



Open Subtitling

Introduction

Open subtitling is a technique where the subtitle text is permanently visible with the broadcast video material. Upon transmission, the broadcaster uses a suitable subtitle character generator to create the subtitles which are then superimposed over, or **Burnt-in** to, the outgoing video signal.

Scope

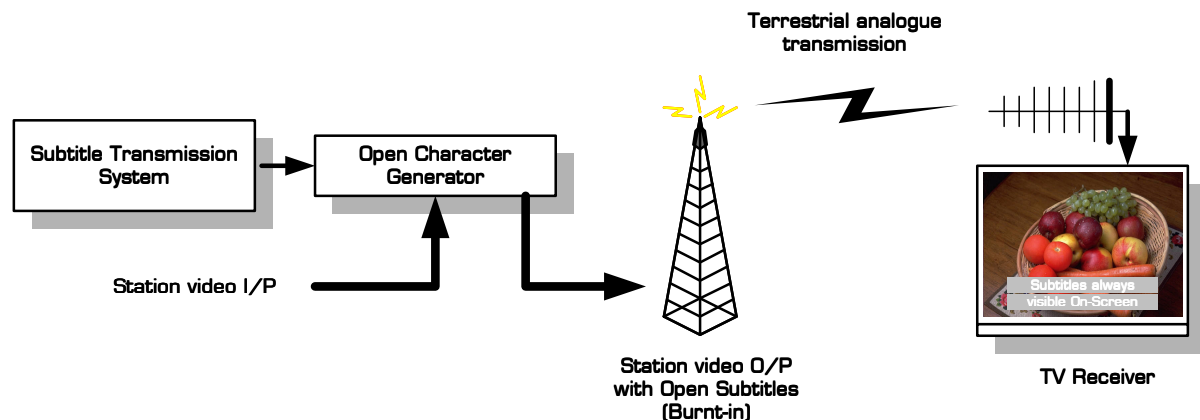
This White paper explains the usage of Open Subtitling, how it fits into a transmission or post production environment and some advantages and disadvantages.

It is now possible to modify compressed (MPEG) video signals in real time. See the M-Series Application Note for more details.

Uses of open subtitling

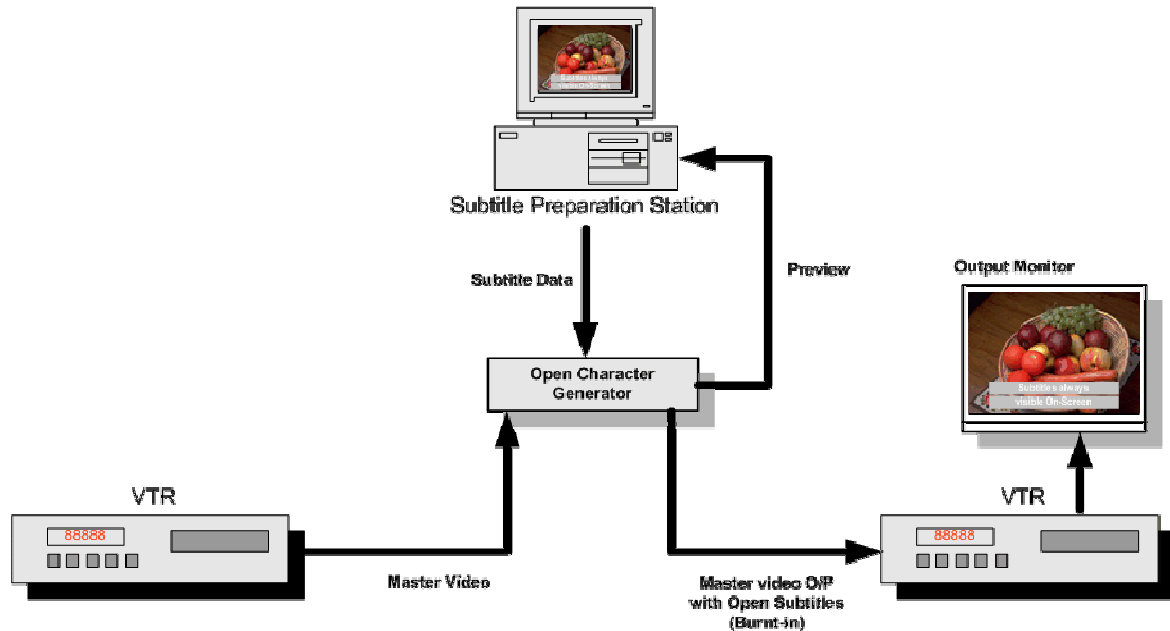
- To provide a single language (or occasionally a pair of languages) translation of broadcast video material across a known geographical area.
- To provide subtitles for translated video cassette distribution.

Transmission.





Post Production.



Advantages of open subtitling

- No special equipment is required by the viewer to see the subtitles.
- The subtitle style, size, and position can be altered by the broadcaster to suit audience requirements.
- Special font attributes such as **Outline**, **Box** or **Stripe** can be applied.
- Nearly every known language can be supported by open subtitling.
- Left to Right (e.g.: Latin) and Right to Left (e.g.: Arabic) subtitles can be created.
- Horizontal and Vertical (e.g.: Japanese) subtitles can be created.
- Master tapes with Open subtitles do not require a separate subtitle media asset (file) or equipment to produce subtitles.

Disadvantages of open subtitling

- As the subtitles are controlled by the broadcaster, the viewer has no control over their display.
- There is no way of removing open subtitles from **Burnt-in** source material.
- For multiple language operations a master quality tape and separate video broadcast channel is required for each language.