://dtvtransition.org)

How to purchase new TVs and converter boxes: [ConsumerReports.org/dtv](http://ConsumerReports.org/dtv)

FCC's DTV transition site: [dtv.gov](http://dtv.gov)

More DTV information:  
[www.pbs.org/digitaltv](http://www.pbs.org/digitaltv)  
[www.ezdigitaltv.com](http://www.ezdigitaltv.com)  
[www.antennaweb.org](http://www.antennaweb.org)  
[www.hearusnow.org](http://www.hearusnow.org)  
[www.checkdtv.com](http://www.checkdtv.com)  
[www.michigandtv.com](http://www.michigandtv.com)

All these links and more resources can be found on our Public TV 13 DTV pages: [www.nmu.edu/wnmutv/](http://www.nmu.edu/wnmutv/)



WNMU-TV is a public service of Northern Michigan University

Public TV 13 values your support. We are here to help you during this transition, so please contact us with any questions you may have about DTV. Visit the Public TV 13 Web site: [www.nmu.edu/wnmutv](http://www.nmu.edu/wnmutv) where we are maintaining a special page with answers to your DTV questions, news updates, useful links, and information about how Public TV 13 is managing the transition; or call **800-227-9668** (8:00 am - 5:00 pm Eastern time) or email us at [dtv13@nmu.edu](mailto:dtv13@nmu.edu).

The Michigan Toll-free DTV Help Line, **1-888-MI-DTV-09** (1-888-643-8809), can offer assistance with DTV questions and obtaining coupons. We are encouraging viewers to use this statewide resource, set up by Michigan Association of

Broadcasters and sponsored by Don-Lors Electronics, to receive personal assistance with issues related to converter box coupons, converter box installation and antennas/reception. Call **1-888-MI-DTV-09 (1-888-643-8809)** (please note the "888" prefix – not "800.")