

Rhode Island PBS Technical Standards & Guidelines

High Definition Video Formats

All HD programming should be conformed to 1080i 59.94, which relates to 30 frames per second, interlaced fields SMPTE 709 standards.

Acceptable formats include

- HDCAM videotape
- HDV videotape 1080/59.94 (no 24p masters)
- Digital file formats should be H264 Quicktime, ProRes 422 LT, AVID DNxHD 145 or 36.

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)

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. Black setup is not allowed in any digital submissions. When measured as derived composite signal, the black level must not fall below 7.5 IRE units. The recorder shall be set up to conform to a standard alignment tape. 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. When measured as derived composite signal, the white level must not exceed 100 IRE units.

Audio (Digital)

The reference tone should be set at -20 dBFS. Program audio levels should be consistently between -20 and -12 dBFS, with occasional peaks above and below. 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 (primary channel for multi-lingual programs)
- Track 2: Right Channel Stereo audio
- Track 3: DVI or Mono mix
- Track 4: Second language or Mono mix