

## Technical Specifications

This document sets out the technical specifications for delivery of commercial copy for transmission. **Any deviation from these specifications could result in the copy being rejected.** The preferred format is MPEG-2 50i as detailed later in this document. Tape copy can be submitted to us by prior arrangement.

The guidelines set out here are for UK Transmission material for commercials. Should the material differ from this, please contact Adtext on the number below for advice.

## Outline

PAL, 16:9FHA. Line-up: 100% Bars -18dBFS stereo tone. Commercial audio peak at -10dBFS, video peak: 700mv for luminance and + 350mv for the colour difference signal. All signals should be free of artifacts and text should conform to Clearcast guidelines with all text falling within 16:9 shoot to protect 14:9 title safety.

Should the commercial contain legal text or stroboscopic images/fast cuts please refer to the Clearcast website for guidance (<http://www.clearcast.co.uk/clearcast>).

Line-up test signals should be followed by a countdown clock of 27 seconds. The clock should identify the product and agency copy number, commercial duration, the correct audio state (stereo/mono), the aspect ratio and display 'Teletext 888' if subtitles are present. Any other relevant information should also be indicated on the clock i.e. 4 channels of audio, commercial starts on black etc.

The tape should contain the following line-up signals and commercial copy at the time codes specified (example is for a 30-second commercial). All commercials delivered for transmission should comply with all aspects of the OFCOM regulations and be Clearcast approved. A full log must be supplied with every tape submitted, containing details of tape contents i.e. clock numbers & time code information.

09:58:30:00	1 minute 100% Bars and -18dBFS level 1kHz stereo tone idented on the left channel (PPM4)
09:59:30:00	Clock with identification for the commercial (see clock details above)
09:59:57:00	Black
10:00:00:00	Start of commercial vision
10:00:00:12	Earliest start of commercial audio (12 frames after start of vision)
10:00:29:12	Sound ends (12 frames before end of commercial)
10:00:30:00	End of commercial. Freeze of last frame of picture, held for 10 seconds
10:00:40:00	Black and silence. Minimum of 30" black and silence before time code ends or next clock starts

The recording must be a compatible 625-line, 25 frame per second standard. The aspect ratio should be 16:9 Full Height Anamorphic and protected for 14:9.

4:3 material is acceptable if the master format is for 4:3 end transmission (for example overseas transmission in 4:3 territory).

The luminance, chrominance, black level and audio signal levels should be accurately set in conformance with the 'Specification of Television Standards for 625 line system

I Transmissions in the United Kingdom' published by the DTI Regulatory Division (1984). Video levels should not exceed 700mv for luminance and + 350mv for the colour difference signal. No audio signal peak - as measured on a standard PPM (BS6840 type 11a) - should exceed +8dBu (i.e. PPM6 or -10dBfs). Continuous vertical interval time code (VITC) must be on lines 19, 21 and 332, 334 and linear time code (LTC) tracks should be identical to the VITC, coherent and have no discontinuities.

Technical specification in addition to the specification outlined above for MPEG-2:

Please supply MPEG-2 Program Stream 4:2:2 CBR i frame (.mpg file) @ 50Mb/s. The preferred MPEG-2 should conform to the D10 standard.

Video: 50000 kb/s

Audio: MPEG-1 Layer 2, 384Kb/s, 48kHz, 16 bit

GOP Structure: I frame only

CBR / VBR: CBR

Interlaced: Upper Field First

Line Standard: 625/50 PAL I

Frame rate: 25 fps.

Frame size: 720 x 608

VBI: VITC must be visible in the VBI

Aspect Ratio: Full Height Anamorphic 16:9

Audio ch 1: Stereo Left or Mono track phase coherent with Audio 2

Audio ch 2: Stereo Right or Mono track phase coherent with Audio 1.

Audio Peak: -10 dBFS (6PPM)

Chroma: 4:2:2

Naming: The file must be named in the following way with the correct clock number with the addition of the suffix "\_TEXT"

e.g. AAA-BBBB000-000\_TEXT.mpg

N.B.

**- The first frame of the file should be the first frame of the clock.**

**- The complete clock, programme and freeze must be present. The freeze must be followed by 10" black and silence.**

If supplying copy for international distribution please be aware that a horizontal fast transition between the white luminance video level (700 mV) and black (0 mV) can generate high frequencies, "overshoot" and "undershoot", that can lead to rejection. This applies in particular to scrolling text. You can reduce this phenomenon on scrolling text by lowering the level of white or by applying an adapted filter (blur, soft) at the edit stage.

All digital files should be accompanied by a digital record report detailing all technical parameters of the files, its content, and any unusual elements of the video/audio (i.e. mute/starts on black etc.)