



DIGITAL CINEMA XML SUBTITLE FILE REQUIREMENTS

Failure to meet all these requirements could result in the file being returned.
If further technical information is required please refer to the attached file;
"DCI Compliant XML Specifications.PDF"

1. File Format

The file format must be a single XML file per reel and must conform to the current version of the SMPTE for DCDM Subtitles.
(428-7 current at time of writing)

2. XML File Naming Convention

The file name must include the name of the feature or an abbreviated name, the language and reel number. Examples below;

Film_Title_Italian_Reel1.xml
Film_Title_Italian_R1.xml

Use only Alphanumeric characters.
There must be no spaces. Use underscores where spaces are required.

3. Font and PNG Files

The font or PNG files referred to in the subtitle XML file must be supplied.
PNG files must be supplied in one directory per reel with the XML file.
PNG file names and directories must use only Alphanumeric characters.
There must be no spaces. Use underscores where spaces are required.
PNG file names must include the film title, language, reel number, and title number.
Example below;

Film_Title_Dutch_Reel1_0001.png

4. *Sync point and running speed*

- 4.1 The sync point used to create the file must be the first frame of action not "Picture Start" in the academy leader.
- 4.2 The running speed of the file must be 24fps not 25fps.

Both of these should be noted in the prolog of the file as in the following example;

```
<!-- *** FFP = 00:00:00:000 Running Speed = 24fps *** -->
```

5. *Universally Unique Identifier*

The file MUST include a valid UUID in the prolog of the file using the switch <SubtitleID>.

6. *Font Usage*

- 6.1 There must be a line in the prolog detailing the Font to be used;

```
<LoadFont Id="Arial" URI="arial.ttf" />
```

The Id can be the name of your choice but the URI must be the exact name of the actual font file to be used.
Format of this line must be exactly as above.

- 6.2 There must be a line after this detailing Font attributes.

```
<Font Id="Arial" Effect="shadow" Size="42" >
```

The Font Id must be the same as specified in the previous line.
"shadow" can be replaced with "border" if required.
Size of 42 is good for all Western fonts. Size 56 is good for Asian fonts.

This is the minimum information required as the default attributes are;
White title with a Black shadow.
Additional information can be added if required from the following;
Color, EffectColor, Italic, Script, Underlined, Weight.

7. *Text Positioning*

- 7.1 Vertical Positioning.
Titles need to have a height in screen specified.

Each title should have an entry for "VPosition".
If Vposition ="bottom" is used the height in screen should be approximately 9.00 for the bottom line and 15.00 for the top line (9.00 and 17.50 for Asian fonts at size 56).
If Vposition ="top" is used the height in screen should be approximately 91.00 for the bottom line and 85.00 for the top line (91.00 and 82.50 for Asian fonts at size 56).

- 7.2 Horizontal positioning.
The default position is center and so there is no need to specify this unless a horizontal adjustment is required.

8. Spotting In and Out Frames

- 8.1 The running speed of the file must be 24fps and the first frame of picture must be 00:00:00:000
- 8.2 The format of the timecode is Hours:Minutes:Seconds:Ticks where a "Tick" is a value of between 0 and 249 and lasts 4 milliseconds. The approximate conversion is 1 frame = 10 ticks.
- 8.3 If an "empty title" occurs in the file it will not work. For example, if there is an entry for a title which has an in and out frame but no text. This could occur in the subtitle preparation whereby a spot is made but then decided it would be omitted. In these instances please delete the entire title entry, not just the text.

9. File Formatting

- 9.1 The XML file must be encoded using UTF-8
- 9.2 The file should open and read fully and correctly in Microsoft Internet Explorer
- 9.3 The file should open using Windows Notepad or other basic text editor and the text should read correctly and appear structured.
- 9.4 The double apostrophes used in the XML formatting must be standard straight quotation marks (") not the 66 and 99 marks (" ") commonly used elsewhere. Those can be used in the text if required but not in the XML code.

10. Example File

Here is an example of how a good XML file should appear when viewed in a text editor. Attached is this same information in an XML file.

```

<?xml version="1.0" encoding="UTF-8"?>
<!-- *** XML Subtitle File *** -->
<!-- *** Created by Your Company *** -->
<!-- *** Creation Date *** -->
<!-- *** FFP = 00:00:00:000 Running Speed = 24fps *** -->
<DCSubtitle Version="1.0">
<SubtitleID>EAE5652F-0EE5-4009-ACAB-EAE5B450C357</SubtitleID>
<MovieTitle>Name of Movie</MovieTitle>
<ReelNumber>1</ReelNumber>
<Language>Your Language</Language>
<LoadFont Id="Arial" URI="arial.ttf" />
<Font Id="Arial" Effect="shadow" Size="42">
<Subtitle SpotNumber="0001" TimeIn="00:00:05:042" TimeOut="00:00:07:156">
<Text VAlign="bottom" VPosition="15.00">Top line of first subtitle.</Text>
<Text VAlign="bottom" VPosition="9.00">Bottom line of first subtitle</Text>
</Subtitle>
<Subtitle SpotNumber="0002" TimeIn="00:00:08:113" TimeOut="00:00:10:218">
<Text VAlign="bottom" VPosition="9.00">Single line second title.</Text>
</Subtitle>
<Subtitle SpotNumber="0003" TimeIn="00:00:12:204" TimeOut="00:00:15:016">
<Text VAlign="bottom" VPosition="9.00"><Font Italic="yes">Third title in italics.</Font></Text>
</Subtitle>
</Font>
</DCSubtitle>

```