

# Technical Specification

ASIA

Short Form

NBCUniversal

International Television

Apple XDCam HD 422 1080i 50

General	
<p>a) Media files must be frame accurate, no slates no extra black.</p> <p>b) Files to contain 10" handle at start of material, with the clock forming part of this handle, and a 10" handle after last frame of freeze at the end of the item</p> <p>c) A single TVC spot must be encoded in a single media file. Multiple spots in a single file is not acceptable.</p> <p>d) Media file received must be ready to air, no additional editing should be required.</p> <p>e) Each media file must have a unique file name</p> <p>f) The media file must be free from audio video, servo disturbances, and any perceptible noise and distortions. Black and white crushing should be avoided.</p> <p>g) Files shall contain timecode. First frame of essence to start at <b>00:00:00:00 for commercial material and 01:00:00:00 for interstitials</b>. Handles shall be added previous to 00:00:00:00 and after last frame of freeze.</p>	
Video	
<b>Video data rate</b>	50 Mbit/s CBR
<b>Resolution</b>	1920x1080
<b>Frame rate</b>	25 fps (50i)
<b>Aspect ratio</b>	16:9 (full frame)
Audio	
<b>Format</b>	24 Kbit/s, 2 channel stereo
<b>Sampling rate</b>	48 kHz
Audio channel configuration	
<b>Track 1</b>	Full Mix Stereo Left
<b>Track 2</b>	Full Mix Stereo Right
<b>Track 3</b>	Music & Effects Stereo Left
<b>Track 4</b>	Music & Effects Stereo Right
<p>a) Material should be supplied uncompressed, peaks not to exceed 6 when measured on a PPM Type 11a.</p> <p>b) Dolby Pro Logic or Dolby Digital are not acceptable formats</p>	
Line Up	
<p>a) <b>Full field reference colour bars for 60" to precede slate, leader and commercial at 100% luminance, 75% Chroma, 0% Setup</b></p> <p>b) 1 kHz tone to be recorded with colour bars. Reference level 4PPM/-18dBFS</p>	
Timecode	
<p>a) LTC - 25 fps, Non-drop frame, locked to video</p> <p>b) VITC - Lines 19 &amp; 21 identical to LTC</p> <p>c) Timecode must be continuous &amp; ascending throughout. First frame of content should start at 00:00:00:00</p>	
Preferred Content Format	
<p>a) 10" black leader with timecode, followed by:</p> <p>b) Minimum 10" bars and tone with timecode, followed by:</p> <p>c) Minimum 10" slate or clock with TVC title, duration, audio track configuration, production format and aspect ratio, with timecode, followed by:</p> <p>d) Commercial start, first frame on 00:00:00:00.</p> <p>e) Following end of commercial, a minimum 20" black leader with timecode.</p>	