

# Encoder stream bit rates

## Adaptive Bit Rate (ABR) Encoder Events (Recommended)

You are only required to send one stream (per primary and backup). All streams are transcoded and aligned for soother quality transitions. If the system receives a higher stream than the bit rate listed in the 'Source Encoder Sends' section below, it will automatically transcode down to the bit rate shown in the 'Audience Receives' section. Sending a lower bit rate than those listed is not recommended.

The video player has a widescreen (16:9) aspect ratio with the following size options. Audio and video streams to attendees at the listed bit rates. We recommend using an audio bit rate of 96 kbps, which is included in the total bit rate. See '[System Requirements for encoder broacasts](#)' for additional information.

### Source Encoder Sends

| Video Player Size | Recommend ed Video Bit Rate | Recommend ed Audio Bit Rate | Total Bit Rate with Recommended Settings |
|-------------------|-----------------------------|-----------------------------|--|
| 480p (854x480)    | 800 kbps                    | 96 kbps                     | 896 kbps                                 |
| 720p (1280x720)   | 1700 kbps                   | 96 kbps                     | 1796 kbps                                |
| 1080p (1920x1080) | 3000 kbps (3mbps)           | 96 kbps                     | 3096 kbps                                |

### Audience Receives

| Video Player Size             | Video Bit Rate | Audio Bit Rate | Total Bit Rate |
|-------------------------------|----------------|----------------|----------------|
| <b>Sending 480p (854x480)</b> |                |                |                |

| Video Player Size                    | Video Bit Rate    | Audio Bit Rate | Total Bit Rate |
|--------------------------------------|-------------------|----------------|----------------|
| Low - 270p<br>(480x270)              | 400 kbps          | 96 kbps        | 496 kbps       |
| High - 480p<br>(854x480)             | 800 kbps          | 96 kbps        | 896 kbps       |
| <b>Sending 720p<br/>(1280x720)</b>   |                   |                |                |
| Low - 270p<br>(480x270)              | 400 kbps          | 96 kbps        | 496 kbps       |
| Medium - 480p<br>(854x480)           | 800 kbps          | 96 kbps        | 896 kbps       |
| High - 720p<br>(1280x720)            | 1700 kbps         | 96 kbps        | 1796 kbps      |
| <b>Sending 1080p<br/>(1920x1080)</b> |                   |                |                |
| Low - 480p<br>(854x480)              | 800 kbps          | 96 kbps        | 896 kbps       |
| Medium - 720p<br>(1280x720)          | 1700 kbps         | 96 kbps        | 1796 kbps      |
| High - 1080p<br>(1920x1080)          | 3000 kbps (3mbps) | 96 kbps        | 3096 kbps      |

## Constant Bit Rate (CBR) Encoder Events

You are only required to send one stream (per primary and backup). All streams are distributed at the bit rate set at the encoder. Listed below are the system-recommended settings for each player size.

**Important:** Streams that exceed 6 mbps (6,000 kbps) will have their connection terminated by the system. Please note that this includes both the audio and video bitrates together.

The video player has a widescreen (16:9) aspect ration with the following layout options. Audio and video streams to attendees at the provided bit rates. We recommend using an audio bit rate of 96 kbps, which is included in the total bit rate.

See '[System Requirements for encoder broacasts](#)' for additional information.

| Video Player Size | Total Bit Rate |
|-------------------|----------------|
| 480p (854x480)    | 896 kbps       |
| 720p (1280x720)   | 1796 kbps      |
| 1080p (1920x1080) | 3096 kbps      |

The system will automatically transcode to the settings above for the on-demand archive, regardless of live bit rates used. With CBR events, you have the option to modify the streaming rate for a higher or lower live bit rate.

**Important Note on all Encoder Events:** Streams that exceed 6 mbps (6,000 kbps) will have their connection terminated by the system. Please note that this includes both the audio and video bitrates together.