

## Data Sheet

### Swift TX

#### Swift TX time-of-air subtitle transmission integration with Harris automation

##### Broadcast automation and subtitling

Subtitling and captioning are becoming an integral part of modern broadcasting and content delivery, as statutory requirements, viewer expectation and a need to reuse content across regions increase throughout the world.

Meanwhile, broadcasters and network operators are increasingly handling multi-channel digital operations, requiring multi-format support. To deliver the high quality expected by their viewers and reduce their cost of operation, they need reliable subtitling/captioning solutions that combine automation with 'at a glance' management control.

An efficient automated subtitle transmission solution enables a high quality of service, reducing manual intervention, saving time and money.

##### Leading automation from Harris

Harris is a leading provider of broadcast automation systems. Their solutions offer integrated systems for mission-critical content management and automated multichannel delivery.

A fully integrated solution including Harris' asset management, end-to-end broadcast monitoring and error-detection systems, results in a high-quality, multichannel broadcast operation.

The solution enables efficient, continuously on-air broadcasting, with a minimal amount of manual intervention. Harris automation will interface with multiple systems, combining various elements of the main program into one seamless stream, whether this is tape or file based.

##### Seamless integration with Swift TX from Softel

Swift TX provides subtitle transmission and transcoding at time of air, in either multi-channel single unit or multi-channel, multi-unit configurations.

It's time of air transcoding means that Swift vTX, Softel's software based off-line inserter, can encode subtitles in the VBI/VANC element of a video server asset, which Swift TX can transcode into Open CG or DVB Closed subtitles at time of air.

Integrated with Harris automation in a broadcast environment, Swift TX can be triggered to either playout a subtitle file associated with video or transcode subtitle data embedded in an asset. Alternatively automation can signal a live event, switching Swift TX to live input mode, to receive subtitles from a Softel Swift Create subtitle workstation.

##### Benefits

- Flexible late, live or pre-prepared subtitle transmission
- Tight integration of subtitling with Harris automation enhancing productivity
- 'Lights out' operation with high quality of service, saving time & money
- Seamless subtitle transmission & transcoding workflow



By seamlessly integrating Harris automation and Swift TX multi-format, multi-channel broadcasting, becomes less complex and labour intensive, enhancing productivity and reducing the cost of bringing subtitles to air.

### Broad range of supported systems

Swift TX playout tightly integrates with the Harris automation system, including checking that the correct files are in place ahead of schedule, flagging an error if subtitle data is missing, damaged or incorrect. This extra integrity checking prevents material going to air with incorrect or missing subtitles.

All Harris systems are supported, from the latest D-Series and all previous Harris and Louth system protocols, with a combination of network and serial connectivity.

Softel have implemented Swift TX with Harris systems at Mediacorp Singapore, Zee TV (India), Canwest (Canada), Channel 10 (Australia) & CBC Canada, among others and can provide expert advice on integrating Swift TX subtitle transmission with Harris systems.

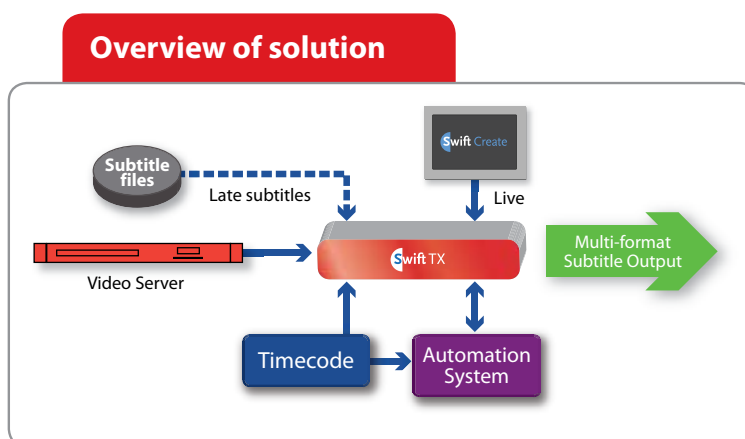
### Subtitle timecode and 'timecodeless' playout

Swift TX support various types of timecode input, including LTC, VITC, DVITC and HDVITC to synchronize subtitle and video playout.

With the Harris automation system it is also possible to support 'timecodeless' playout. Timecodeless is now being employed by some broadcasters using file based content, to eliminate the need for timecode generation or 'restripe' when content is repurposed.

Timecodeless playout of subtitles will be triggered by the automation system, using frame references and start of material (SOM) markers to synchronize subtitles with the video. Late subtitles can also be inserted by the Swift TX using a drop folder and material IDs. Additionally Swift TX supports a live input interface, switched under automation or manual control, with capture for later re-broadcast or repurposing.

Use of PCR and PTS feedback ensures that output is always synchronised, with Swift TX also able to factor in the video re-encoding delay on turnaround services.



### Broadcast ready reliability

Harris automation solutions are designed to support complex, 24x7, broadcast operations, so Swift TX can also be configured for high availability, with switched, multi SUBMUX/MUX or Softel vFlex SDI inserter configurations. For quality control purposes encoded files can also be previewed on a Swift Create subtitle workstation, with Swift TX also providing a WYSIWYG subtitle display.

Master/standby and N+1 configurations ensure that when the Harris system calls for an item to be transmitted, it will always get to air.

### The Softel end-to-end subtitle solution

The Swift family of subtitling products from Softel provides a seamlessly integrated, end-to-end subtitling/captioning solution including off-line or time-of-air insertion, transmission and monitoring. Contact Softel to find out more or visit our website at [www.softelgroup.com](http://www.softelgroup.com).