colorfront

Streaming Player 2025

User Guide

2025-10-28

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Streaming Player 2025 Introduction

About Streaming Player

Colorfront's advanced **Streaming Player** application presents a solution for professional remote video and audio monitoring from any SDI video source, using the secure, robust and low-latency SRT transport protocol and real-time, GPU-accelerated, high-quality 10-bit HEVC encoding.

Streaming Player is a simple, easy-to-install client application provided by Colorfront, which supports both the macOS and the Windows platform. For the best quality, it is recommended to use a professional video output device connected to the client computer to interface with the monitor.

Key Features of Streaming Player

- Reference quality 10-bit 444 HEVC video stream
- Sub-second latency for truly interactive sessions
- Secure transport with 128/256-bit AES encryption and optional visible and forensic watermaking
- Flexible data rates from below 10 up to multiple hundreds of Mbps
- Easy-to-use thin client application running on Mac and PC
- Rec.709 and PQ color space support
- Dolby Vision tunneling
- Disabled screen capturing to ensure content security
- 3D stereo video streaming [*]
- Dual video output in SDR and HDR
- Multichannel 5.1 and 7.1 PCM audio output on Mac and iPad devices

[*] Windows-only feature

Streaming Technology

Remote streaming is based on two main components:

- *Server*: This component directly accesses the source digital media and transmits the SRT stream.
- *Client*: Running on the operator's local computer, typically a small, off-the-shelf Mac or Windows computer connected to a professional reference monitor or high-quality HDMI display.

Through Colorfront's client-side solution, the **Streaming Player**, multiple clients can connect to a single server in two ways: directly through a point-to-multipoint connection, or via Colorfront's proprietary *Stream Manager* interface. The Stream Manager acts as an intermediary between the streaming source and the clients, serving as an SRT gateway solution and offering simplified networking configuration and greater flexibility in routing video streams.

Colorfront's reference quality streaming technology ensures reliable transmission at moderate bandwidths using studio-quality HEVC compression, suitable for critical color grading, QC, VFX reviews, and approvals. The solution supports 2K, UHD, 4K video formats in 2D and 3D stereo, up to 4:4:4 chroma, and 10-bit color depth.

A professional video card, either AJA or BlackMagic output board, is essential for interfacing with professional or "prosumer" display (or two displays) via SDI or HDMI. The solution supports professional reference monitors via SDI or high-quality TV sets via HDMI in SDR and various HDR modes. Color metadata layers in the video stream, such as Rec.709, Dolby Vision HDR, HDR10, or HLG, ensure that the connected display device is triggered into the appropriate mode.

The Windows and macOS versions of the Streaming Player application are successfully used in various hardware configurations, including laptops, Mac mini setups with an XDR display or OLED TV connected, as well as cinema environments with stereo 3D projection driven by dual SDI feed. The basic hardware configuration should include at least 2 x 8 GB memory and a robust CPU capable of decoding an HEVC stream.

One of the most cost-effective solutions is the Mac mini with Apple Silicon platform paired with either an XDR display, an OLED TV or some professional reference monitor (connected via the Blackmagic Design UltraStudio 4K Mini). This setup is inexpensive, quiet, and small form-factor, enabling 4K HDR output via both SDI and HDMI. The optimized Apple Metal acceleration ensures smooth playback with no dropped frames at UHD resolution. See details on Hardware Configurations.

Contact Customer Support

All information with regard to COLORFRONT's Streaming Player software application can be found on the COLORFRONT website. Should any issues or questions arise, please contact Customer Support so that we can assist you as efficiently as possible. Our contact information:

Web:	http://www.colorfront.com
Help Center:	http://support.colorfront.com
Email:	support@colorfront.com
Discord:	https://discord.gg/cfsupport

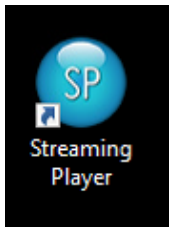
To help us support you as efficiently as possible, please read chapter Troubleshooting.

About COLORFRONT

COLORFRONT, based in Budapest, Hungary, is one of Europe's leading post-production facilities. The company was founded by brothers Mark and Aron Jaszberenyi, who together played a pivotal role in the emergence of non-linear digital intermediate. The company's R&D team earned an Academy Award for the development of Lustre, Autodesk's DI grading system, and a Primetime Engineering Emmy for COLORFRONT On-Set Dailies. Combining this in-depth expertise with a pedigree in the development of additional cutting-edge software, COLORFRONT offers today's most advanced technologies for scanning and recording, DI grading, conforming, digital dailies, VFX, online and offline editing, cinema sound mixing, mastering and deliverables. For more information, please visit https://docs.colorfront.cloud.

1. Getting Started

Colorfront will provide you with the **Streaming Player** application software that is available for both Windows and macOS systems. The app should be installed by double-clicking the relevant .msi (on Windows) or .pkg (on macOS) file and following the prompts. The installer will create a Streaming Player icon on the desktop.

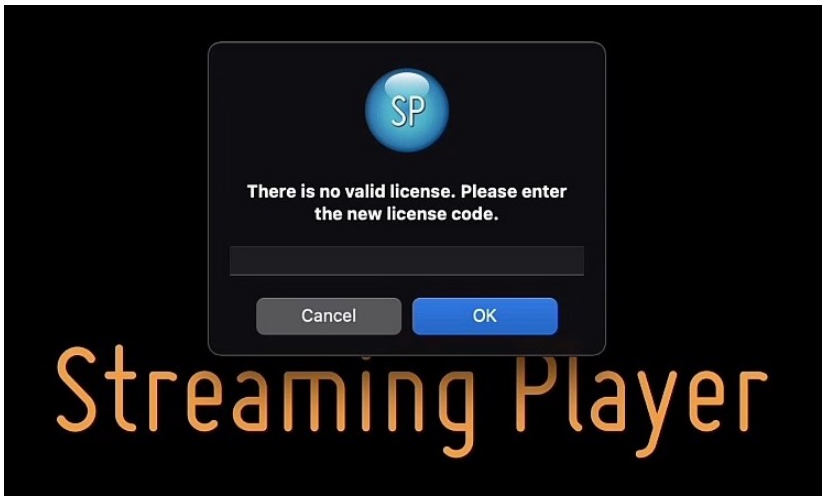


Streaming Player icon

If you are using either a AJA or BlackMagic SDI device, you will need to download and install the necessary drivers/software on the system for them to be usable.

Most of the time, the *stream invitation link*, which is sent via email, contains the license information that allows Streaming Player to be launched, and the viewer does not need to take any action. If you get a license string, please start the application and enter the received license key into the license entry window. This is a 18-character numeric string.

!	For the first validation of the received license key, an active Internet connection is required.



License entry window for the Streaming Player

2. Stream Connection

Colorfront offers a variety of configuration solutions for remote streaming to meet different individual customer needs and security requirements.

You can connect to the stream via:

- Email Invites From Stream Manager or
- Point-to-Point Streaming

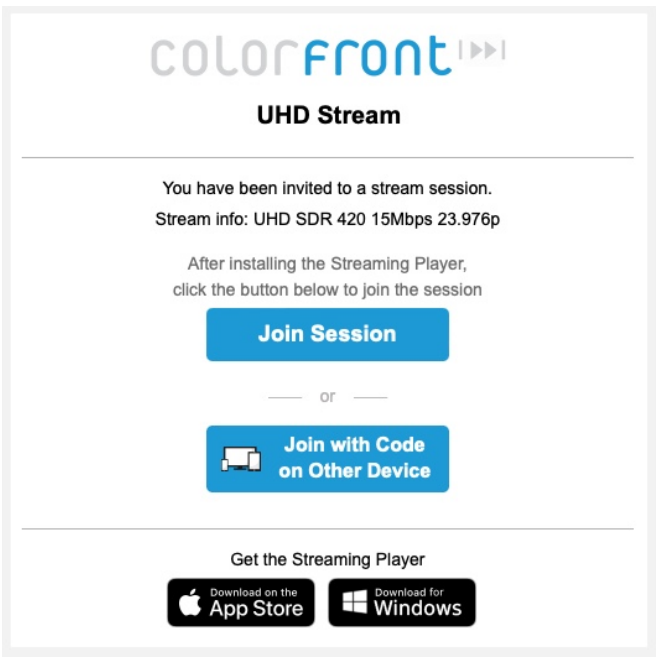
2.1. Email Invites From Stream Manager

The most convenient method for creating and sending stream invites to potential viewers is through the **Stream Manager**. The Stream Manager, Colorfront's proprietary intermediary solution utilized for SRT streaming, is an intuitive interface for managing streaming sessions, invitations, and monitoring connected clients in real-time.

Using the Stream Manager, you can effortlessly send stream invitations to multiple users simultaneously. Upon sending, recipients will receive automatic email notifications containing unique URL links to join the stream.

To access the stream:

- Click the [Join Session] button to instantly launch Streaming Player on your computer, initiating the stream immediately.
- Alternatively, use the [Join with Code on Other Device] option by entering a code from your device (e.g. iPhone or iPad) on the login page. Refer to Connecting with Code From Device for detailed instructions.



Email invitation from the Stream Manager to join the stream

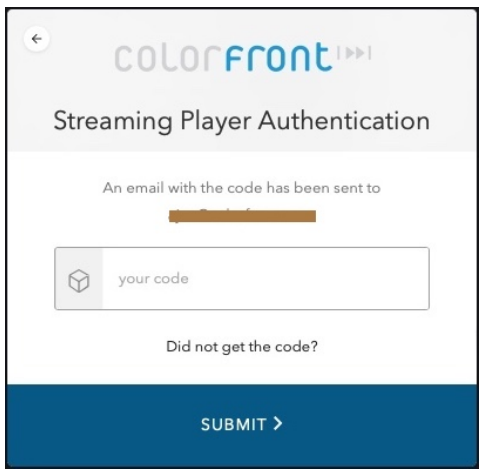
If the application is not installed on your computer, you can easily download it by clicking the links provided at the bottom of the email for macOS or Windows systems.

The invitation link remains accessible multiple times throughout the duration of the streaming session, as determined by the sender.

2.1.1. Two-Factor Authentication

As an additional security layer, two-factor authentication may be required before joining the live stream, where you must first verify your email address to access the streaming session. Follow these steps:

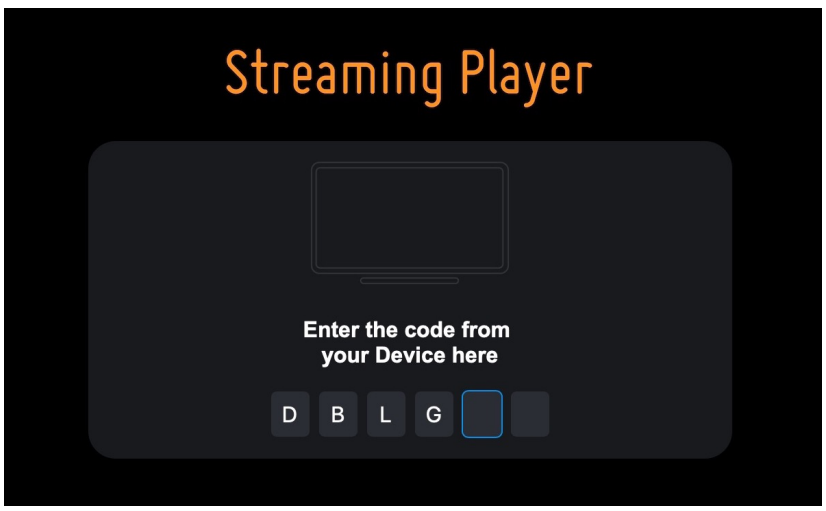
1. Click the [Join Session] button in the invitation email, and the Streaming Player application will open. An authentication pop-up will appear with your email address auto-filled.
2. Click [Submit] to verify your email address.
3. You will receive a second email with a verification code that must be copied to the clipboard.
4. Paste the verification code into the pop-up authentication window and click [Submit] for the Streaming Player to start streaming.



2.1.2. Connecting with Code From Device

You have the option to join the stream using a code from your device. Clicking the [Join with Code on Other Device] button in the invite email takes you to a Device Login Page. Enter the code generated by the specific device you are using, such as an iPad, iPhone, or Apple TV.

After entering the valid code, an additional Two-Factor Authentication may be required. Following successful authentication, Streaming Player opens and initiates the stream.



Device Login Page for entering the code generated from a device

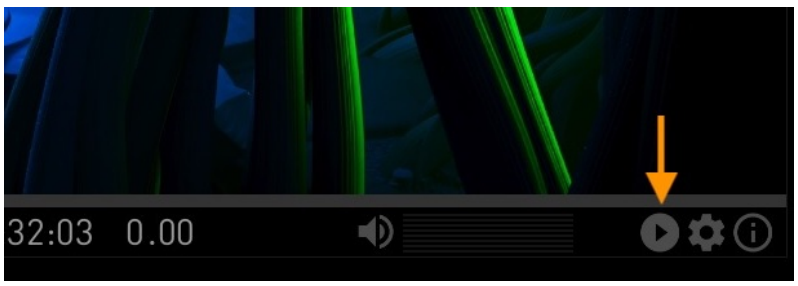
Code generation methods vary for different devices, which are explained in the following sections:

- Code Generation on iOS Device
- Code Generation on Apple TV
- Code Generation in Desktop Streaming Player

Code Generation in Desktop Streaming Player

To generate a code from Streaming Player installed on your macOS or Windows computer to access the video stream, follow these steps:

1. Open Streaming Player.
2. Use the **Stream › Invitation Code** menu option, or simply click the *play* button located in the lower right corner of the navigation bar to generate the code.

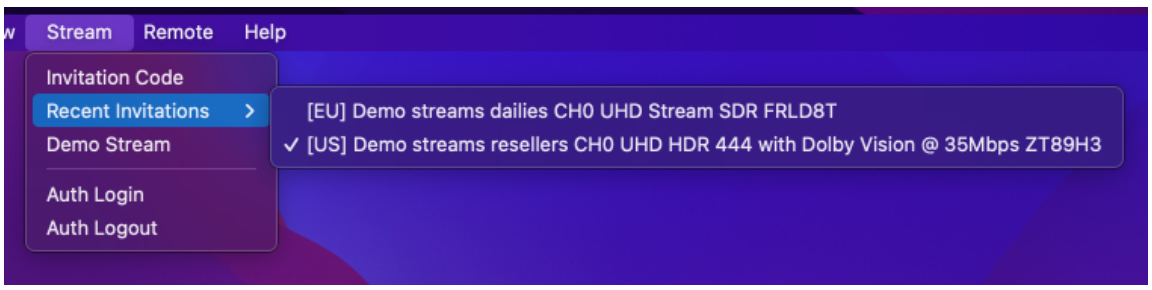


3. A 6-digit alphanumeric code will be displayed on the screen.

4. Go to the Device Login Page (see above) on the device (such as your mobile phone) that you used to open the stream invitation email. Enter the code on that page.
5. Once the code is validated, the stream will automatically start on your computer.

2.1.3. Switching Between Recent Invitations

When you receive multiple invitations for different stream sessions at the same time, you can easily switch between these sessions using the **Stream › Recent Invitations** menu option. This menu displays a list of all the streams you have recently joined. Simply click on the preferred stream title to seamlessly switch between sessions.



Switching between recent stream invitations

2.2. Point-to-Point Streaming

2.2.1. Connecting via Invite Links

You can connect to a stream session through **direct invite links**, which can be generated and sent to you from various systems, such as the Streaming Server, Stream Manager or other Colorfront software. These

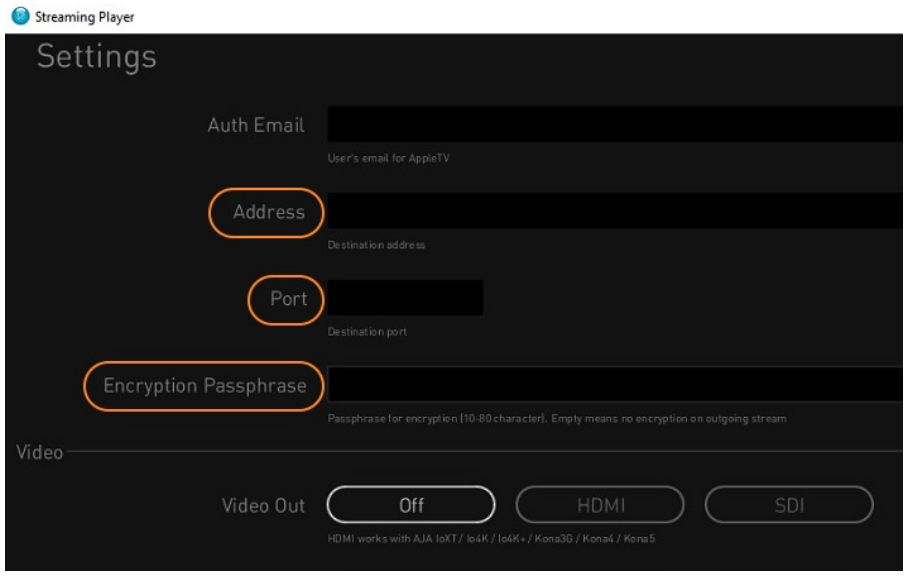
invitation links are clickable URLs that will automatically open the Streaming Player application, if it is installed on your computer, and the stream will start immediately.

For details about Colorfront's Streaming Server or the Stream Manager, see the Streaming Server manual.

2.2.2. Manual Stream Setup

You can set up the stream manually from Streaming Player.

After launching the Streaming Player, press the *Tab* keyboard button to open the Settings Page, where the server's *IP address*, *port number* as well as the *encryption passphrase* should be added. No other setting is needed to start decoding the stream.

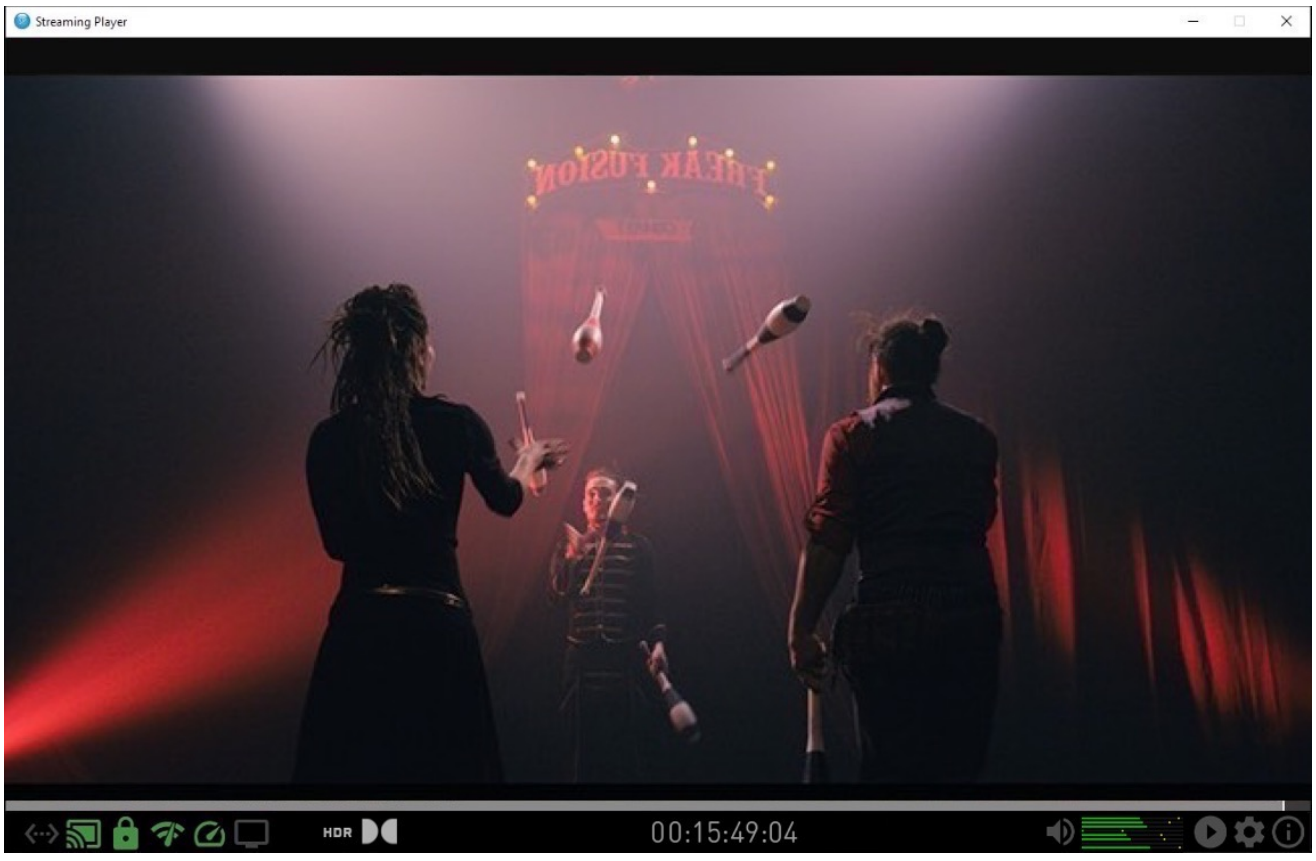


Streaming Player settings

3. UI and Navigation

The Streaming Player has a simple user interface with a **navigation bar** at the bottom. It consists of:

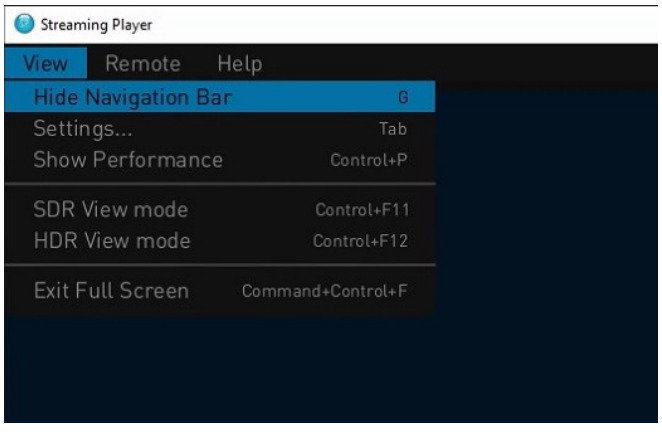
- timeline showing the current frame position
- status icons
- timecode display
- mute button and audio bar
- various configuration and information buttons



Streaming Player

The bar can be displayed or hidden by the **View › Show/Hide Navigation Bar** menu option, or using the *G* shortcut.

See more in Keyboard Shortcuts.



View menu options of the Streaming Player

3.1. Status Icons

The status icons on the left side of the navigation bar indicate the stream's health.

As for color coding, the icons turn *green* in case of connection or availability, while *yellow/red* icons indicate performance issues. See Troubleshooting for details on color coding and what to do if an icon is not green.

The status icons are the following:

 *Remote control status*	green when remote controlling is established
 *Stream connection status*	green when connected
 *Encryption status*	green for encrypted and gray for unencrypted streaming
 *Stream quality*	green when streaming is realtime
 *Performance*	green when hardware decoding is seamless
 *Video I/O*	green when video output is established and gray when there is no video IO
 *HDR mode*	white text for HDR content; icon is crossed-out and gray when stream is not HDR

	HDR signaling is enabled in any of the HDR modes via SDI or HDMI of AJA boards, such as *KONA 4* or *KONA 5*, and a number of Blackmagic Design devices, such as *DeckLink 8K Pro*, *DeckLink Mini Monitor 4K*, *DeckLink Duo 2* or *DeckLink 4K Extreme 12G*.

 *Dolby Vision*	Dolby Vision logo only when relevant metadata is available

	For Dolby Vision tunneling, the HDMI link uses Dolby's proprietary *IPT* color space.

	Status icons are currently not available in the main screen on the Mac platform, only on the Performance page. Double-click to view them.

Use the following shortcuts to activate SDR and HDR output LUTs:

- *Ctrl+F12* - Use this shortcut when working with an SDR monitor but want to preview how HDR footage would appear on an HDR display. This shortcut sets the SDI/HDMI metadata to **HDR** and activates the output LUT. Additionally, it turns on the HDR icon at the bottom of the main screen.
- *Ctrl+F11* - Press this key combination to set the SDI/HDMI metadata to **SDR** and deactivate both the output LUT and the HDR icon.
- *Ctrl+F10* - Utilize this shortcut to turn off the LUT while keeping the SDI/HDMI metadata unchanged.

If you click the HDR icon or use the above SDR/HDR shortcuts in *Automatic* HDR mode, the HDR setting will automatically switch back to the *Manual* mode.

3.2. Center Displays and Buttons

In the center of the navigation bar, there is a **timecode** display of the incoming footage.

The *timecode* is the eight-digit numeric representation of a particular frame of the video, as follows:

`Hours:Minutes:Seconds:Frames`

For example, `00:17:22:07` refers to the seventh frame of the video at 17 minutes and 22 seconds.

You can monitor audio levels with the small **audio level indicator**. Click the **mute** button to mute the sound.

The mute button behavior depends on the Mute Scope parameter in the Advanced Settings. It defines whether muting affects [Video Out], [System Audio], or [Both] (default). Adjust this setting to control which outputs are silenced when mute is enabled.

Mute button, timecode and audio indicator in the navigation bar

By default, the Streaming Player is in view-only mode, meaning playback controls are hidden and remote controlling is disabled. To see the basic navigation controls on the right side of the bottom bar, such as the ***Play/Pause***, ***Previous Frame*** and ***Next Frame*** buttons, enable *full* remote control REST API access in the server application.

3.3. Information and Configuration Buttons

The *play* button on the right side of the navigation bar is used to **generate access codes** for the stream. See Code Generation in Desktop Streaming Player for details.

Information and configuration buttons on the navigation bar

The **Settings** page can be accessed by clicking on the cogwheel icon or by hitting [Tab].

Next to it is an information icon that opens the **Performance** page, which is also accessible by double-clicking anywhere on the screen.

Performance Page of the Streaming Player

3.4. Navigation on Apple Devices

Touch and swipe interaction is supported on both iOS devices and Apple TV. See the following table for navigation details.

Navigation	Action
On all Apple devices*	
Swipe up	Switching between Performance Page and image
Swipe down	Enabling the bottom navigation bar while switching between Performance Page and image
Swipe left/right	Switching between image / image+navigation bar / Performance Page+navigation bar
Only iPad and iPhone	
Single tap	On *mute* button to mute the audio
Double tap	Resizing of the main image as *Fit* (fit to screen) or *FitAll* (original scale)
Three-finger touch and hold	Code generation to log in to the stream
Only Apple TV	
Mute button on the remote	Mutes the audio

Navigation	Action
Play button on the remote	Code generation to log in to the stream

* Swiping on the touch surface of the remote (Apple TV) or on the screen of the device (iPad/iPhone)

To prevent any interference with the stream, it is possible to disable user interactions for viewing the metrics. To deactivate all user interaction, follow these steps:

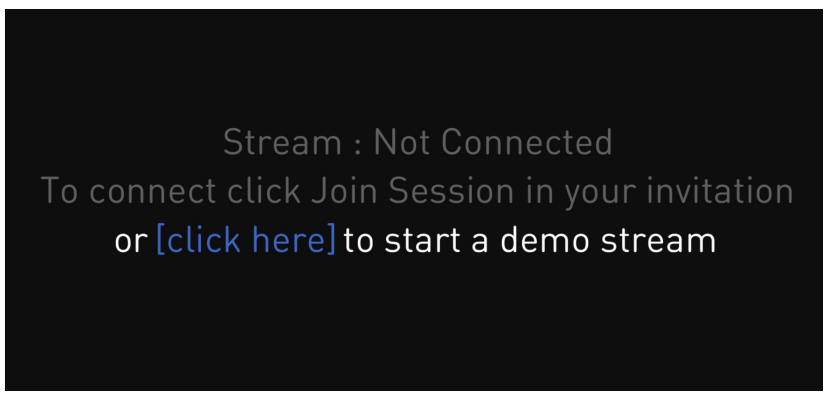
1. Go to Settings.
2. Access Application Preferences.
3. Click ***Disable User Interaction***.

4. Viewing the Stream

There are several ways to look at the video content when using the Streaming Player application. Most importantly, you can use

- a directly connected GUI monitor, including the XDR display on the Mac, or
- a professional AJA or Blackmagic Video Output Device and connect to an external HDMI or SDI monitor.
- You can also use the Streaming Player App on Apple TV and iOS Devices. See the step-by-step installation guide.

When you first open the Streaming Player, a screen message will invite you to connect to a **demo stream**.



Start demo stream

Click the link and enter your email address in the pop-up window. You will receive a code via email to verify your identity in the Streaming Player to start the demo stream. You can interrupt and rejoin the stream multiple times, or join from another device with a code.

The demo stream contains watermarks including your IP and email address.

Watermarked demo stream

4.1. Performance and Quality

Streaming technology encompasses a wide range of resolutions and formats, including HD, UHD, or 8K, with color encodings such as RGB 444 or YUV 420, alongside variable bitrates that can range from low to very high. These critical settings determine the stream's overall quality and require precise adjustment on

the server side. It is important to note that compatibility with these settings varies across playback devices; for instance, AppleTV may not support UHD with RGB 444 encoding.

Adjustments on the Streaming Player side, particularly in terms of network buffering, can directly impact latency, ensuring a smoother viewer experience.

For optimal performance with the ***Network Buffering*** parameter set to [Ultra Low Latency] in the Advanced Settings of the Streaming Player, it is recommended to switch the streaming server to PCM audio. Unlike the default AAC option, which delivers compressed audio, PCM offers lossless quality. Despite the higher data rate, PCM provides superior quality and reduced latency.

When using PCM audio, Streaming Player also supports multichannel 5.1 and 7.1 output on Mac and iPad devices if compatible hardware is available. This enables full-quality multichannel playback without compression, ideal for QC and professional review workflows.

The quality and performance of the streaming content can be adversely affected by the network environment. WiFi and VPN connections, in particular, often lead to notable slowdowns, potentially compromising stream quality. For further details, please refer to the Troubleshooting chapter.

4.2. Directly Connected Displays

You can connect HDR-capable displays directly to the Streaming Player on both macOS and Windows. Refer to the following sections for platform-specific instructions on configuring HDR display output.

To toggle full-screen mode in the Streaming Player, use the *Alt*+*Enter* keyboard shortcut.

On macOS, full-screen mode can also be activated by clicking the green button in the top-left corner of the application window. In this mode, video content fills the screen and audio is played through the system's default output.

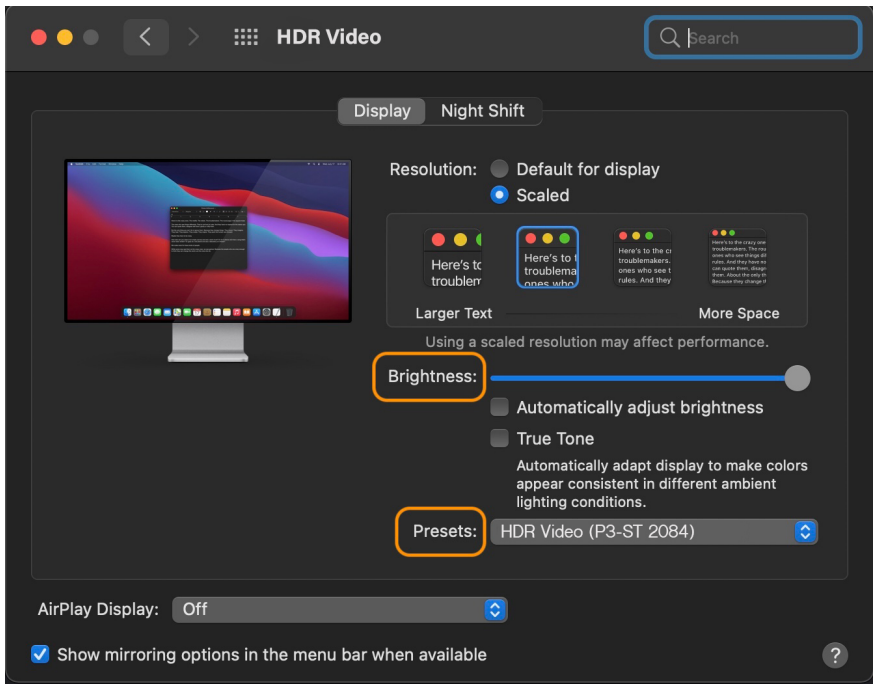
4.2.1. Directly Connected Displays via DisplayPort on macOS

To use a graphics monitor directly, take the following steps:

1. Connect the display through the DisplayPort of your Mac workstation.

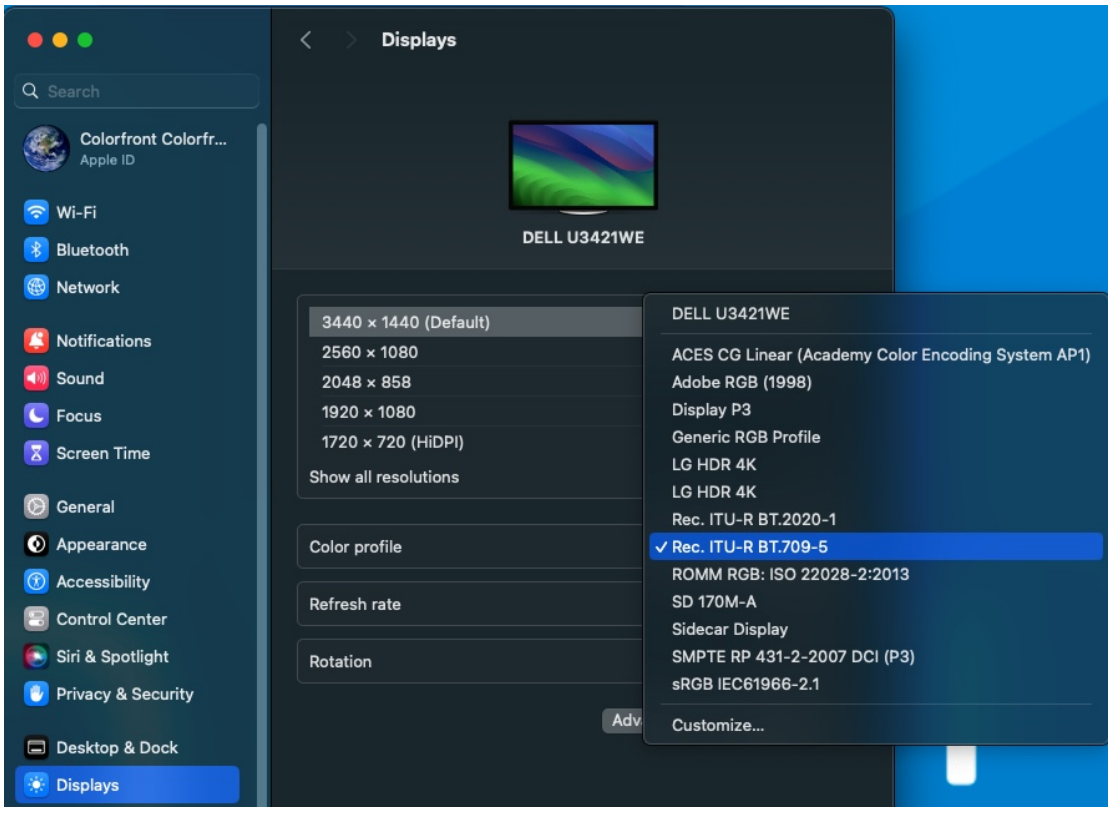
Thunderbolt 3 DisplayPorts on the Mac mini

2. Go to the display settings of your Mac and set the *Brightness* slider to its maximum value. The *Preset* selector should be set to [HDR Video (P3-ST 2084)] for HDR displays.



Selecting the P3-ST 2084 preset for HDR video display

3. For non-HDR content, select the [Rec. ITU-R BT.709-5] (Rec. 709) setting as your default *Colour Profile*. When viewing HDR video on a non-XDR display, choose the [Rec. ITU-R BY.2020-1](Rec. 2020) color profile for an optimal viewing experience.



Selecting proper display profile

4. Start the Streaming Player.
5. For HDR, navigate to the Advanced Settings and set the ***Gui HDR Mode*** from [SDR] to [HDR10] to trigger the HDR mode on the display.

Selecting HDR display mode on the Settings Page

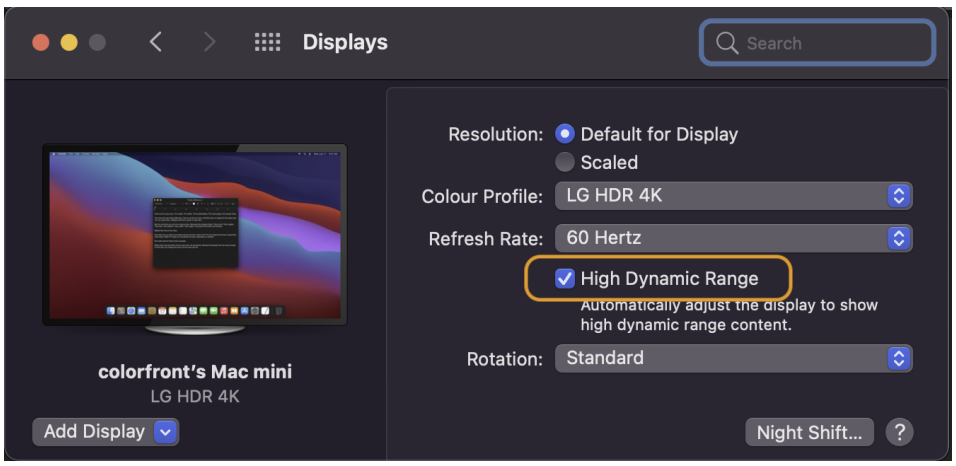
4.2.2. Directly Connected Displays via HDMI on macOS

Another option to view the Streaming Player's streamed HDR content through a direct display is to connect an LG OLED TV to the supported Mac configuration (such as Mac Pro) via the HDMI port, as per the following:

1. Connect the television through the HDMI port of your Mac workstation.

HDMI port on the Mac mini

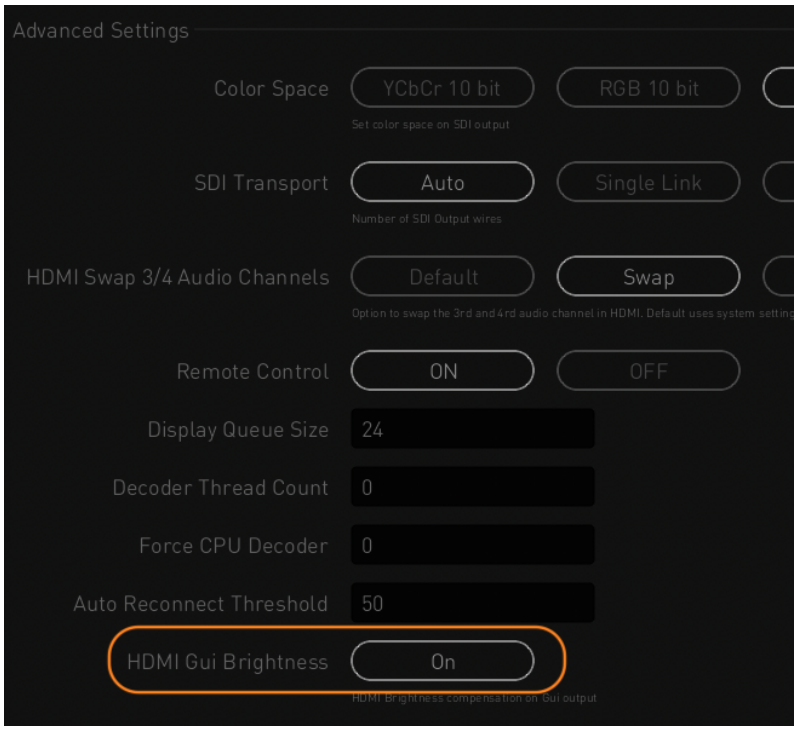
2. Go to the display settings of your Mac, and enable the ***High Dinamic Range*** option so that the display shows HDR content. Make sure that the *Colour Profile* is also set to the appropriate option.



Enabling HDR mode in the display settings on the Mac

3. Start the Streaming Player and go to the Settings Page.
4. For color-accurate monitoring, go the Advanced Settings and enable the ***HDMI Gui Brightness*** to compensate HDMI brightness on the GUI output.

ℹ	The *HDMI Gui Brightness* setting is only available on macOS.

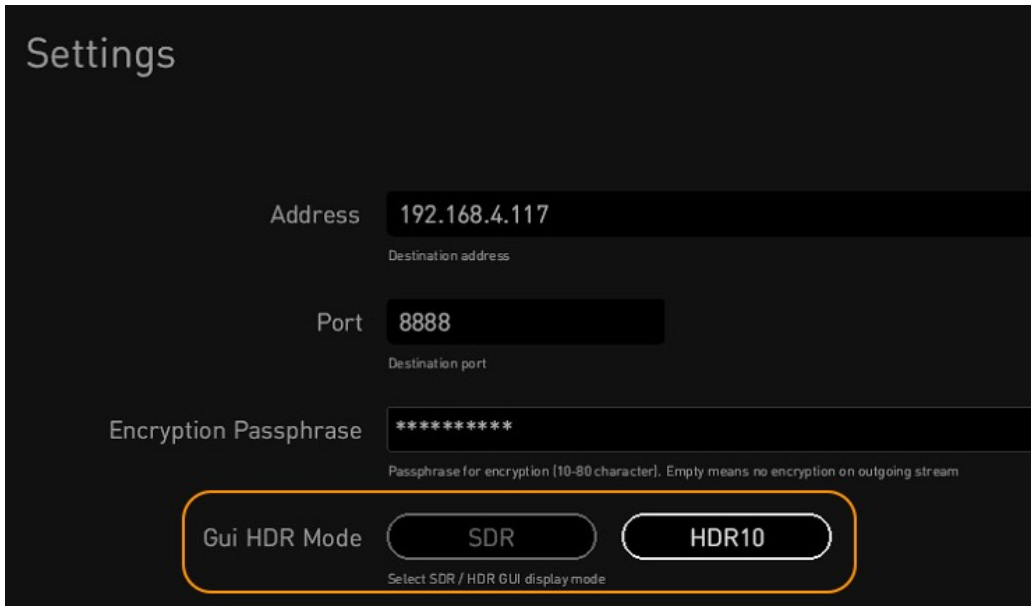


Selecting GUI brightness compensation for the GUI

4.2.3. Directly Connected Displays on Windows

When using the Streaming Player on a Windows workstation, please do the following:

1. Connect the display, GUI monitor or TV, through the appropriate port of the workstation. The monitor should be HDR10 capable. For HDR televisions, use the HDMI port of the computer.
2. Go to the displays settings of the Windows operating system, and switch to HDR mode.
3. Start the Streaming Player and go to the Settings Page.
4. Set the ***Gui HDR Mode*** to [HDR10] display mode for all direct connections, including HDMI.



Selecting HDR GUI display mode on the Settings Page on Windows

4.3. Video Output Device

If an AJA or Blackmagic Design device is installed in the system, you can customize the video output in the Video Settings as follows:

Video Out Set it to [HDMI], [SDI] or [Off].

Video Resolution	It should match the server's video setting. To send HD 720p resolution video to the video output, set this to [Auto].
Color Space	Set the SDI output color space to [YCbCr 10 bit], [RGB 10 bit] or [RGB 12 bit].
SDI Transport	Set to [Auto] or to the appropriate SDI configuration.
Dual Video Out	Enable a secondary video output by choosing a color space for the output. Select either [SDR] or [HDR].

The transmission also consists of the audio stream. The audio is transmitted to the video card, and may be output to a monitor or television over SDI or HDMI interface.

4.4. Disabled Screen Capturing

To protect sensitive content, all forms of screen capturing is blocked in the Streaming Player, such as taking screenshots or recording screen content.

Viewing streamed video content of the Streaming Player through any remote desktop application is also disabled. While the audio signal is transmitted to the remote party, no image is visible from remote access. For support purposes, you can allow limited access to the application's settings by enabling the Support Mode.

4.5. Advanced Configurations

4.5.1. Custom GUI Color Space

The Streaming Player supports defining a custom GUI color space through the Startup.xml file. This advanced configuration affects only the GUI display and does not alter the streamed or video output signal. It allows GUI color management customization for specific display workflows, such as Apple P3 monitors or SDR/HDR mixed environments.

This feature is available only through the Startup.xml file and is not accessible from the user interface.

Add the following entry to the Startup.xml:

```
<CustomGUIColorspace type="string">P3D65_SRGB</CustomGUIColorspace>
```

The value follows the `Primary_Curve` format:

- The part *before* the underscore defines the **color primaries**.
- The part *after* the underscore defines the **gamma** or **transfer curve**.

Examples:

- `P3D65_SRGB` (Apple Display P3)
- `BT709_Gamma24`

- `BT2020_PQ`

Available options:

Primaries	`BT709`, `Rec709`, `BT2020`, `Rec2020`, `P3DCI`, `P3D65`, `XYZ`, `AP0`, `AP1`, `ARRIWideGamut`, `CanonCinemaGamut`, `RedWideGamutRGB`, `Sgamut3Cine`, `VGamut`
Curves	`SRGB`, `Gamma22`, `Gamma24`, `Gamma26`, `BT1886`, `HLG`, `PQ`, `ACEScct`, `LogC`, `Slog3`

5. Streaming Player App

You can watch media content on **Apple TV** and **iOS devices** such as iPad or iPhone through the **Streaming Player app**.

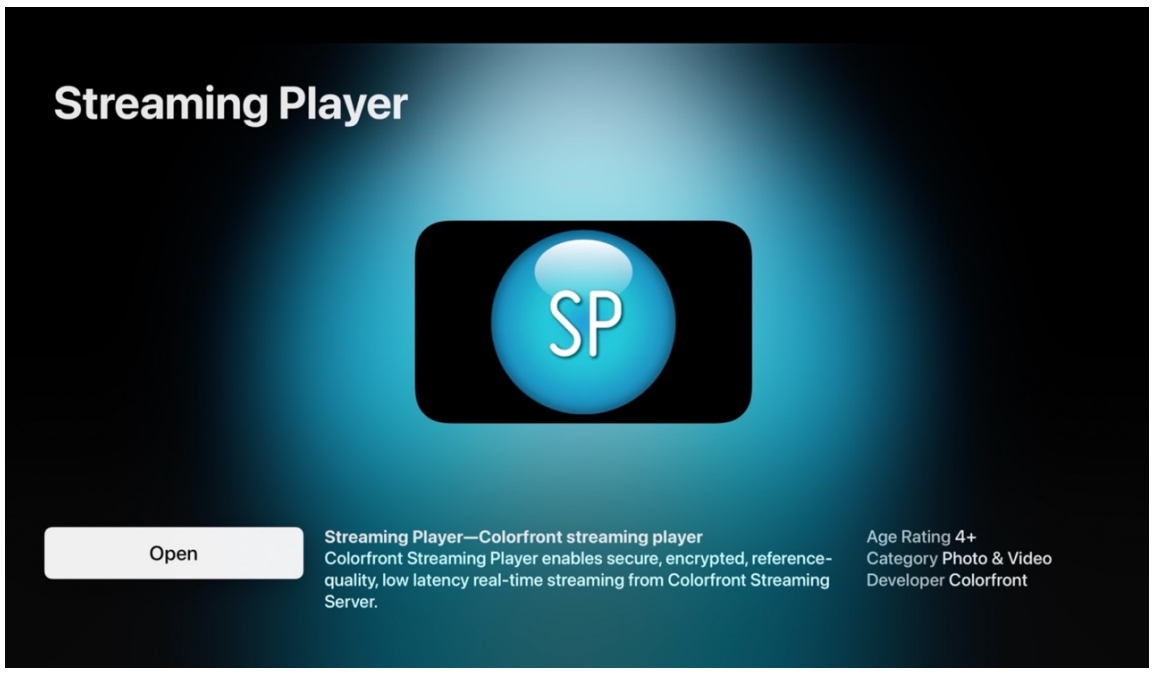
Apple TV device

Please see Email Invites From Stream Manager on how to join a streaming session by clicking on the URL sent to you in email.

> Currently, the Streaming Player does not open on iPhone from email when the default browser is Microsoft Edge.

Key Features of Streaming Player App

- Reference-quality 10-bit 420 HEVC video stream
- Sub-second latency for truly interactive sessions
- Secure transport with 128/256-bit AES encryption and optional visible and forensic watermarking
- Flexible data rates from below 10 up to multiple hundreds of Mbps
- Rec.709 and PQ color space support
- Dolby Vision
- Disabled screen capturing to ensure content security



Streaming Player App on the GUI of Apple TV

5.1. Prerequisites

Supported hardware platforms, setups and formats are the following:

System	Supported Versions
Apple TV model	• 4K (2nd generation) - recommended • 4K (1st generation) - with limited functions Currently, AppleTV HD is not supported.
tvOS	tvOS 15.0 and above - 15.5 recommended
iPad model	iPad Pro 4th Generation 12.9" or later
iPadOS	iPadOS 14.5 and above
iPhone model	iPhone 12 and 13 Pro/Pro Max or later
iOS device	Devices equipped with Apple A12 Bionic 6-core processor or above
Web browser	Safari, Chrome and Firefox Currently, Streaming Player does not open on iPhone from email when the default browser is Microsoft Edge.
Stream format	10-bit 420 HEVC video stream Currently, 10-bit 444 HEVC video stream is not supported on Apple TV.
UHD HDR 420/444 support	• iPhone 12 Mini and up, with reduced stream quality for iPhone SE (3rd generation) • iPad Air (3rd generation) and up • iPad Pro 12.9-in. (3rd generation) and up
8K support	iPad Pro 12.9-in. (5th generation) and up
Internet connection	For best performance, we strongly recommend using hard-wired Ethernet cable for your system. If hard-wired connection is not possible, you can also use Wifi for streaming.
HDMI connection	The Apple TV is HDMI 2.0a capable, which can be connected to any input of the Television.

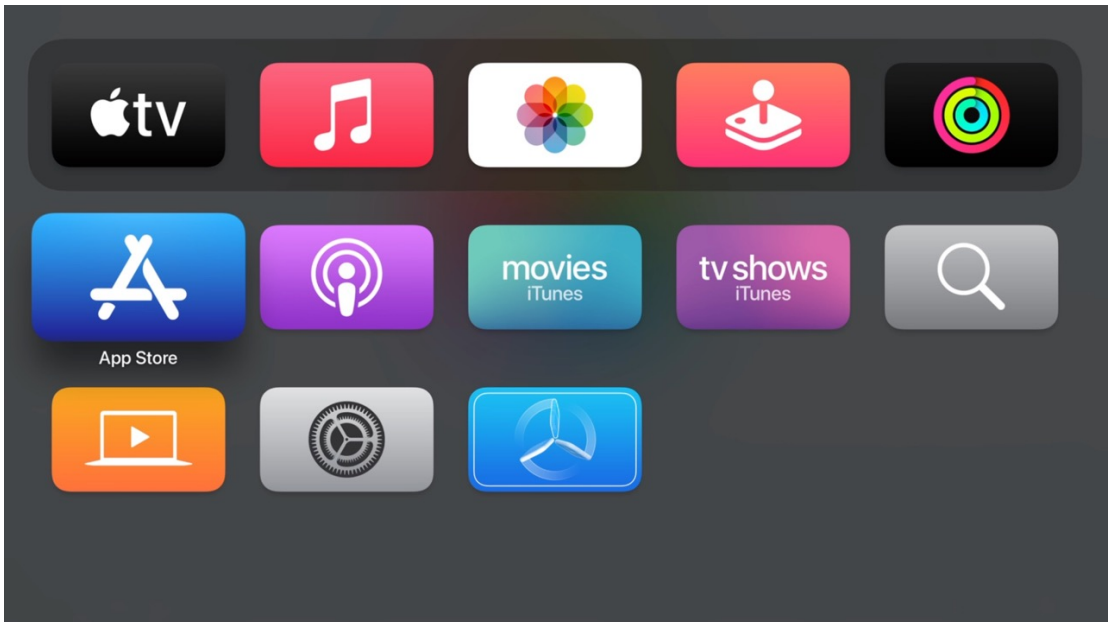
System	Supported Versions
Picture Mode settings	Although many manufacturers/televisions differ, it is generally recommended to disable features such as motion compensation (e.g. LG TruMotion) or dynamic contrast options that may interfere with the original creative intent. However, picture settings such as Filmmaker Mode are recommended. Filmmaker Mode automatically disables any picture processing settings that can often distort the natural look of movies, ensuring they are displayed as intended by their directors by preserving the film's original aspect ratio, colors, and frame rate, and delivering a more authentic and true-to-source viewing experience.

5.2. Apple TV

5.2.1. Installation on Apple TV

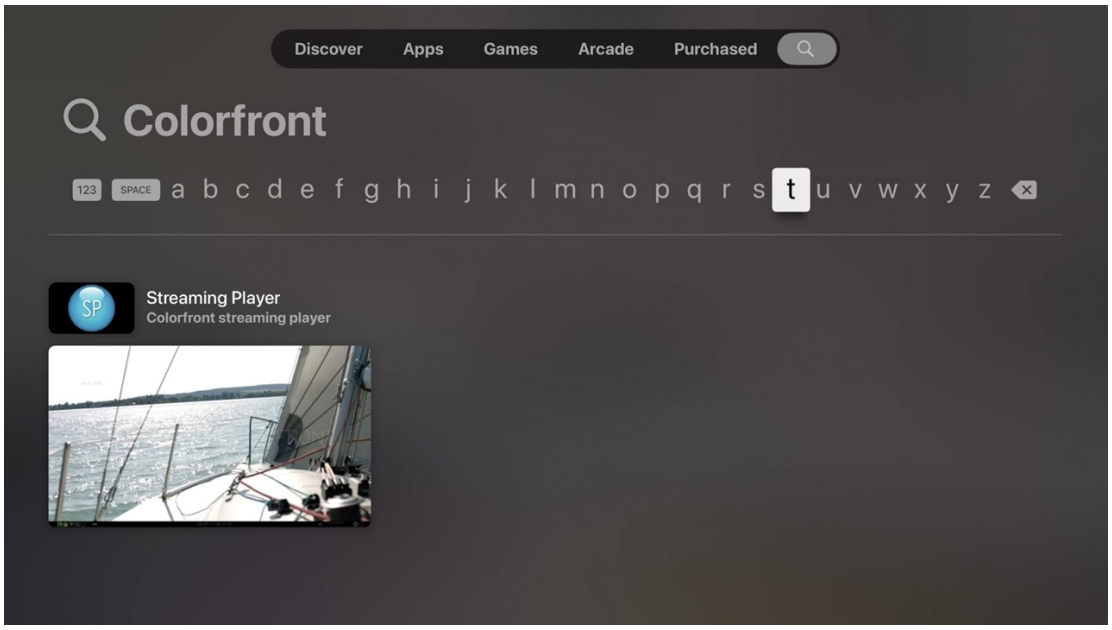
To install the Streaming Player App on Apple TV, please follow these steps:

1. On your Apple TV, go to the App Store.

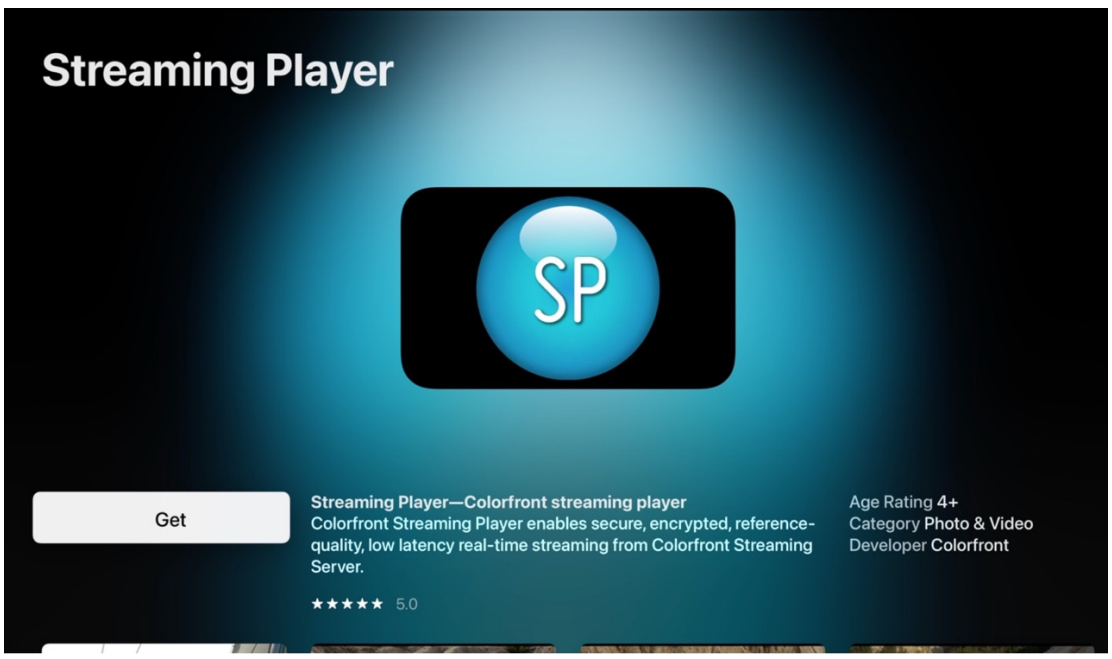


Apple TV App Store

2. Search or type in 'Colorfront'.



3. Select the Streaming Player application icon and click [Get].



4. Once the download is complete, return to the main screen and tap the Streaming Player App icon to open it.
5. Before connecting to a stream using the Streaming Player App, you need to verify your identity. For detailed instructions, please refer to the Email Verification for Stream Access section.

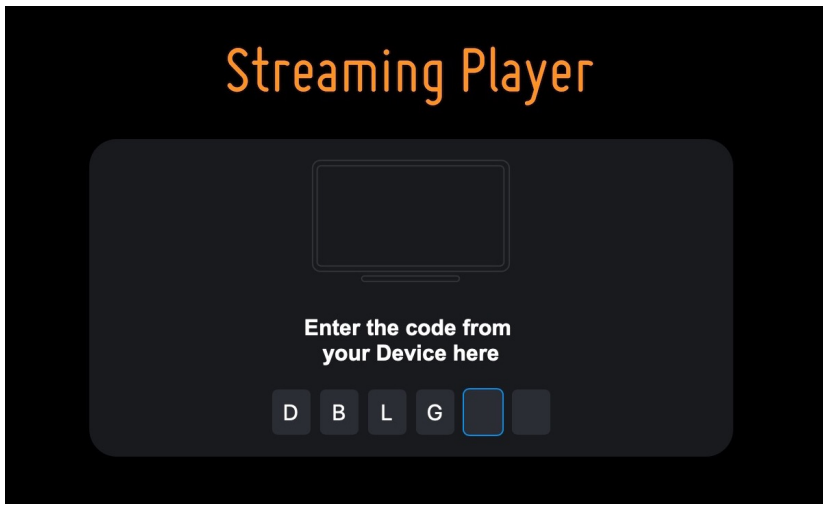
5.2.2. Code Generation on Apple TV

To generate a code from the Streaming Player App installed on your Apple TV to access the video stream, follow these steps:

1. Open the stream invitation email. The message will include a [Join with Code on Other Device] button that will take you to the Device Login Page. Here you will need to enter a six-digit invitation code generated by your Streaming Player App within the Apple TV. See more details in Connecting with Code From Device.
2. Go the GUI of the Apple TV.
3. On the Apple TV home screen, open the Streaming Player App.
4. On the Siri Remote controller, press the Play/Pause button.

5. A 6-digit alphanumeric code will appear on the screen.

6. Go back to the Device Login Page on the device that you used to open the stream invitation email (such as your mobile phone or computer) and enter the code.
7. Once the code is validated, the stream will start automatically on Apple TV.
8. Closing the application will stop streaming data with the Streaming Player App, but as long as the streaming session is live, you can rejoin the stream by reopening the application.



Entering code on Device Login Page

5.2.3. Siri Remote Controller

Touch and swipe interaction is supported on Apple TV using the Siri Remote controller, where you can swipe by touching across the touch surface of the remote with a sliding gesture. See the following table for navigation details.

Touch surface of Siri Remote controller

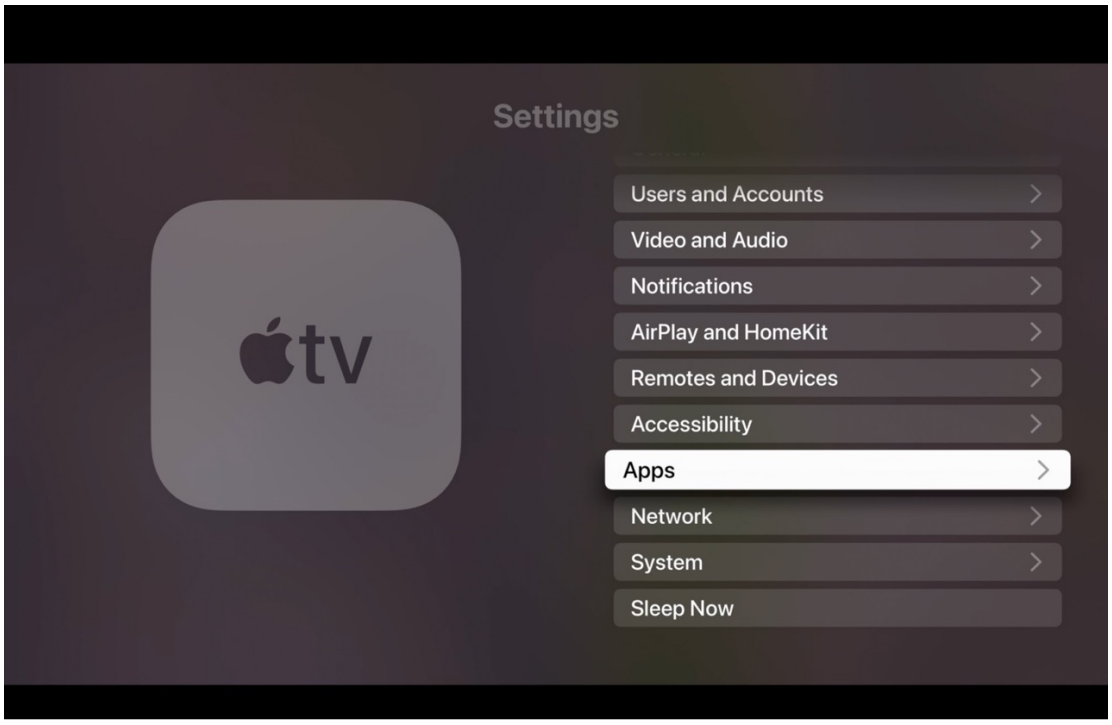
Navigation	Action
Swipe up	Switching between Performance Page and image
Swipe down	Enabling the bottom navigation bar while switching between Performance Page and image
Swipe left/right	Switching between image / image+navigation bar / Performance Page+navigation bar
Mute button on the remote	Mutes the audio
Play button on the remote	Code generation to log in to the stream

Streaming Player Performance Page with navigation bar

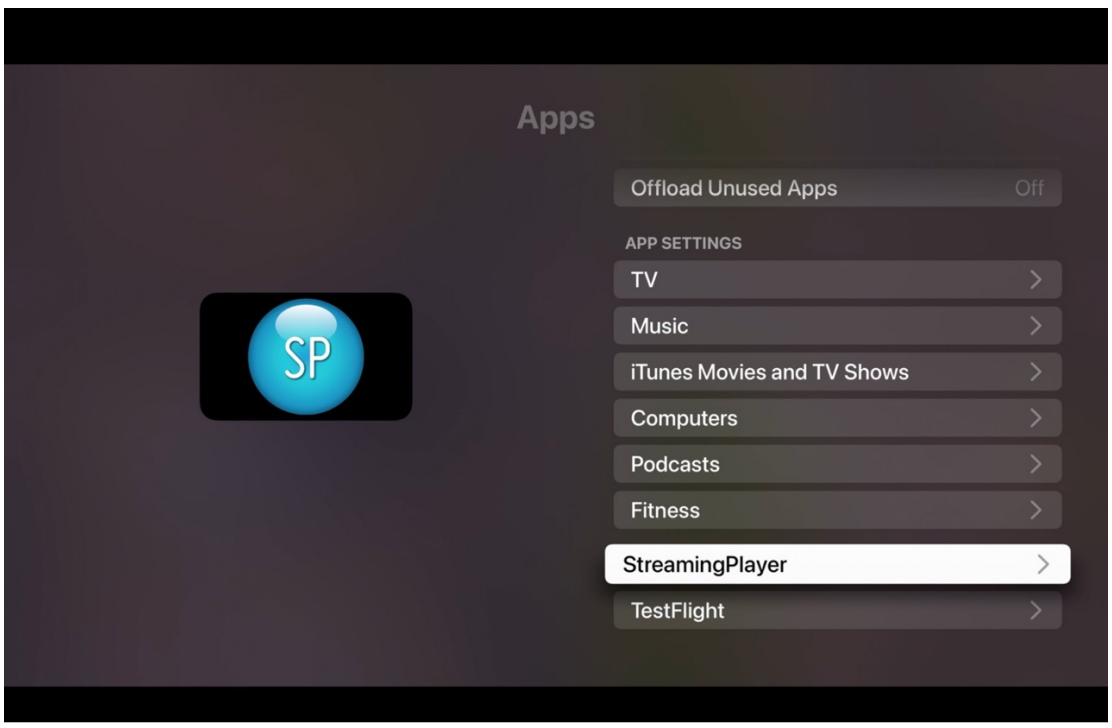
5.2.4. StP App Settings

1. Access **Settings** from the Apple TV Home Screen.

2. Select **Apps**.



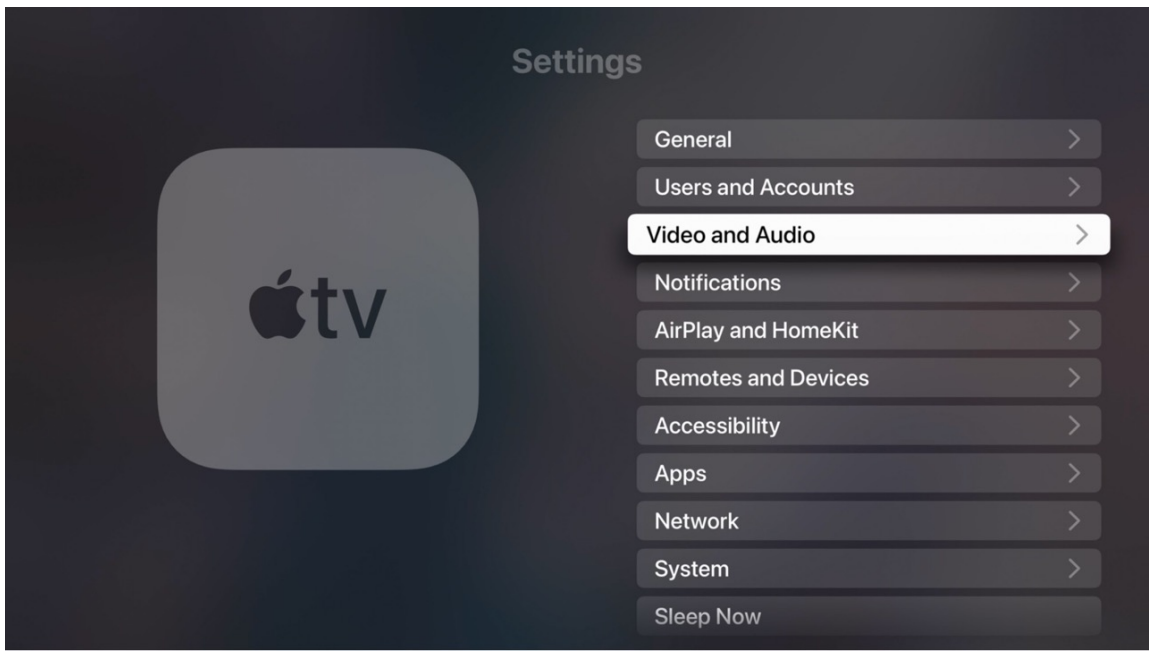
3. Select **Streaming Player**.

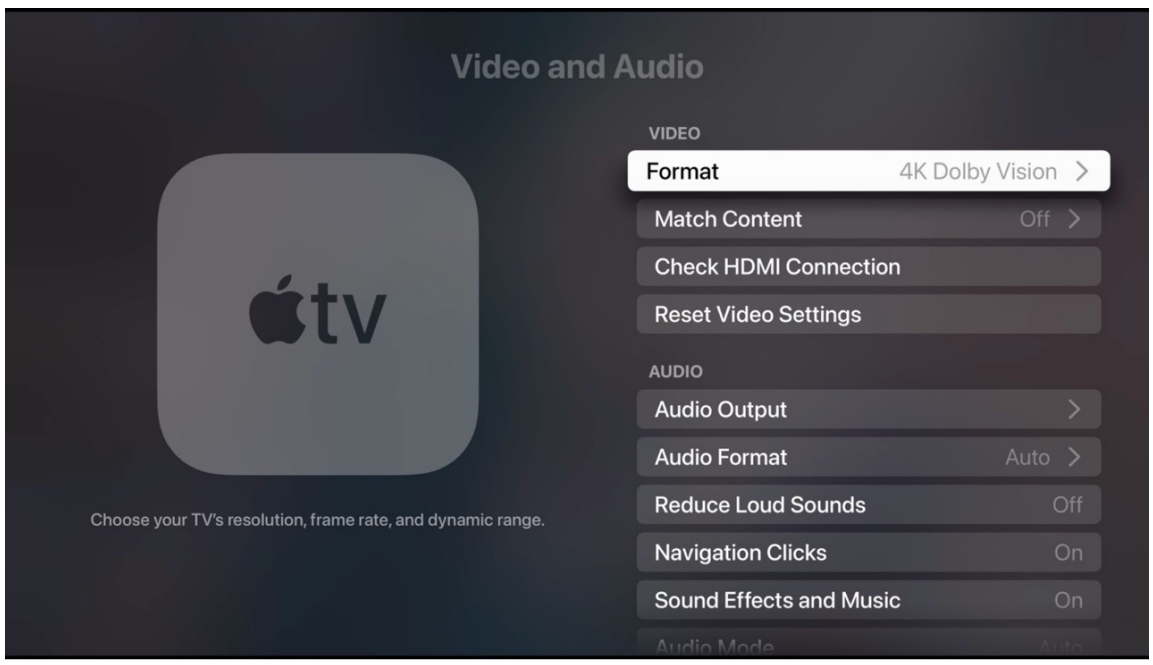


To see how to configure streaming source parameters, see Application Settings.

5.2.5. Apple TV Video Settings

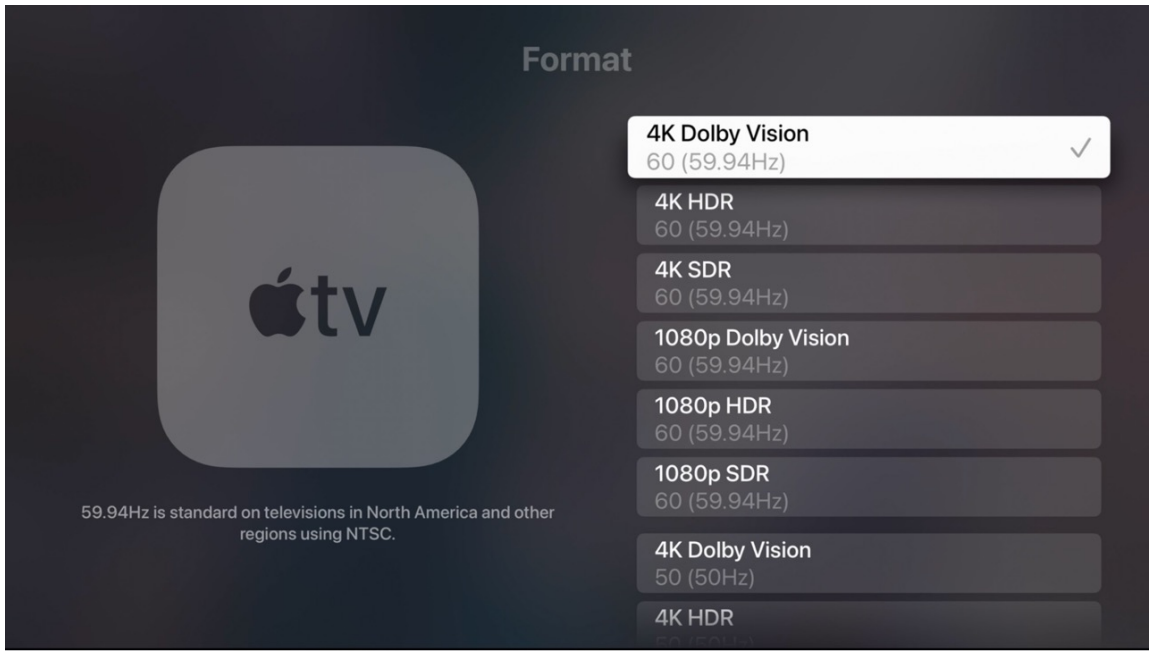
In the **Settings**, open **Video and Audio** where you can configure the **Format** of the video stream.





For an optimal review experience, please choose a 4K video format. 4K options include [4K HDR], [4K SDR] and [4K Dolby Vision] in 50/60 Hz formats.

If you have a **Dolby Vision** compatible television (such as LG or Sony), for the best quality and experience, please set your Apple TV to [4K Dolby Vision] video format. This is especially important if you want to review HDR materials. However, even for SDR videos, we encourage you to set your Apple TV device and television to Dolby Vision format.

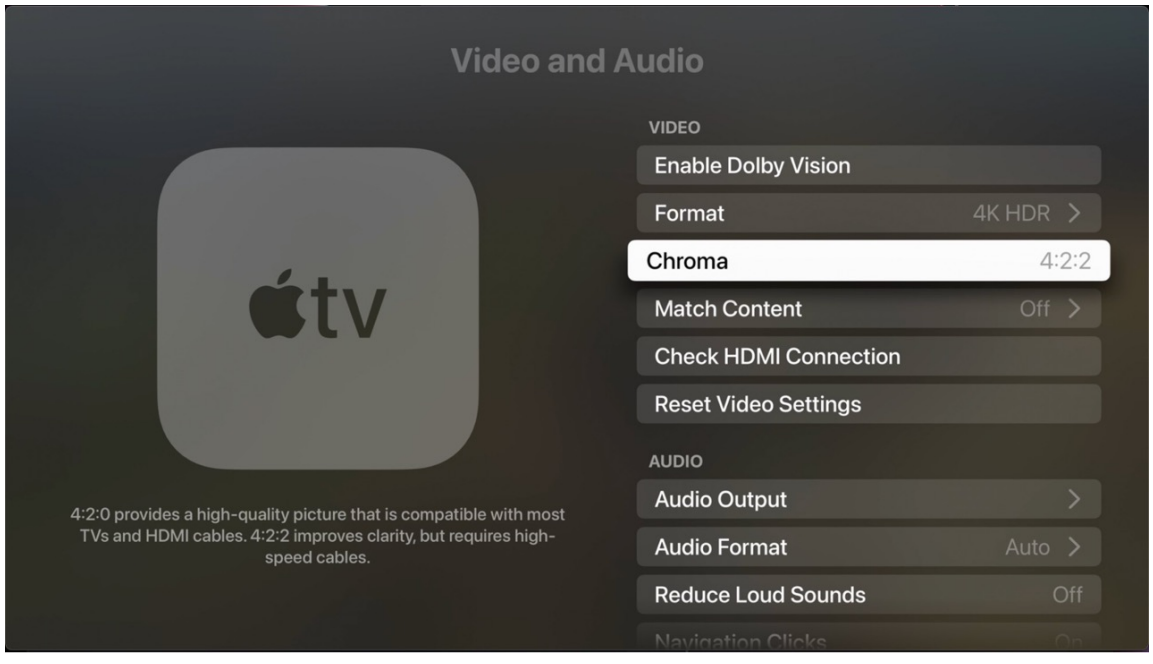


Selecting 4K Dolby Vision video format

If Dolby Vision is not available but you have a HDR-compatible TV (such as Samsung), please select an HDR format option.

	Please note that the HDR-compatible TV should immediately display an HDR or HDR10 logo if any of the [4K HDR] format options is selected on the Apple TV.

As for **Chroma** settings, for HDR10 content, it is best to set the hue subsampling to the maximum value. The choices on Apple TV are [4:2:0] or [4:2:2]. Please set to the latter.



Setting Chroma to 4:2:2

5.2.6. Other Stream Parameters

Color Conversion

Either your Apple TV is configured for SDR (Rec.709, Gamma 2.4 at 100 nits) or HDR (with HDR10 or Dolby Vision), the Streaming Player will handle the color conversion as needed.

As an example, you can send a 48 nits, Gamma 2.6 video with P3 DCI primary to the Apple TV Streaming Player, and the application will receive the signal “as is” and perform the appropriate color conversion to make the images look as good as possible on your television screen. This color conversion is based on Colorfront’s advanced *Perceptual Processing Engine* (PPE), aka the **Colorfront Engine**, which is a complex color processing model based on human visual perception to ensure a perceived match between SDR and

HDR outputs while preserving the artistic intent of the original source material.

Finally, if the incoming stream or signal is the same color as the destination (Apple TV Streaming Player), no conversion is applied. A visual indication of the incoming signal as *Input Color* and of the destination color as *GUI Color* is shown on the Streaming Player's Performance Page.

Force SDR Display Mode

In some workflows, especially when connecting Apple TV to professional SDR monitors or converting HDMI to SDI signals, it is necessary to disable automatic color space conversion and HDR tunneling. This ensures the preservation of exact Rec.709 color characteristics without unintended HDR processing.

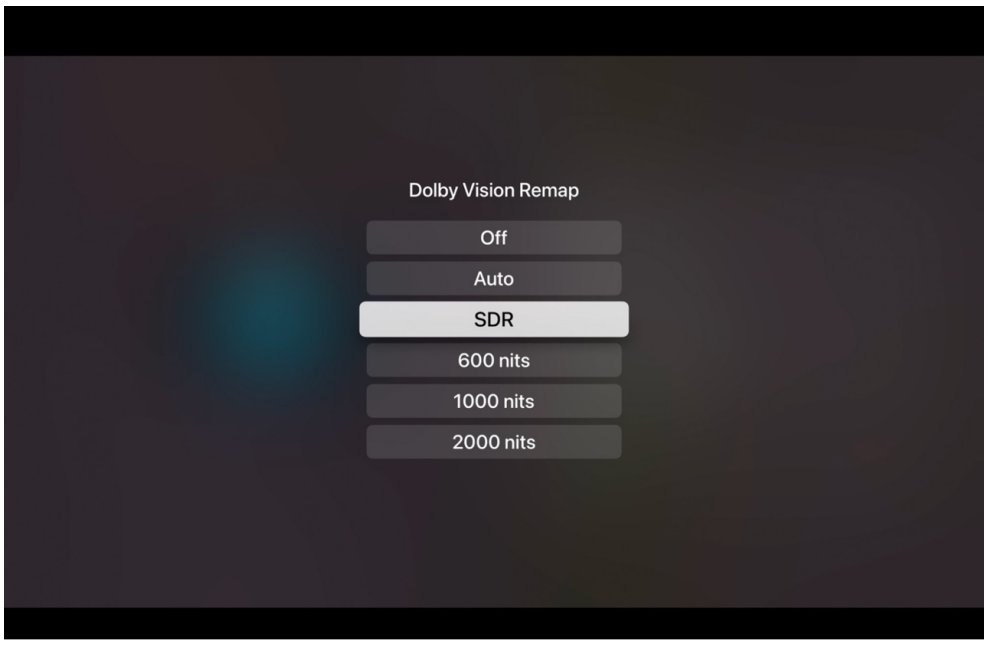
The Streaming Player app on Apple TV includes a ***Force SDR Display Mode*** setting, available in the App preferences. When enabled, this option forces the Apple TV's HDMI output to behave as a true Rec.709 SDR signal, bypassing any internal HDR signaling or color conversions. This ensures that the HDMI output matches the original stream characteristics as closely as possible (except for legal/full range adjustments if necessary), without altering gamut, gamma, white point, or dynamic range.

After enabling the *Force SDR Display Mode* setting, you must restart the Streaming Player app for the changes to take full effect.

Dolby Vision Remap

If the stream contains Dolby Vision metadata, a Dolby Vision logo will appear in the navigation bar of the GUI. In the Streaming Player App preferences, you can select **Dolby Vision Remap** and choose one of the Dolby Vision target options that you want to see, such as [Auto], [SDR], [600 nits], [1000 nits] and [2000 nits].

This setting controls the content mapping in the Streaming Player App itself. It allows previewing any target via the application, such as SDR, and not just a "fixed" remap performed on your television.



Selecting Dolby Vision target remap options

Audio Stream on Apple TV

The Apple TV Streaming Player application supports stereo only (2-channel) audio output over HDMI. However, the audio stream can be configured with up to 8 separate audio channels. The application will display all eight audio channels in the GUI and will mix them down to stereo configuration for monitoring, e.g. mixing down 5.1 (L, R, C, LFE, Ls, Rs) to stereo.

Screen Capture

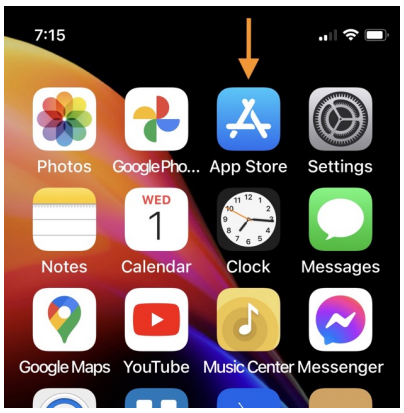
In order to protect sensitive content, all forms of screen capturing is blocked in Streaming Player, such as taking screenshots or recording screen content.

5.3. iOS Devices

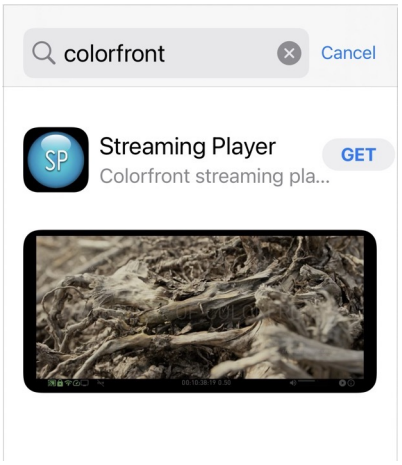
5.3.1. Installation on iPad/iPhone

To install the Streaming Player App on your iOS device, such as an iPad or iPhone, please follow these steps:

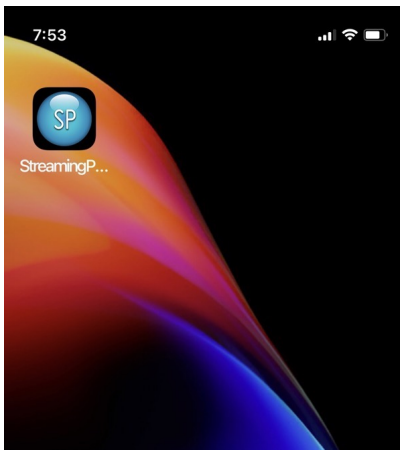
1. On your iOS device, open the App Store.



2. In the App Store app, search for ‘colorfront’ or 'streaming player'.



3. Locate the Streaming Player app and tap [Get] to download it.
4. Once the download is complete, return to the main screen and tap the Streaming Player App icon to open it.

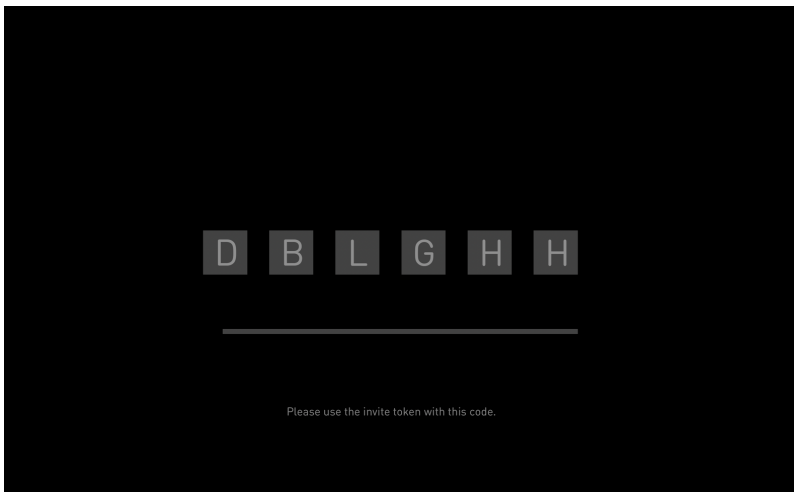


5. Before connecting to a stream using the Streaming Player App, you need to verify your identity. For detailed instructions, please refer to the Email Verification for Stream Access section.

5.3.2. Code Generation on iOS Device

To generate a code from the Streaming Player App installed on your iPhone or iPad to access the video stream, follow these steps:

1. Open the stream invitation email. In the message click the [Join with Code on Other Device] button that will take you to the Device Login Page. See more details in Connecting with Code From Device.
2. Open the Streaming Player application on your iPhone/iPad.
3. Place three fingers on the screen and hold it for a few seconds.
4. A 6-digit alphanumeric code will appear on the screen.



5. Go back to the Device Login Page and enter the code.

You may use a separate device (such as your mobile phone or computer) to read the stream invitation email and then open the Device Login Page, and another device (such as an iPad) to view the stream through Streaming Player, or use the same device for both.

6. Once the code is validated, the stream will automatically start on your iPad/iPhone.
7. Closing the application will stop streaming data on the iOS device, but as long as the streaming session is live, you can rejoin the stream by reopening the Streaming Player app.

5.3.3. Brightness Configuration

Image brightness must be set up in different ways for proper viewing depending on whether the goal is to critically review the content with an iOS device, such as an iPad Pro. In addition, brightness configuration depends not only on the dynamic range of the footage (SDR or HDR), but also on the display used for viewing it.

There are two use cases when adjusting the image brightness on iOS devices:

Reference mode — It is used for performing critical QC and making informed color decisions in a dark environment. When this mode is enabled, content colors and image brightness are accurate as seen on a calibrated, professional reference monitor. However, it is highly recommended using a device with an XDR display.

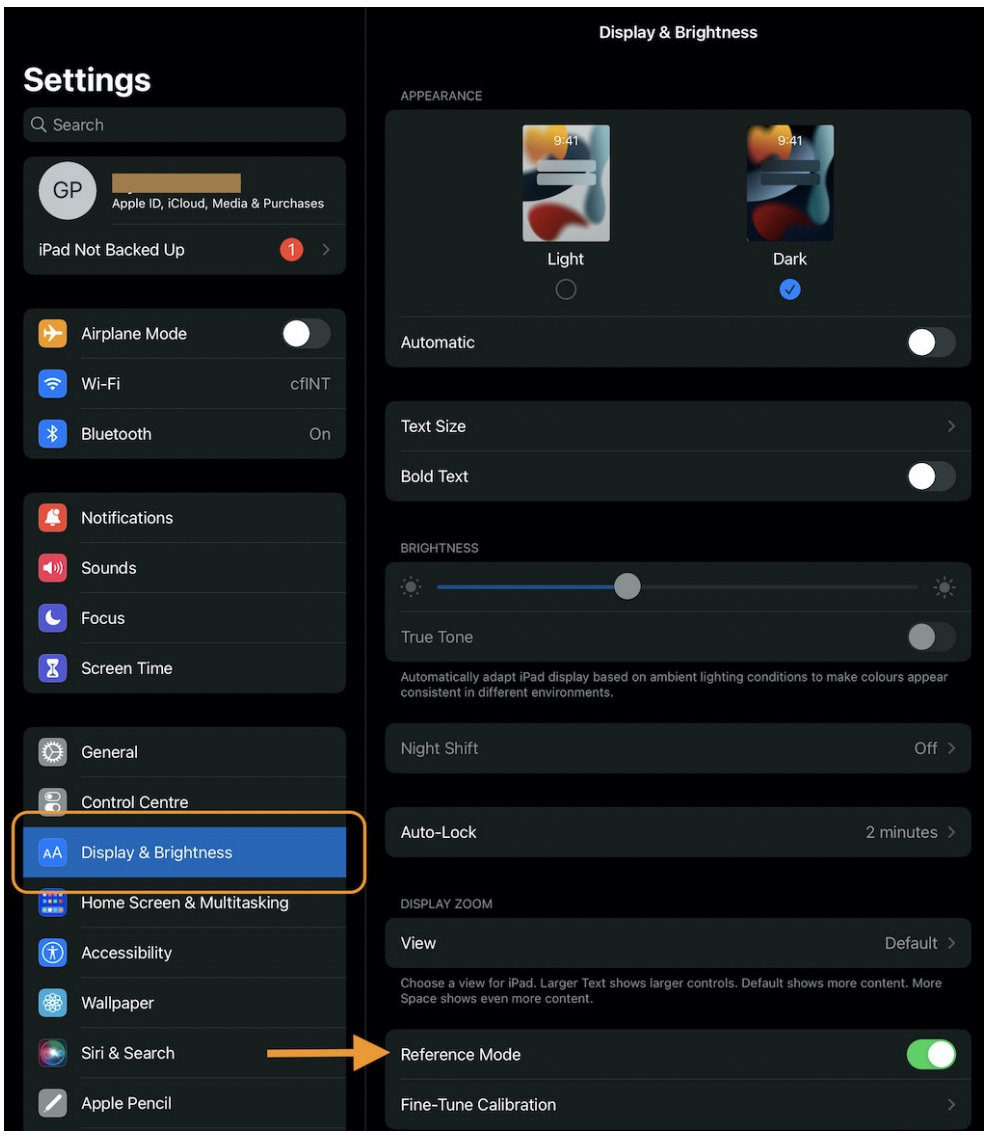
Non-reference mode	It is used to view technically correct image using the Streaming Player with factory default settings, in various lighting conditions, adapted to the viewing environment.

For devices with **advanced XDR display and iOS 16** (and above), use the ***Reference Mode*** in the iOS *Display & Brightness* settings. While the Streaming Player app also has an optional Reference Mode parameter, it will automatically follow this system setting.

	iOS-level reference mode requires 12.9-inch iPad Pro (5th generation or later) and iPadOS 16 or later.

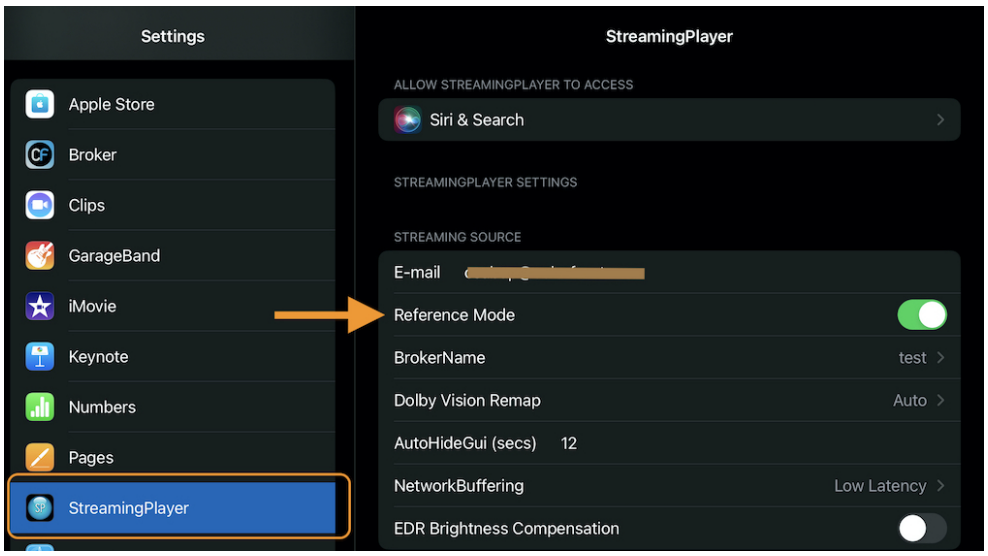
For HDR content, the Reference Mode adjusts brightness to the PQ value of the footage, while SDR images are limited to 100 nits.

	When iOS-level Reference Mode is on, the brightness slider is disabled, and true tone, auto brightness and night shift are not available.



Reference Mode in the Display & Brightness system settings

On **all other iOS devices**, enable Reference Mode in the Streaming Player app settings to see color- and brightness-accurate images as seen on a professional reference monitor.

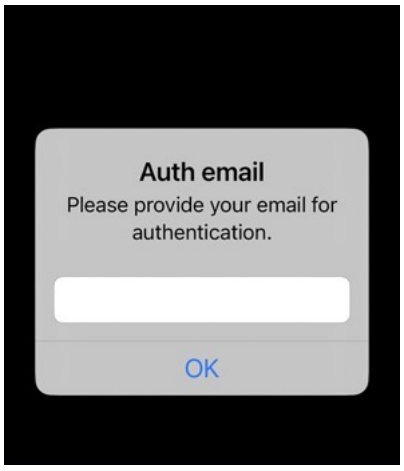


Reference Mode in the Streaming Player app settings

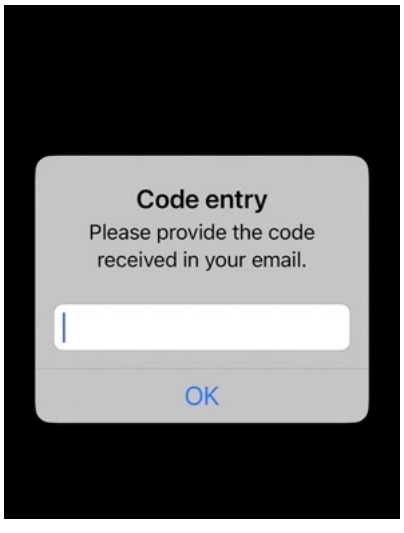
5.4. Email Verification for Stream Access

In order to ensure a secure and reliable experience for users of the Streaming Player App, a one-time email verification process is essential. This verification step is designed to confirm the user's identity and grant access to the app's streaming functionality. By validating the provided email address, we ensure that only authorized individuals can access the app's features. Please follow this steps:

1. Launch the Streaming Player App.
2. In the pop-up window, enter your email for one-time authentication and press [OK].

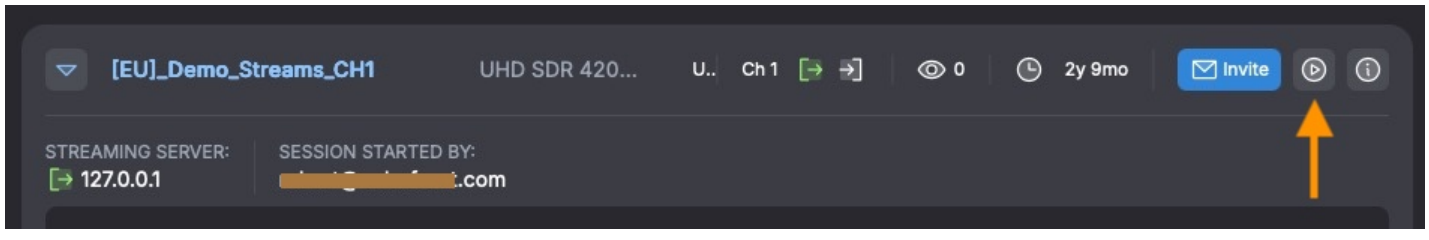


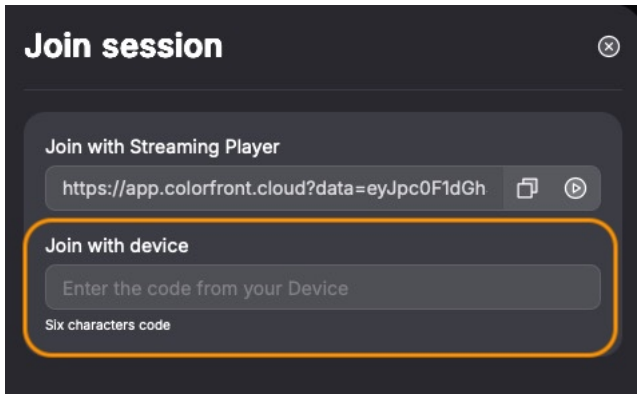
3. You will receive an email containing a verification code. Enter this code in the next pop-up window in the Streaming Player App.



4. Upon successful verification, a six-character alphanumeric access code will be displayed.

5. Enter this access code in the Stream Manager for the selected stream. On the Streams Page, click the Play button next to the streaming channel name. In the panel that opens on the left, paste the code into the *Join with device* field.



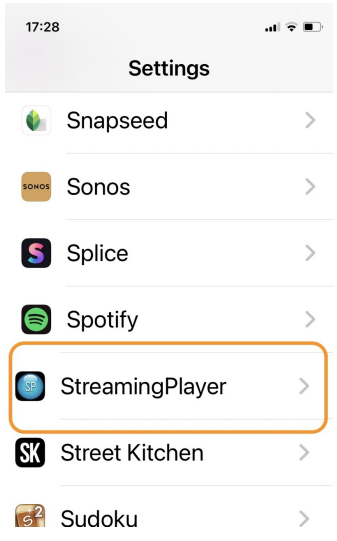


If needed, contact your TM for assistance with the Stream Manager interface, or refer to the Streaming Server manual.

6. After entering and confirming the access code, the stream starts automatically on your iOS device or Apple TV.

5.5. Application Settings

Open Settings on your Apple TV or iOS device, then the Streaming Player app settings. Here you can modify the following parameters.



Selecting StP settings on iOS device

E-mail	Email identification to communicate with Colorfront's Stream Manager.

Reference Mode	For *Apple TV*, leave this setting disabled for SDR content, i.e. at 200 nits. When enabled, the brightness value is at maximum 100 nits on the HDMI HDR output, as seen on a calibrated, professional reference monitor. For *iOS devices*, see Brightness Configuration for details.
	 Check the *GUI Color* parameter on the Performance page to see the maximum dynamic range (in nits) of the video output.
Dolby Vision Remap	For Dolby Vision High Dynamic Range streams, enable and set to any available target nit level options or SDR preview. Options are: [Off], [Auto], [SDR], [600 nits], [1000 nits] and [2000 nits].
Auto Hide GUI	Enter any value that specifies the number of seconds after which the bottom navigation bar automatically disappears from the GUI. Default is 12 seconds.
Network Buffering	Specifies how much error correction the streaming application should perform in terms of latency. Options are: [Ultra Low Latency], [Low Latency], [Balanced] (default) and [Reliable].
Disable User Interaction	Deactivate all user interaction to prevent any interference with the stream.
Version	Displays the build version of the installed Streaming Player application.

6. Hardware Configurations

6.1. Minimum Hardware Requirement

The minimum hardware requirement for the Streaming Player application is as follows:

Minimum **Windows** *hardware requirement*

CPU	i5-8400 or faster for desktop, i5-8300H or faster for mobile
Memory	16+ GB dual channel DDR4-2400 or faster
GPU	RTX4000 or faster for desktop, T1000 or faster for mobile (minimum PCIe x16 Gen3 slot)
Display	HD resolution or above

On client-side systems, 444 hardware decoding is only supported by NVIDIA **Turing** GPUs, such as T1000, T2000 and RTX4000.

Pascal GPUs are also supported, but their decoding capability is limited to 420. If you use a Pascal GPU for 444 formats, decoding will be performed on the CPU of the system, which can affect performance.

Supported **Mac** *hardware*

Memory	8+ GB

- **Intel MacBook Pros** 2019 or later with AMD GPU
- **MacBook Pro with Apple Silicon**
- **Mac mini with Apple Silicon**
- **iMac with Apple Silicon**
- **Mac Pro** 2019 or later with AMD GPU

6.2. Recommended Configurations

Recommended hardware configurations for the Streaming Player are the following:

Mac mini configuration

Workstation	Apple Mac mini. See here.
CPU	Apple Silicon
Memory	16 GB unified memory
Storage	256GB SSD

Display	SDI/HDMI monitor connected to the AJA T-Tap Pro or Black Magic Design UltraStudio 4K Mini, or a directly connected XDR display

Example Windows PC configuration

Workstation	HP Z2 Tower. See here.
CPU	Intel® Core™ i9-9900 processor. See here.
Memory	Minimum of 2x8GB. Recommended: 2x16GB
Storage	256GB SSD
GPU	NVIDIA Quadro RTX 4000, driver version 442.50
SDI/HDMI	AJA KONA 5 or Blackmagic Design DeckLink Mini Monitor 4K
Monitor	A screen resolution of at least 1920x1080 is required. A resolution of 2560 or 3840 is recommended.

Example 1RU Rack Mount Chassis Configuration

Workstation	SuperChassis 514-R407W. See here.
Motherboard	X11SPW-TF. See here.
CPU	Intel® Xeon® Silver 4210R processor. See here.
Memory	Minimum of 2x8GB. Recommended: 2x16GB
GPU	NVIDIA Quadro RTX4000, driver version 442.50
SDI	AJA KONA 5 and BMD DeckLink Mini Monitor 4K

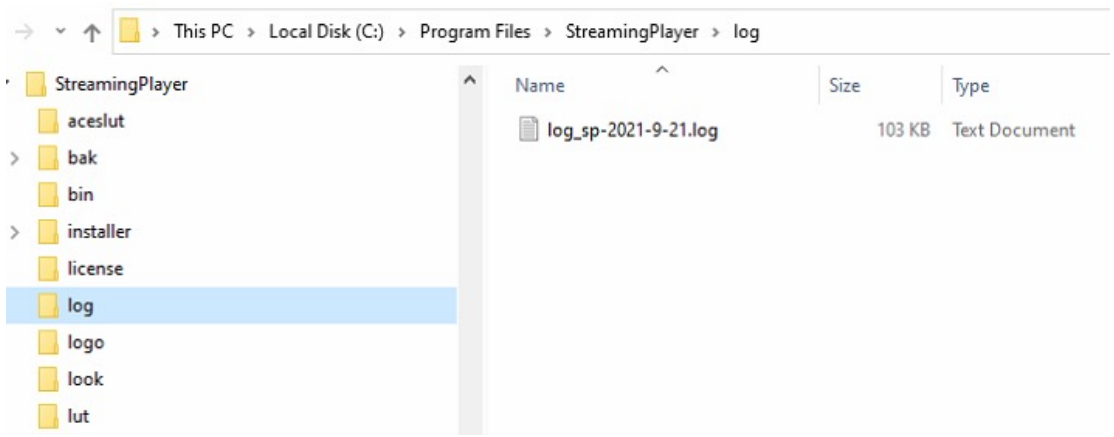
Example Laptop Configuration

Laptop	HP ZBook 15 G6 Mobile Workstation with Windows 10 Pro or Windows 11. See here.
CPU	Intel® Core™ i9-9880H vPro™ processor (2.3 GHz, up to 4.8 GHz with Turbo Boost, 16 MB cache, 8 core). See here.
Memory	32 GB (4x8 GB) DDR4 2666
GPU	NVIDIA® Quadro® T1000 (4 GB GDDR5 dedicated)
SDI	AJA Io4K+ or Blackmagic UltraStudio 4K Mini
Display	15.6" diagonal UHD B-LED UWVA Anti-Glare DreamColor slim (3840x2160) (600 nits)

7. Troubleshooting

Should any issues or questions arise, please Contact Customer Support. In order to provide you with support as efficiently as possible, please collect the following files and attach them to your support request:

- **Log file** for Streaming Player - saved immediately after the problem occurred. Log files are stored in the \Program Files\StreamingPlayer\log folder.



- **Crash dump files** - Crash dump files are saved in the \Program Files\StreamingPlayer\bin folder.
- **Any** possibly **related** non-sensitive **metadata or sample file**.

7.1. Log Viewer

The Log Viewer is available in the Streaming Player App for both AppleTV and iOS devices. It provides the capability to inspect application logs, assisting in debugging and issue resolution.

Apple TV

To activate the Log Viewer on AppleTV, follow the swipe sequence on the remote control: left, right, right, left, left.

To exit the viewer, simply use the back button.

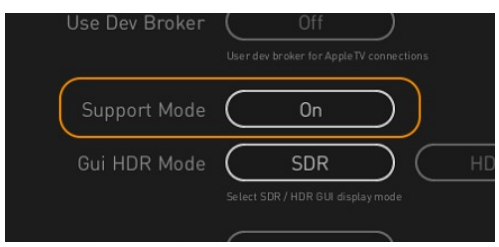
iOS Devices

On iPad and iPhone devices, the Log Viewer can be activated with the sequence: tap, double tap, double tap, tap.

To exit on iOS, you can use the dedicated exit button or swipe in any direction.

7.2. Support Mode

If you need remote assistance from our Support Team regarding the Streaming Player, please switch the software to ***Support Mode*** in the Advanced Settings.



In this mode, although the default Disabled Screen Capturing is still on, the GUI will only appear with the Settings Page on the computer screen. While streaming continues, the streamed image will still be

blocked and not appear on the GUI, or on any remote screen connected via remote desktop software, such as *TeamViewer*. This mode allows our Support Team to configure settings to resolve any issues with the Streaming Player.

7.3. Color Coding for Status Icons

By examining the status icons and their color code, you can easily determine whether the streaming is working properly or not. The color coding is as follows:

Green icons signify normal operation.

Yellow indicates borderline performance values.

Red signifies an error in the stream.

Gray represents that the corresponding element of the streaming pipeline is disabled.

Remote Control Status

Status	**Remote Control Status**
Icon	
Green	The ***Remote Control Mode*** setting from the remote machine is enabled and the streaming server's API is accessible.
Red	The above setting is enabled, but there is an error connecting to the streaming server's API.
Gray	The above setting is disabled.
Troubleshooting	There is a possible firewall issue on the streaming server's side.  The remote control API is only available when streaming straight from a Colorfront product such as Transkoder, QC Player, OSD or ExD. Remote controlling cannot be enabled if the server is a Colorfront Streaming Server or an SRT gateway/HUB.

Stream Connection Status

Status	**Stream Connection Status**
Icon	
Green	The Streaming Player is able to receive/decode the stream.
Red	The incoming, configured stream is not accessible.

Status	Stream Connection Status
Troubleshooting	Please check the configured IP address and port number settings on the Settings Page. Please check if the server is running on the correct port and is in listening mode. If all these settings are correct, there is probably a firewall or network configuration issue. Please contact your IT administrator.

Encryption Status

Status	Encryption Status
Icon	
Green	The passphrase is correct on both sides. Thus, the stream is encrypted and can be decrypted properly by the client.
Red	There is no passphrase specified on the client side, or it is incorrect.
Gray	No passphrase is set on the server side, so the stream content is not encrypted.
Troubleshooting	Please check that you entered the passphrase correctly.  If no passphrase is specified on the server side, the stream will not be encrypted. In this case, the client does not need to add a passphrase either. However, if a passphrase is specified on the server side, the stream will be encrypted, but will only work if the same passphrase is entered on the client side.

Stream Quality Status

Status	Stream Quality Status
Icon	
Green	Smooth operation. The stream arrives properly and is played back in real time.
Yellow	The stream arrives, but packet recovery is reaching its upper limit. If this state persists, operational issues may arise.
Red	Packet loss exceeds 30%.
Gray	No stream available.

Status	Stream Quality Status
Troubleshooting	Please check the values for *Packet loss rate* and *Lost/Drop/Fixed* on the Performance page. • If the packet loss rate is above 25%, the bitrate is too high for the current network connection. Please decrease the bitrate. • If the Drop value is greater than 0, there is a possible network quality and/or connection issue. Please decrease the bitrate or check your network connection.

Performance Status

Status	Performance Status
Icon	
Green	Smooth performance. The hardware is capable of decoding the arriving stream in real time.
Yellow	"Local performance" issue: Frame processing takes longer than real-time periodically. "Remote performance" issue: The server side cannot render the stream in real time.
Red	Frame processing takes longer than real-time permanently. As a result, latency is constantly increasing.
Troubleshooting	If indicates yellow "Local performance" issue: Set the ***Network Buffering*** parameter from [Ultra Low Latency] to [Low Latency], or from [Balanced] to [Reliable] in the Advanced Settings If indicates yellow "Remote performance" issue: Check what is causing the performance problem on the server side. Server hardware capacity may be insufficient. If red: The hardware is incapable of rendering the stream. You can either: • use the recommended configurations, • decrease stream resolution, and/or • switch to 4:2:0 video chroma format. To achieve optimal performance with [Ultra Low Latency], it is recommended to switch the streaming server to PCM audio. Unlike the default AAC option, which delivers compressed audio, PCM offers lossless quality. Despite the higher data rate, PCM provides superior quality and reduced latency.

Video IO Status

Status	**Video IO Status**
Icon	
Green	Video IO output is enabled and working properly.
Yellow	There has been a frame drop within one minute but not within 10 seconds.
Red	There has been a frame drop within 10 seconds. Alternatively, there is a possible conflict between the video IO settings and the stream format. In this case, more information is available on the Performance page.
Gray	Video IO output is either unavailable or turned off.
Troubleshooting	Other issues may have been culminated here. Please check if there are any other status icons that indicate an error, and if so, refer to the corresponding troubleshooting descriptions above. If red permanently, and no other icons indicate an error, please check the video IO board drivers and their configurations.

Appendix A: Settings Page

Pressing *Tab* or selecting the corresponding menu item from the drop-down menu opens the Settings Page, where you can adjust the project settings.

Hold the right mouse button to scroll up and down the page.

Press the *A* key while on the Settings Page to view Advanced Settings.

A.1. General Settings

Setting	Description	Note
Auth Email	User email for Apple TV	
Address	Destination address for the SRT gateway	
Port	Destination port number	
Encryption Passphrase	Passphrase for the encryption	10-80 characters. Empty means no encryption on outgoing stream.
Alternative Stream Selection	Defines which stream is used for playback	Options: [Auto]: Plays the primary stream by default. If performance or network issues occur, switches to the secondary stream (if available and not WebRTC). [Primary]: Always attempts to play the primary stream. [Secondary]: Always attempts to play the secondary stream (falls back to primary if secondary is unavailable).

A.2. Video Settings

Setting	Description	Note
Video Out	Specifies the interface for the video output	Options: [Off], [HDMI], [SDI]
Video Resolution	Video output resolution with [HD] as default	Options: [Auto], [HD], [2K], [UHD], [4K]
Color Space	Sets the color space on the SDI output	Options: [YCbCr 10-bit], [RGB 10-bit], [RGB 12-bit]
SDI Transport	Set the number of SDI output wires	Options: [Auto], [Single Link], [Dual Link], [Quad Link]

Setting	Description	Note
Dual Video Out	Color space for the secondary video output	Options: [Off], [SDR], [HDR]

A.3. Advanced Settings

To display the Advanced Settings, select the **View › Advanced Settings** option from the menu.

Setting	Description	Note
Stream Cache Size	Number of video frames to cache locally for zero-latency playback in the Streaming Player	A value of `0` disables caching.
Remote Control	Enables remote control	
Realtime Gateway Address	Enter the address of the Realtime Gateway	
Realtime Communication Room	Specify the communication room	Must match the value configured in the Colorfront application (e.g. TKD) that is functioning as the streaming server.
Input Stream Color Space	Set the color space of the input stream signal	Options: [Auto], [HD709], [HDR10], [P3D65PQ], [HLG], [P3DCIGamma26], [XYZGamma26], [P3D65Gamma22], [P3D65Gamma26], [Bypass]
Video Out Color Space	Set the color space of the video output signal	Options depend on the hardware device: [Auto], [HD709], [HDR10], [P3D65PQ], [HLG], [P3DCIGamma26], [XYZGamma26], [P3D65Gamma22], [P3D65Gamma26], [Dolby Vision], [SDR in BT2020 PQ], [HDR10 Auto]
Dolby Vision Remap	Enable Dolby Vision remapping on the GUI	[Off], [Auto], [SDR], [600 nits], [1000 nits], [2000 nits]
Dolby Vision Video	Enable Dolby Vision remapping on the video output	[Off], [HD709 100 nits], [P3D65 600 nits], [P3D65 1000 nits], [P3D65 2000 nits], [SDR in BT2020 PQ], [BT2020 600 nits], [BT2020 1000 nits], [BT2020 2000 nits]

Setting	Description	Note
SDI 3G Level	Controls the SDI 3G output formatting for external displays and SDI devices	Options: [Default]: automatically selects Level A for YCbCr signals and Level B for RGB signals [A]: forces output to use 3G Level A [B]: forces output to use 3G Level B
Network Buffering	Specifies how much error correction the streaming application should perform in terms of latency	Options: [Ultra Low Latency], [Low Latency], [Balanced] (default) and [Reliable]
Hyper Low Latency	Minimizes playback delay beyond *Ultra Low Latency* by reducing **Network Buffering**. Requires the same feature-enabled version on both source and player.	WARNING: Designed for high-quality, local, or dedicated networks. Avoid public networks or Wi-Fi to prevent instability or degraded performance.
Force CPU Decoder	Enable it to enforce CPU decoding for processing	
Auto Reconnect Threshold	In case the CQ (Compressed frames Queue) buffer size reaches this number, the Streaming Player will automatically reconnect to the stream	The QC buffer increases continuously when the Streaming Player's performance is insufficient for real-time decoding and processing
Auto Hide Status Bar	Add the number of seconds. The Status Bar will be hidden after this time.	0 means no hide
Gui Audio	Audio mixdown for 5.1 audio when there is only stereo audio output from the GUI. [Auto] automatically mixes down multi-channel audio to stereo. [Pass] sends audio through without any mixdown or channel remapping.	Options: [Auto], [5.1Mix], [Pass], [1-2], [3-4], [5-6], [7-8], [9-10], [11-12], [13-14], [15-16]
Mute Scope	Defines which audio outputs are affected when muting is activated	Options: [Video Out], [System Audio], [Both] (default)
Stream Manager Name	Select the Stream Manager mode for your Streaming Server	Options: [dev], [test], [prod]
Support Mode	Enable it for Support Mode	

Setting	Description	Note
GUI HDR Mode	Change from default SDR mode to HDR on GUI monitor	Options: [SDR], [HDR10]

Appendix B: Keyboard Shortcuts

Shortcuts used in Streaming Player are listed below.

B.1. Frequently Used Shortcuts

Keyboard Shortcut	Command
G	Show/Hide Navigation Bar
Tab	Settings
A (while on Settings Page)	View Advanced settings
Ctrl+P	Show/Hide Performance
Ctrl+F11	SDR view mode
Ctrl+F12	HDR view mode
Alt+Enter	Enter/Exit Full Screen
Alt+/	About

B.2. Navigation Control Shortcuts

Navigation controls are only available when streaming straight from Transkoder and not from the Colorfront Streaming Server. To activate the navigation control buttons, enable *full* remote control REST API access in your server application.

Keyboard Shortcut	Command
Space	Play/Stop
right arrow	Frame Forward
left arrow	Frame Back

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Chromium Embedded Framework

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