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