

Digital Betacam

Labels

Box and tape should be labelled with the following details:

Production house
Title of content
Duration of content
Aspect Ratio

VT Report

Tapes should contain the VT recording report (log sheet) with the following details:

Title of promo / program
Aspect ratio
Name of each segment
Timecode IN and timecode OUT
Duration of each segment

Aspect Ratio Format

If 16:9 full-frame native, should be 16:9 – 1.78:1 with WSS in the first half of line no. 23
If 16:9 letter-box native, should be 16:9 – 1.78:1 pan and scan with WSS in the first half of line no.23

Video

Tape to be produced as follows:

- Black
- Bars and sound 100% luminance, chrominance 75% (audio: 1KHz – 18dBFS) (60 seconds)
- Black (audio: MUTE) (10 seconds)
- Slate with the following information: Title / Number & order of audio tracks / Name of Production (10 seconds)
- Black (audio: MUTE) (10 seconds)
- Program / Promo
- Black (audio: MUTE) (60 seconds)

Timecode

The timecode cannot cross 00:00:00:00 in any part, and must be continuous, with VITC recorded on lines 19-21 and 332-334, and in line with LTC. Promo start / program is 10:00:00:00.

Audio

Tracks:

1 Mix Italian SX
2 Mix Italian DX
3 Mix Italian SX
4 Mix Italian DX

Audio Levels

Red Level =-18 dBFS
Max PPM Level =-12 dBFS (QPPM) or -9 dBFS (true peak)
AES: A / V Delay = 0ms

Technical Specification

Italy Diva

NBCUniversal

International Television

MPEG2: Standard Definition PAL

50 Mb I Frame Only

Video		
Stream Format	Generic ISO MPEG stream	
Type	MPEG-2 Program Stream	
Video resolution	720x576 (608 inc. VBI) 1024x576 / 1050x756 / HD / Full HD material not accepted	
Chroma	4:2:2(601)	
Profile/Level	422P@ML	
Bit rate	50Mb Constant CBR	
GOP Structure	I Frame only	
Intra DC precision	9	
Field Dominance	Upper field first (odd)	
Video levels	Luminance should not exceed 700MV (+/-3%) or fall below 0MV (-1%) Chrominance to be within ITU-R BT.601 for SD and ITU-R BT.709 for HD	
Standard	PAL	
Aspect ratio	4:3 and/or 16:9 according to format required by channel 16:9 materials should be designed as 4:3 anamorphic	
Audio		
Audio codec	Mpeg layer 2	
Bitrate	384 kbps	
Sampling frequency	48 khz	
Channels	4-channel stereo / mono	
Audio levels	Reference(dBFS): -18 Program Loudness I: -24LUFS Integrated Ballistic: See A/V specifications below**	
Pre & Post Roll	Duration	Timecode
EBU bars & 1kHz tone @ -18dBFS	5 seconds	00:00:00:00 – 00:00:04:24
Slate / Ident*	7 seconds	00:00:05:00 – 00:00:11:24
Black	3 seconds	00:00:12:00 – 00:00:14:24
TVC	30 seconds	00:00:15:00 – 00:00:44:24
Black	10 seconds	00:00:45:00 – 00:00:54:24
A/V Specifications		
* Slate / Ident layout: Client-Product – Agency – Production House – Post-Prod House – Clock Number – Title – Duration HH:MM:SS:FF – Aspect, etc (we suggest countdown clock)		
** Loudness: The Loudness value must be checked following the specification of AGCOM 219/09/CSP – 05/012010 and next modifications . More info below: The Loudness is measured following ITU-R BS 1770 recommendation. The measure instrumentals is defined on ITU-R BS. 1771 recommendation. The measure will be defined using a sampling time between 300 – 1000 ms. Absolute silence Gate: -70LUFS Fixed Gating: -8LU referred to relative value		
<ul style="list-style-type: none">• The Integrated Program Loudness must be -24LUFS +0.5LU• PML True Peak: -2dbTP• Momentary Loudness: not limited• Short Term (3s): max -21LUFS It is possible to use the new EBU-R128 compliant instrumentals to perform similar audio check.		
Local Clearance		
Local clearance in Italy is managed by the Legal department at the broadcaster. No pre-approval is needed.		