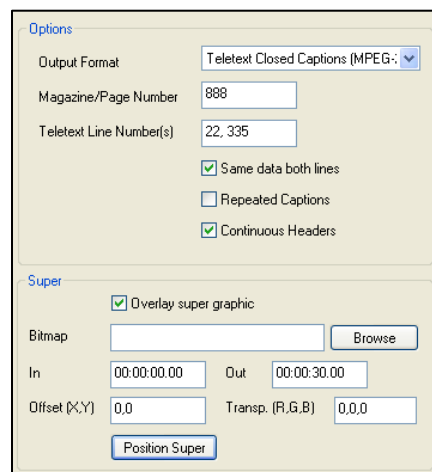


InFILE Subtitle Inserter Software

InFILE is an easy-to-use software utility that inserts subtitles into a broadcast quality video file or DVB transport stream. As software working at the file level InFILE avoids the need for specialist SDI video hardware, video tapes, manual dubbing or re-ingestion/encoding processes, thereby saving on equipment costs as well as time and effort.

The increasing use of compressed video files as a distribution format for broadcast television content, replacing traditional tapes and uncompressed SDI video, now demands a software approach to subtitle data insertion in order to preserve the benefits of the digital file-based workflow.

Traditional SDI inserters need a real-time dub process using the original uncompressed material with the resultant new master being re-ingested to the server ready for playout, adding unnecessary time and cost compared to inserting the data directly into the video file or transport stream.



- **Fits into a digital workflow**
- **Saves operator/production time and saves machine room time**
- **Software only, no expensive special hardware**
- **File based operation: no linear video, no SDI, no tapes, and no re-encoding**
- **Digital video files or DVB transport stream files**
- **Simultaneous insertion of multiple files/pages/languages**

The software can handle one or more streams of subtitles using the most common subtitle formats:

- **Open captions**
- **Teletext VBI subtitles**
- **Line 21 closed captions**
- **DVB bitmap subtitles**
- **DVB teletext subtitles**

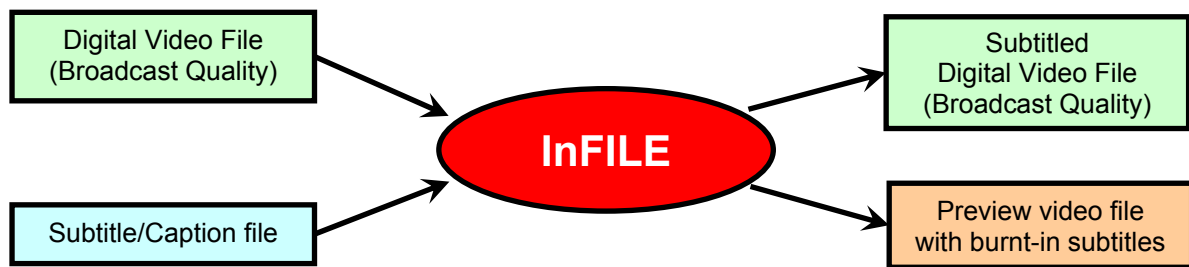
The software can also produce open-caption previews of teletext subtitles or closed captions and has the option to include an overlay graphic as a spoiler, bug or an identifier for a subtitled programme version).

SysMedia also produces a range of hardware inserters and caption generators and the WinCAPS Screener utility for approval previews in Windows Media Video format.

Job #	Source Master	Subtitles File	Output To	Output Type
1	TWWDTD PAL master.mpg	EnglishSDH.STL	TWWDTD PAL ENG SDH.mpg	Closed Captions (MPEG-2 Clone)
2	TWWDTD PAL master.mpg	EnglishSDH.STL	TWWDTD PAL ENG Preview.mpg	Open Captions (MPEG-1)
3	TWWDTD PAL master.mpg	Dutch.STL	TWWDTD PAL NL open.mpg	Open Captions (MPEG-2 Clone)
4	TWWDTD PAL master.mpg	Dutch.STL	TWWDTD PAL NL preview.mpg	Open Captions (MPEG-1)
5	TWWDTD PAL master.mpg	Welsh.STL	TWWDTD PAL Welsh 887.mpg	Closed Captions (MPEG-2 Clone)

Batch processing to save time –
The software works at considerably faster than real-time (actual speed is dependent on the host computer) so the process is far quicker than an equivalent dubbing operation.

Configuration and processing are independent of each other allowing a job to be prepared and added to a queue without waiting for the current job to finish, on completion of the current job the next job is started automatically. Queue management allows the user to change the position of jobs in the queue, as well as add and remove jobs.



- overlays HD/SD open-caption subtitles authored using WinCAPS (any language, any font)
- inserts teletext subtitles or line 21 closed captions into user defined VBI line(s) or PID (and teletext page number with options to repeat subtitles and add continuous headers)
- preserves all source video characteristics including other VBI data (e.g. VITC)
- adds optional user defined overlay graphic within specific timecode range
- also creates optional preview version of video file with burnt-in subtitles

Video Format	Open Subtitles	Teletext Subtitles	Line 21 Closed Captions	
			EIA608	EIA708
MPEG-2/M2V - MP@ML, 422P@ML (SD)	✓	✓	✓	○
MPEG-2/M2V - MP@HL, 422P@HL (HD upto 50Mbps)	✓	✓	✓	○
GXF (Grass Valley)	✓	✓	✓	○
Omneon	✓	✓	✓	○
SeaChange	●	●	●	○
WMV	✓	-	-	-
TGA Sequence	✓	✓	✓	○
DVC Pro	✓	✓	✓	○
MXF	●	●	●	○
IMX D10	●	●	●	○
QuickTime Native	●	●	●	○
Transport stream file (MPEG-2)	✓	✓ ¹ ○ ²	○	○

- - due for release autumn 2009
- - due for release by end of 2009
- ¹ - DVB teletext (EN 300472)
- ² - DVB bitmap (EN 300743)

Preview video files too - Programme schedulers and reviewers, lawyers or censors, external translators and end clients who have traditionally been sent a VHS preview tape can now be sent a video file with burnt-in subtitles to view on their PC or media player. This can be distributed immediately, as many times as needed, using an Internet/FTP download rather than duplicating tapes and using an expensive courier service. *SysMedia also produces the WinCAPS Screener utility to produce low bitrate preview WMV files.*

Timecode handling to ensure synchronisation normally uses VITC in the source master as its timecode reference, however the user can specify an alternative start timecode reference if there is no VITC or if the timecode in the subtitle/caption file is offset compared to the VITC.