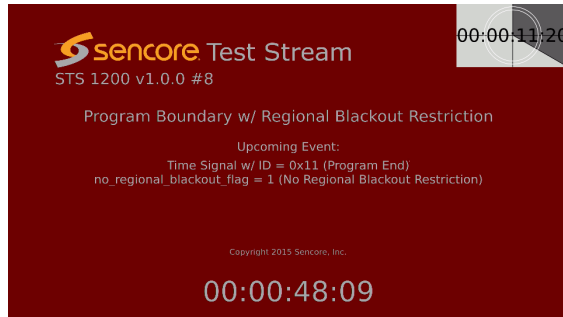
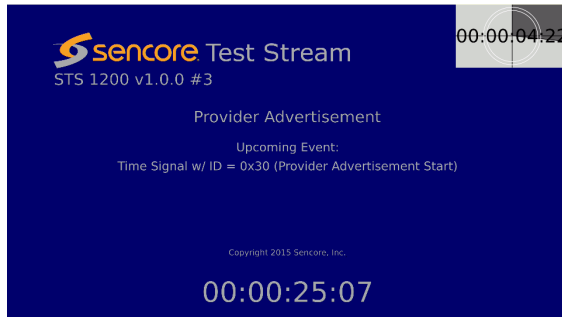


# SCTE35 ESAM Test Stream Suite

STS 1200



## OVERVIEW

Sencore has created a suite of MPEG transport streams for end-to-end testing of equipment and systems for SCTE35 compatibility. These streams enable engineers and product designers to validate that equipment and systems are fully compliant with traditional SCTE35 splice\_insert messages and also the latest SCTE35-2013 extensions.

The Broadcast industry is beginning to use the SCTE35 messages defined in the 2013 SCTE35 extensions specification to carry a variety of program-related information. SCTE35, being an industry standard for local ad insertion and actively used in conjunction with SCTE104 messaging is the most economical and technically-viable solution to trigger the desired signaling. SCTE35 messaging is actively being used to indicate ad insertion using splice\_insert() commands.

In ANSI/SCTE35-2013, messaging was added to support functionality pertaining to streaming of content. Due to provider rules and regulations of content, customers requires a mechanism to autonomously and accurately trigger requested events as well as continued support of targeted ad insertion. Providers require the automated insertion of slates when programs are not allowed to be streamed (Blackouts). Customers also require support for Program Boundary indicators for delayed playback. Specific flags within the SCTE35 messaging are used to accomplish this signaling.

These STS 1200 Sencore test streams for SCTE35 enable full validation of the traditional and new extensions. Each of the 90 second streams include 30 seconds of lead-in, 30 seconds of an event, and 30 seconds of lead-out. The transitions are identified using on screen messages and countdown timers. To further enhance the testing capabilities of the streams, they each include an onscreen lip-sync pattern with corresponding audio tones.

## STREAM DETAILS

- **Stream 1**  
Used to test traditional splice\_insert() SCTE35 ad splicing techniques.
- **Stream 2**  
Used to test traditional splice\_insert () SCTE35 ad splicing techniques coupled with extended Distributor Advertisement segmentation descriptor methods.
- **Stream 3**  
Used to test Provider Advertisement segmentation descriptor commands.
- **Stream 4**  
Used to test Provider Advertisement segmentation descriptor commands with web delivery restriction.
- **Stream 5**  
Used to test Provider Advertisement segmentation descriptor commands with device restriction.
- **Stream 6**  
Used to test Placement Opportunity segmentation descriptor commands with web delivery restriction.
- **Stream 7**  
Used to test Program Boundary segmentation descriptor commands with web delivery restriction.
- **Stream 8**  
Used to test Program Boundary segmentation descriptor commands with regional blackout restriction.
- **Stream 9**  
Used to test Program Boundary segmentation descriptor commands with archive restriction.
- **Stream 10**  
Used to test Program Boundary segmentation descriptor commands with device restriction.

## STREAM CHARACTERISTICS

- MPEG transport stream format with 188 byte packets
- H.264 video content with 1080i resolution at 29.97Hz frame rate
- AC3 audio tones at 48kHz and 384kbps
- SCTE35 messages following the SCTE35-2013 syntax