Adstream File Delivery Specification For Italy

To maintain a consistently high quality product Adstream requires all material for distribution in this region to be supplied to the following HD specifications.



Quicktime ProRes 422HQ 1080/50

Video:

Codec : Apple Quicktime ProRes 422 (HQ) Container : MOV Profile : HQ Chroma Subsample : 4:2:2 Interlacing : Upper/Top Field First Frame Size : 1920x1080 Frame Rate : 25 FPS Aspect Ratio : 16:9

Audio: Codec : Integer (Little Endian) PCM Sample Rate : 48kHz Sample Size : 24bit Canali : Stereo

Quicktime Wrapped Avid DNxHD 120/185 1080/50

Video: Codec : **8bit DNxHD** Container : **MOV** Bitrate : **120Mb/s o 185Mb/s** Chroma Subsample : **4:2:2** Interlacing : **Upper/Top Field First** Frame Size : **1920x1080** Frame Rate : **25 FPS** Aspect Ratio : **16:9**

Audio: Codec : **PCM** Sample Rate : **48kHz** Sample Size : **24bit** Canali : **Stereo** MPEG-2 Transport Stream 1080/50

Video: Codec : MPEG-2 Transport Stream Container : MPEG-2 Transport Stream Profile: 4:2:2 Profile @MainLevel (422P@ML) Bitrate : 100Mb/s CBR Chroma Subsample : 4:2:2 Interlacing : Upper/Top Field First GOP Structure : I Frame Only Frame Size : 1920x1080 Frame Rate : 25 FPS Aspect Ratio : 16:9

Audio: Codec : **PCM** Sample Rate : **48kHz** Sample Size : **24bit** Canali : **Stereo**

HD Video Level Requirements

TV Format : HDTV Aspect Ratio : 16:9 Title Safe : 16:9 – EBU R.95-1

All Video Signals Should Comply With ITU-R BT.709-5 And Video Signals Should Not Exceed The Specified Limits.

Video Levels Should Not Exceed 700mV, Or Fall Below 0mV

Out of gamut tolerance.

Whilst Adstream and the Broadcasters will reject illegal video levels they understand there may be instances where it is difficult to completely avoid, and following EBU recommendation Rec.103-2000 will allow a small tolerance, assuming no more that 1% of the active picture is in error.

- Luminance (Y) -1% and 103%
- o (ie between -7mV and 721mV)RGB video levels -5% and 105%
- o (ie between -35mV and 735mV)

Audio Level Requirements

AGCOM 219/09/CSP

The loudness level of the program material must be in agreement with the AGCOM 219/09/CSP directive, including the following delivery specifications : Reference Level : 1kHz@ -18dBFS Integrated Loudness Program : -24 LUFS Weighting Scale : As per ITU-R BS 1770-1 Target Level Tolerance : +/-0.5 LU Maximum True Peak : -2dBTP PML (QPPM) : -9dBFS Maximum Short Term Momentary (3 Sec) : +5LU On The Relative Scale Relative Gating : -8 LU Absolute Silence Gate : -70 LUFS All commercial soundtracks must be measured using ITU-R BS 1771-1 loudness meter to ensure compliance to the required recommendation.

The measurements will be defined using an integration time of 400ms with 75% overlap

Adstream File Delivery Specification For Italy

To maintain a consistently high quality product Adstream requires all material for distribution in this region to be supplied to the following SD specifications.



SD File Specification

| 🗙 Quicktime ProRes 422HQ 625/50 | MPEG-2 Program Stream 625/50 |
|---|--|
| Video: | Video: |
| Codec : Apple Quicktime ProRes 422 (HQ) | Codec : MPEG-2 Program Stream |
| Container : MOV | Container : MPEG-2 Program Stream |
| Profile : HQ | Profile : 4:2:2 Profile @MainLevel (422P@ML) |
| Interlacing : Upper/Top Field First | Bitrate : 50Mb/s CBR |
| Frame Size : 720x576 | Chroma Subsample : 4:2:2 |
| Frame Rate : 25 FPS | Interlacing : Upper/Top Field First |
| | GOP structure : I Frame Only |
| Audio: | Frame Size : 720x576 (608 if Inc VBI) |
| Codec : Integer (Little Endian) PCM | Frame Rate : 25 FPS |
| Sample Rate : 48kHz | |
| Sample Size : 16bit | Audio: |
| Channels : Stereo | Codec : MPEG1 Layer-2 |
| | Sample Rate : 48kHz |
| | Sample Size : 16 bit |
| | Channels : Stereo |



SD Video Level Requirements

TV Format : SDTV Aspect Ratio : 16:9 Title Safe : 16:9 - EBU R.95-1

All Video Signals Should Comply With ITU-R BT.709-5 And Video Signals Should Not Exceed The Specified Limits.

Video Levels Should Not Exceed 700mV, Or Fall Below 0mV

Out of gamut tolerance.

Whilst Adstream and the Broadcasters will reject illegal video levels they understand there may be instances where it is difficult to completely avoid, and following EBU recommendation Rec.103-2000 will allow a small tolerance, assuming no more that 1% of the active picture is in error.

- Luminance (Y) -1% and 103% o (ie between -7mV and 721mV)
 - RGB video levels -5% and 105%
 - o (ie between -35mV and 735mV)



SD Audio Level Requirements

AGCOM 219/09/CSP

The loudness level of the program material must be in agreement with the AGCOM 219/09/CSP directive, including the following delivery specifications : Reference Level : 1kHz@ -18dBFS Integrated Loudness Program : -24 LUFS Weighting Scale : As per ITU-R BS 1770-1 Target Level Tolerance : +/-0.5 LU Maximum True Peak : -2dBTP PML (QPPM) : -9dBFS Maximum Short Term Momentary (3 Sec) : +5LU On The Relative Scale Relative Gating : -8 LU Absolute Silence Gate : -70 LUFS All commercial soundtracks must be measured using ITU-R BS 1771-1 loudness meter to ensure compliance to the required recommendation.

The measurements will be defined using an integration time of 400ms with 75% overlap

Adstream File Delivery Specification For Italy

Clock/Slate and Pre & Post Roll Information – NOT MANDATORY

| Structure | I.e. Duration | I.e. Timecode |
|-----------------------|---------------|---------------------------|
| TVC Only – Cut to Cut | 30" | 00:00:00:00 - 00:00:29:24 |

The full structure with Color bars and cover blacks could be request in case a deeper QC will be necessary. Our Client Service could support you.

| For this region a valid clock/slate IS NOT mandatory | Suggestion ONLY - HOW TO MAKE A CLOCKNUMBER FOR both SD and HD |
|---|--|
| Clock/Slate Information | |
| Client Product Subject Agency Production House Post/Prod House Clock Number : <i>MMYY-Advertiser-Product-Title-N-DDD</i> Title Duration HH:MM:SS:FF Aspect | MMYY-Advertiser-Product-Title-N-DDD (Max 100 chars)MM: MonthYY: YearAdvertiser, only initials alsoProdotto, only initials alsoTitle, only initials alsoN: Version (A, B, C,)DDD: Duration in secondsThe clock number should be up to 30 alpha-numeric characters, - egshould not contain characters such as (!"\$%&()?^*§°ç><;: &)HD and SD assets of the same subject should have the sameCLOCKNUMBER. |

Audio description (currently RAI Only)

For Audio Description delivery, the following should be supplied.

- Pro Res 422 HQ spec (see above full guidance on page 1)
- 4 Channels of Audio in the following configuration:
 - Channel 1: Stereo Programme Left
 - Channel 2: Stereo Programme Right
 - Channel 3: Stereo Audio Description and Programme Mix Left
 - Channel 4: Stereo Audio Description and Programme Mix Right

IMPORTANT!

The audio should be supplied as a 4 channel 1 PID file, (mono discrete or 2 stereo pairs will not be accepted) Note: Audio Description is for HD only. Audio Description should follow AGCOM audio specifications for Loudness

NOTES!

The channel logos are also broadcast during the advertising slots with the risk of impacting and covering the logos and / or super imposes of the TVC.

It is highly recommended to check the overall dimensions with the Sales Houses to avoid unwanted coverage, even partial.

Local clearance in Italy is managed by the legal department at the broadcasters. Check in time with the Sales Houses any relevant doubts.

"To ensure compliance please contact our local office for any queries."