

# Using SCTE for Inputs and Outputs

This article will explain how you can use SCTE for your projects. PLAYDECK supports SCTE-35, which are exclusively used in Streams and SCTE-104, which are exclusively used in SDI Device signals.

Scroll down for SCTE-104. We also recommend to follow-up with this article on sending SCTE-35 to Streaming Server.

In this article:

- Using SCTE-35 in Streams
  - Using SCTE-104 in SDI
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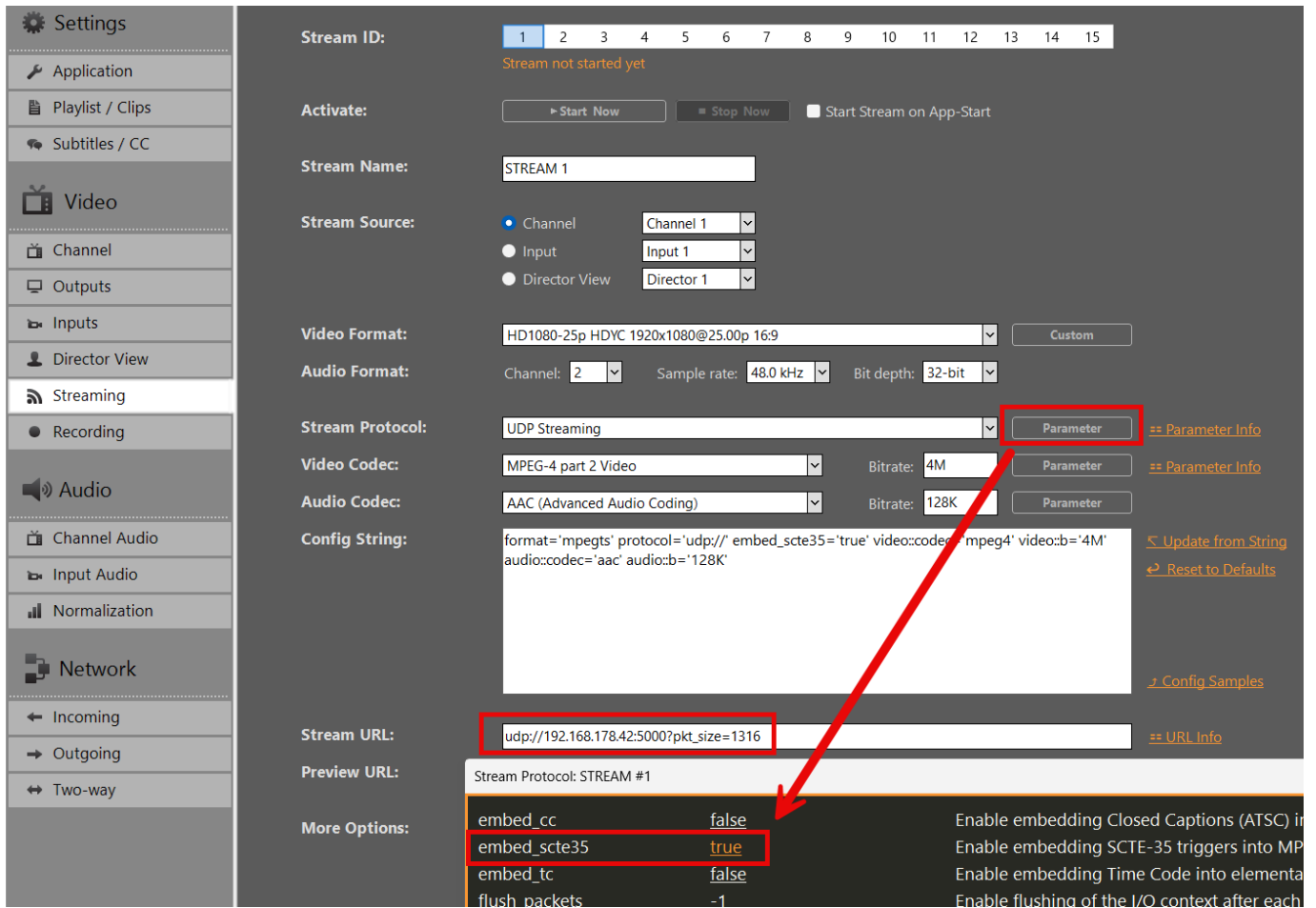
## Using SCTE-35 in Streams

### SCTE-35 Facts

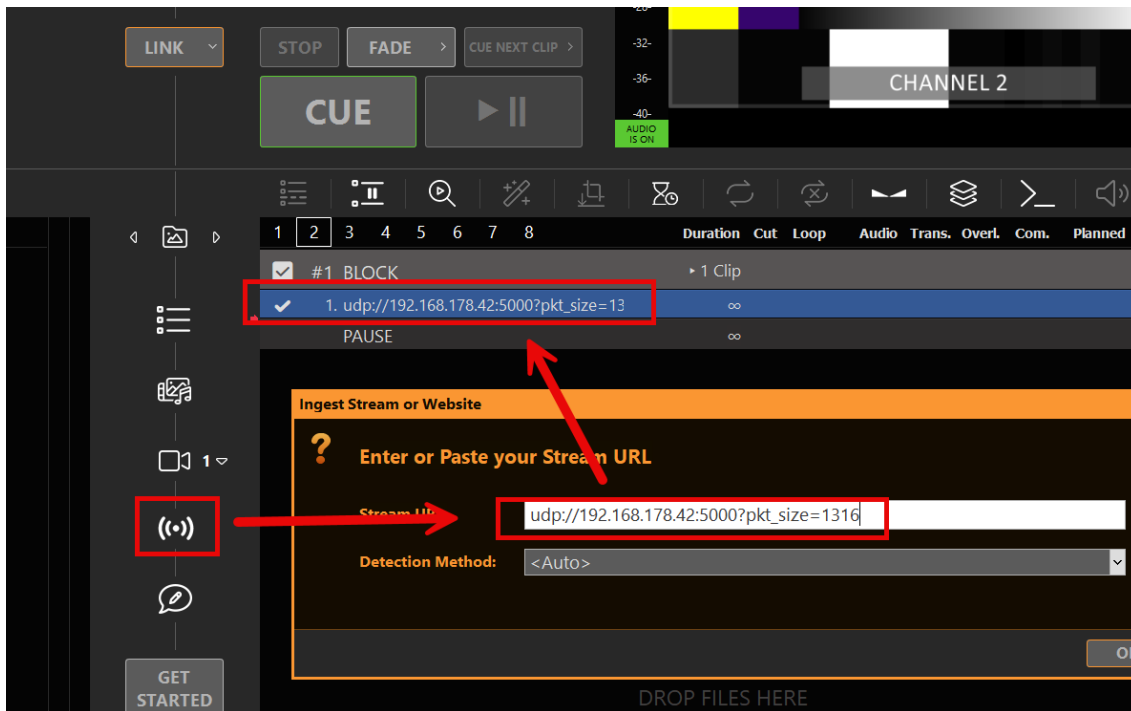
- Supported for Stream Inputs as well as Stream Outputs. Tested Stream Formats are UDP, DVB and SRT. The selection of the Video Codec does not influence SCTE transport. SCTE transport is always active and does not need to be enabled somewhere.
- PLAYDECK can detect and display incoming SCTE-35 Marker. All incoming and outgoing Marker will be written to an Event Log.
- PLAYDECK can forward incoming SCTE-35 Marker from Stream Input to Stream Output. Cross-Forwarding between UDP, DVB and SRT is supported, e.g. receiving SRT and forwarding to UDP.

### SCTE-35 Testdrive

Let us dive into those topics a bit. As a test run we setup our own UDP signal loop. We stream Channel 1 to "udp://192.168.178.42:5000?pkt\_size=1316" via UDP (use your local IP). Make sure to enable "embed\_scte35" for the UDP Parameter:

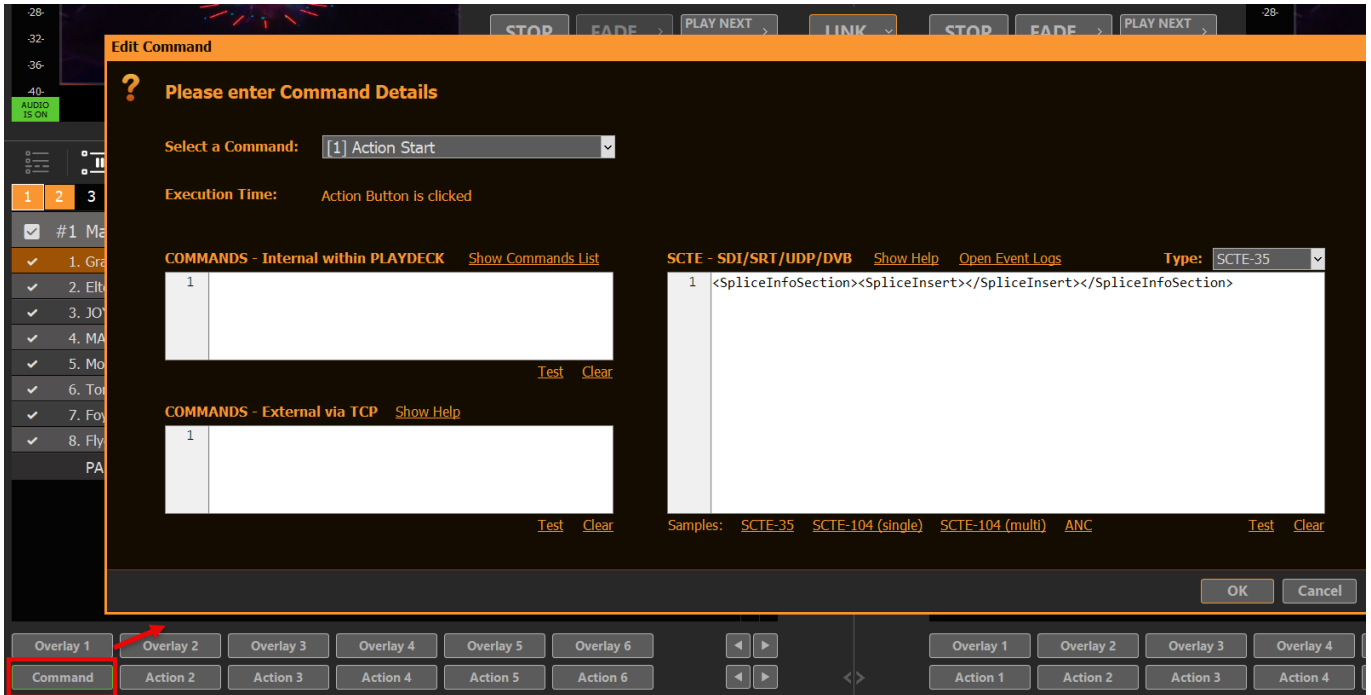


And play the Stream in Channel 2:



Now we only need a way to send a SCTE-35 marker in Channel 1. So we setup a new Command Action and use the smallest detectable SCTE-35 Marker (of course you can use any other):

```
<SpliceInfoSection><SpliceInsert></SpliceInsert></SpliceInfoSection>
```

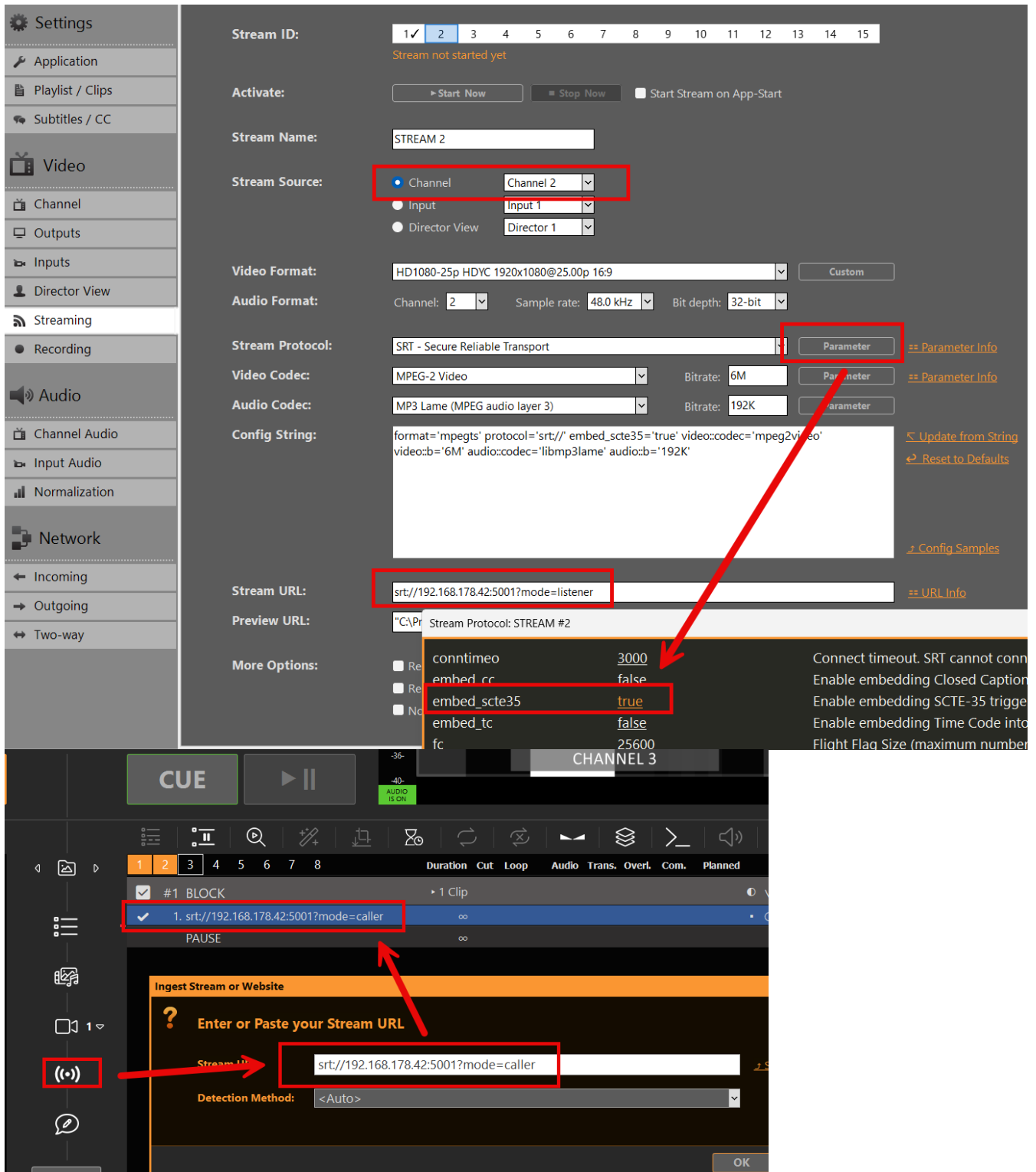


Make sure Channel 1 and Channel 2 are playing, then hit the Action Button. Then open the SCTE Event Log in the Main Menu under “Logs”. You can see the outgoing SCTE on Channel 1 and the Incoming SCTE on Channel 2.

F:\Projekte\Playdeck\Delphi\Code\Main\4.x\DocumentsDebug\Event-Logs\SCTE\2026-05-09.txt

```
09/05/2026 00:03:27 - >> Ch1 SCTE-35 - <SpliceInfoSection> <SpliceInsert spliceEventId="2026-05-09 00:03:27" out0
09/05/2026 00:03:28 - << Ch2 SCTE-35 - <SpliceInfoSection protocolVersion='0' ptsAdjustment='0' tier='0'> <SpliceInsert s
```

We even go one step further and setup ANOTHER Stream from Channel 2 to Channel 3 to test the SCTE Forwarding and Cross-over Detection (UDP to SRT). We send Channel 2 to “srt://192.168.178.42:5001?mode=listener” (your IP) and receive in Channel 3 at “srt://192.168.178.42:5001?mode=caller”.



If we now press our Action Button to send the SCTE-35 Marker, we detect it also in Channel 3:

```
F:\Projekte\Playdeck\Delphi\Code\Main\v4.x\DocumentsDebug\Event-Logs\SCTE\2026-05-09.txt
09/05/2026 00:08:34 - >> Ch1 SCTE-35 - <SpliceInfoSection> <SpliceInsert spliceEventId="2026-05-09 00:08:34"
09/05/2026 00:08:35 - << Ch2 SCTE-35 - <SpliceInfoSection protocolVersion='0' ptsAdjustment='0' tier='0'> <SpliceI
09/05/2026 00:08:40 - << Ch3 SCTE-35 - <SpliceInfoSection protocolVersion='0' ptsAdjustment='0' tier='0'> <SpliceI
```

## Using SCTE-104 in SDI

## SCTE-104 Facts

- Supported for SDI Device Inputs as well as SDI Device Outputs, e.g. Blackmagic DeckLink. SCTE transport is always active and does not need to be enabled somewhere.
- PLAYDECK can detect and display incoming SCTE-104 Marker. All incoming and outgoing Marker will be written to an Event Log.
- PLAYDECK can forward incoming SCTE-104 Marker from SDI Input to SDI Output.

## SCTE-104 Testdrive

Let us dive into those topics a bit. As a test run we setup our own SDI signal loop. We use our DeckLink Duo 2 and an SDI Loop Cable:

The screenshot displays the PlayDeck software interface with a sidebar on the left and a main settings panel on the right. The sidebar includes sections for Settings, Playlist, Application, Subtitles / CC, Video, Channel, Outputs, Inputs, Director View, Streaming, Recording, Audio, Channel Audio, and Settings. The main panel is divided into two sections: Channel 1 and Input 1.

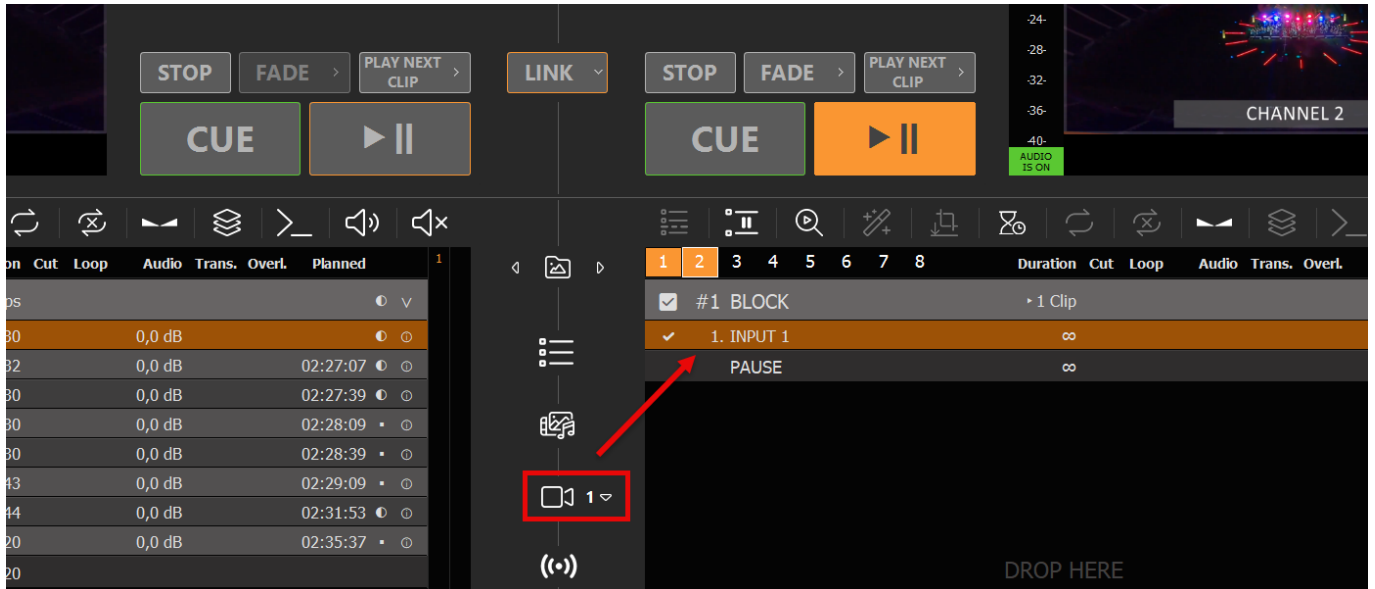
**Channel 1 Settings:**

- Channel ID:** 1 (selected), 2, 3, 4, 5, 6, 7, 8. Buttons: Refresh Page, Preview.
- Output Scaler:**  Position,  Pixel X/Y. Scale type:  Original Size,  Fixed Size (1920 / 1080 Pixel X/Y),  Percental (100 / 100 % X/Y).  Lock X/Y.
- Device Output:**  Device: DeckLink Duo 2, Line: SDI, Keying: <None>, Straight Alpha, Options: Show Help.
- Desktop Output:**  Monitor: <Window Mode>, Audio: <No Audio>.

**Input 1 Settings:**

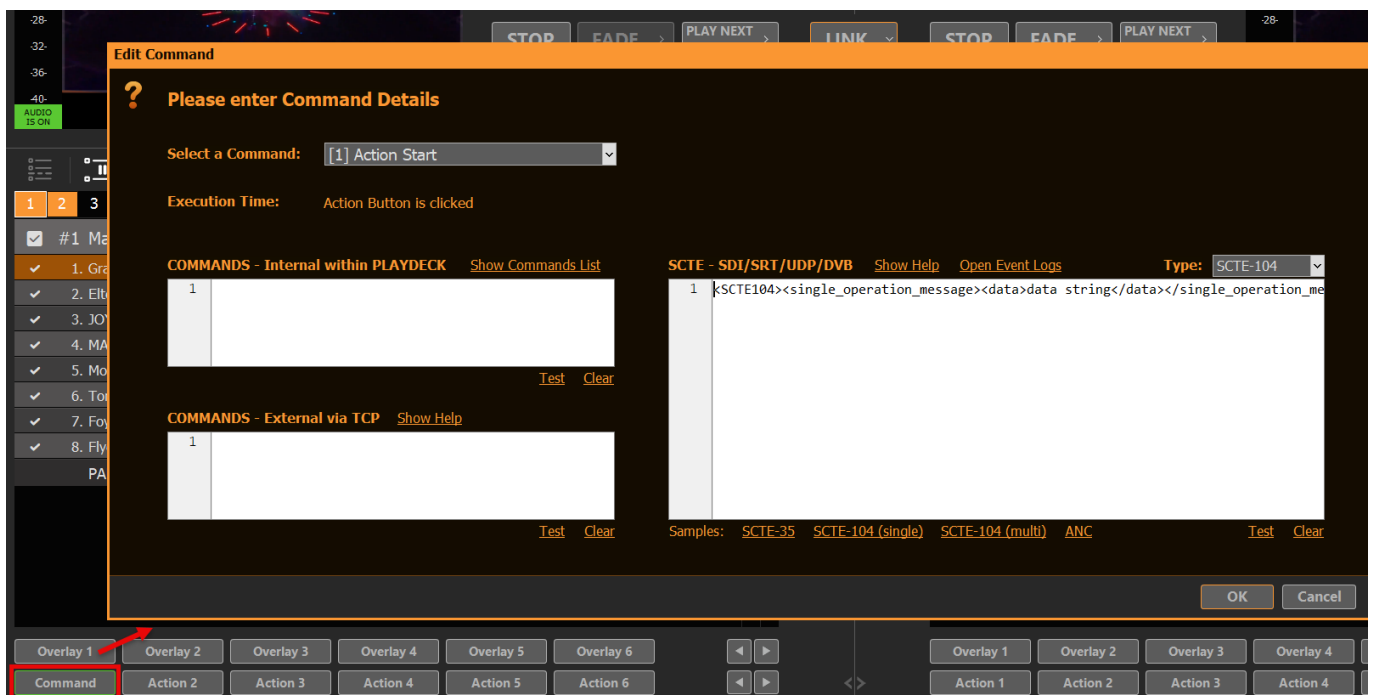
- Input ID:** 1 (selected), 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12. Buttons: Refresh Page, Preview.
- Input Name:** INPUT 1, Update to Playlist >
- Crop / Aspect:** 0, 0, 0, 0, Letterbox / Pillarbox, Update >
- Time shifting:**  Active, Delay: 0, 0, 7 HH:MM:SS
- Device Input:**  Device: DeckLink Duo 2 (2), Line: SDI Video & SDI Audio, Format: <Auto/Variable>, Audio: <No Audio>, Background: <Black>, Image: Show Help.
- Desktop Input:**  Monitor: NVIDIA GeForce RTX 3080 - 3840x1600@144,00 - PRIMARY, Audio: <No Audio>.

And play the SDI Input in Channel 2:

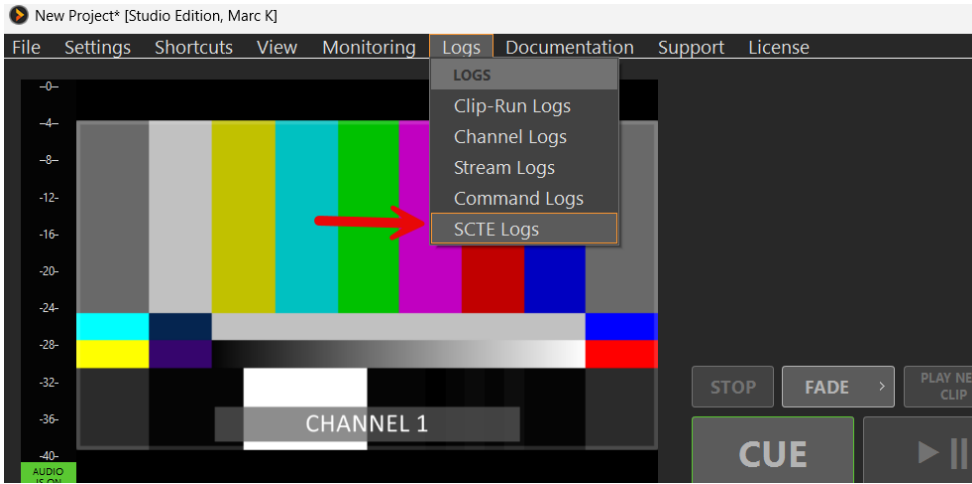


Now we only need a way to send a SCTE-104 marker in Channel 1. So we setup a new Command Action and use the smallest detectable SCTE-104 Marker (of course you can use any other):

```
<SCTE104><single_operation_message><data>data
string</data></single_operation_message></SCTE104>
```



Make sure Channel 1 and Channel 2 are playing, then hit the Action Button. Then open the SCTE Event Log over the Main Menu > Documentation > SCTE:



We even go one step further and setup ANOTHER SDI Loop from Channel 2 to Channel 3 to test the SCTE Forwarding:

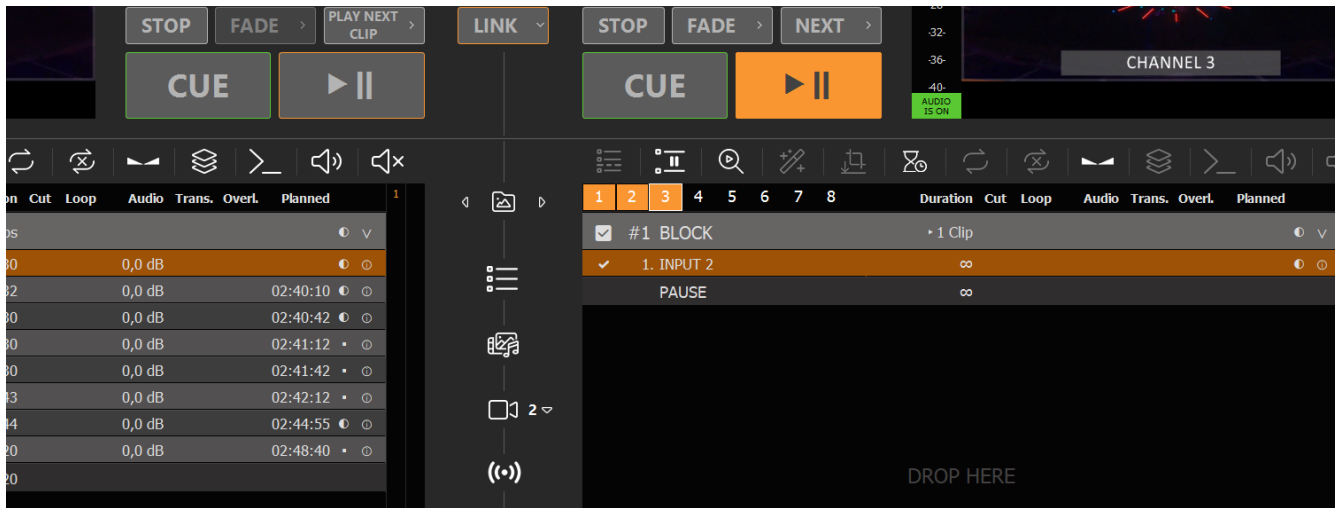
The screenshot displays the 'Settings' panel for Channel 2. The left sidebar shows 'Settings' selected. The main panel is divided into two sections: 'Channel 2' (top) and 'Input 2' (bottom).

**Channel 2 Settings:**

- Channel ID:** 1 2 (checked) 3 4 5 6 7 8. Buttons: Refresh Page, Preview.
- Output Scaler:**
  - Position: 0 / 0 Pixel X/Y
  - Scale type: Original Size (selected), Fixed Size (1920 / 1080 Pixel X/Y), Percental (100 / 100 % X/Y). Lock X/Y is checked.
- Device Output:**
  - Device: DeckLink Duo 2 (3)
  - Line: SDI
  - Keying: <None>, Straight Alpha
  - Options: Show Help
- Desktop Output:**
  - Monitor: <Window Mode>
  - Audio: <No Audio>

**Input 2 Settings:**

- Input ID:** 1 2 (checked) 3 4 5 6 7 8 9 10 11 12. Buttons: Refresh Page, Preview.
- Input Name:** INPUT 2. Button: Update to Playlist
- Crop/Aspect:** 0 / 0 / 0 / 0. Letterbox / Pillarbox. Button: Update
- Time shifting:** Active. Delay: 0 / 10 / 0 HH:MM:SS
- Device Input:**
  - Device: DeckLink Duo 2 (4)
  - Line: SDI Video & SDI Audio
  - Format: <Auto/Variable>
  - Audio: <Same as Video Device>
  - Background: <Black>, Image: [Image icon]
  - Options: Show Help
- Desktop Input:**
  - Monitor: NVIDIA GeForce RTX 3080 - 3840x1600@144,00 - PRIMARY
  - Audio: <No Audio>



If we now press our Action Button to send the SCTE-104 Marker, we detect it also in Channel 3.