

# DTV And HDTV Info

Roger Reini, KD8CSE  
FARL (Tin Lizzie Club) – April 2008

- Basic Information
- Forthcoming NTSC Shutdown
- HDTV Options in SE Michigan
- (H)DTV and Amateur Radio
- Personal Impressions
- Links

## Topics for Discussion

- DTV: Digital Television
- HDTV: High Definition Television
- HDTV is **not** synonymous with DTV
- Lowest form of DTV: 480i (equivalent to today's NTSC)
- Increasing quality: 480p (VGA equivalent), 720p, 1080i, 1080p
- HDTV broadcasts are in 720p or 1080i
- HDTV by definition is a widescreen format, thus requires a widescreen TV or monitor

## Basic Information

- CRT sets: falling by the wayside
- Rear projection sets: Once the leader, now less popular
- Front projection setups: Great for high-end
- Flat-panel sets: market leaders
  - LCD: typically 37" or smaller
  - Plasma: typically 42" or larger
- Computers or computer monitors
  - 24" iMac displays OTA HDTV very well

## Types of Monitors and Sets

- Component Video: oldest for HDTV; they are analog
  - Cannot be secured, so newer HD devices will not supply HD-quality signals via these inputs
- DVI: One means of conveying digital signals to monitor
- HDMI: High-bandwidth video and audio connection
  - This method supports copy protection
  - Blu-Ray HD players use this connection to output HDTV

## Inputs

Can't ever have too many inputs

- February 2009: By law, all analog NTSC TV over-the-air broadcasts cease
- Old sets still usable by being connected to cable or by getting a converter box with that \$40 coupon from the government
- Converter boxes available now at Best Buy and other retailers
  - Next generation boxes may be better
- Parts scavenging opportunities will lie ahead

## DTV 2009 Transition

Bye bye, NTSC analog TV

- All Detroit stations are operating DTV stations (not Windsor)
- WADL (38) is 480i DTV only; others have HD capability
- WDIV and WXYZ carry local news in HDTV; they also carry weather subchannels
- Other subchannels:
  - WXYZ has classic TV
  - WMYD has WCSN sports (Olympic-type sports)
  - WTVS has its analog simulcast and PBS Create
- All available over-the-air and via cable (not all subchannels carried by cable)

## HDTV Options, SE Michigan

What's available and how to see it

- Effects not yet known – will they be less susceptible to RFI?
- Plasma sets tend to be electrically noisy

(H)DTV and Amateur Radio



- Long-time user (since 1999)
  - First, analog conversion
  - 20" VGA
  - 43" RPTV and 26" widescreen CRT
  - now 24" LCD display on iMac with DVR capability
  - 13.3" MacBook , too
- Reception
  - No graceful degradation; you either receive it perfectly or not at all
  - ATSC tends to be susceptible to multipath
  - Reception at home can be difficult at times

## Personal Experience with HDTV

- HDTV Magazine – <http://www.hdtvmagazine.com/>
- AVS Forum – <http://www.avsforum.com/>
- DTV Transition – <http://www.dtv.gov/>
- DTV Converter Coupon Program – <http://www.dtv2009.gov/>

## Links

Good sources of information

Questions?

Q&A