Rhode Island PBS Technical Standards & Guidelines

High Definition Video Formats

- All HD programming should be conformed to:

    - Lines/frame........1080i
    - Pixels/line...........1920
    - Frames/second...29.97
    - Aspect ratio........16 x 9
    - Interlaced fields SMPTE 709 Standard

- Acceptable Digital File Formats:

    - **Preferred......ProRes 422 LT**
    - Alternative....Quicktime H264 (Less Preferred)

Packaging (Digital)

- 60 seconds of NTSC color bars and tone (-20 dBFS).
- Starting with the test signal, time code must be SMPTE drop frame, and must begin with time code greater than 00:00:00:00. The time code must increment without interruption until 30 seconds after the final program segment.
- VITC and LTC time code must be continuous and identical, recorded on lines 16 and 18.
- 20 seconds visual slate containing:

    - Program/Series Title

    - Program Length (HH:MM:SS)

    - Indication of Mono or Stereo audio, captioning, SAP, DVI

    - Track utilization for all audio tracks (see below for track assignment)

- Countdown clock requirements:

    - The countdown clock starts 10 seconds before the program

    - Countdown clock must appear over the slate, or stand alone 10 seconds after the slate

    - There shall be 1.8 seconds of silent black between the countdown clock and the beginning of the program (silent black shall be taken 0.2 seconds after the number "2" appears)

Video (Digital)

High Definition:

- The luminance level in white areas of the program can reach as high as 100%, but not above 100%. Objectionable white clipping must not be evident.

- The luminance level in black areas of the program can fall as low as 0%, but not below 0%. Objectionable black clipping must not be evident.

Audio (Digital)

- Program audio levels should regularly peak at -12 dBFS, while reference tone should be set at -20 dBFS. Producers must maintain music and effects levels sufficiently below dialog to insure that a wide variety of viewers can understand the dialog upon first viewing, in home conditions with ambient noise and moderate program levels.

Audio Track Assignments

- **Monaural Audio**

 Track 1:   Mono mix or full mix Stereo

 Track 2:   Mono mix or full mix Stereo

 Track 3:   DVI or Mono mix

 Track 4:   Second language or Mono mix

- **Stereo or Multi-Channel Audio**

 Track 1:   Left Channel Stereo audio

 Track 2:   Right Channel Stereo audio

 Track 3:   Mono mix

 Track 4:   Mono mix