



THE LIVE STREAMING COOKBOOK

Everything you need to get up and running with live streaming



SECTION 1

JOIN THE LIVE STREAMING REVOLUTION



WHY LIVE STREAM?

We live in a world of screens. On the move, people are accompanied by their smartphones, tablets and laptops almost everywhere they go. In the home, they spend hours in front of their PCs, gaming consoles, streaming media devices and smart TVs. And, today, most enjoy fast broadband connections.

As a result, people are consuming more live streamed video than ever. Sports. Entertainment. Events. News. Now, anyone with an idea for a show can take it to a global stage. For video pros, the advantages of live streaming are clear – they can:

- Connect viewers to content they wouldn't usually be able to access
- Gain access to a far wider global audience for their productions
- Enhance their primary shows with valuable extra content
- Generate revenue through increased viewership, advertising and sponsorship opportunities

About this cookbook

In this cookbook, we're going to cover the common live streaming scenarios our customers face every day. From here, we'll give you sample recipes for the equipment you'll need to make the move into live streaming as well as tips for setting up your productions.

There are of course countless kit combinations suitable for live streaming. In fact, you may already own or have access to much of what you'll need. But the following kit lists should at least give you a place to start.

SECTION 2

SMALL PRODUCTIONS, BIG IDEAS

2: SMALL PRODUCTIONS, BIG IDEAS

It's best to get started with something small – so, a production aimed at a specific, targeted audience, programming produced for a specialized purpose, or from a location of a limited size. If this sounds like you, a smaller live streaming setup can be used to achieve professional results, without compromising creative flexibility.

Typical small scale scenarios

- ▶ Mobile and remote events
- ▶ Small news or chat-style production in a basic studio or virtual set
- ▶ Stage presentations or performances from smaller venues
- ▶ Amateur, local and semi-professional sports
- ▶ Small business or corporate use, such as professional workshops, seminars or webcasts
- ▶ Distance learning or training applications

SAMPLE KIT LIST

Must haves:

- Network connection and Ethernet cable
- TriCaster® Mini Go with Control Panel
- Up to 4 IP or USB cameras
- USB Microphones
 - For studio or fixed location productions - USB microphone with a shock-mount
 - For outdoor productions - handheld USB microphone
- Cabling
 - Sufficient cabling for Ethernet and USB devices as well as HDMI or display port for monitoring
- Power source and extension cord if needed
- 1920 x 1080 resolution monitor with HDMI or display port

Seriously consider:

- Tripods
 - One per camera as needed
- Green screen
 - Example choices include collapsible background or chroma cloth sheet. For a permanent fixture, consider green chroma key paint.
- Lighting kit
 - Appropriate lighting for location (e.g., ring light or similar)
- Audio mixer
 - Table top or portable audio mixer with enough inputs and outputs to accommodate your sound needs

Nice to have:

- Storage media, such as an external hard drive, for transferring video or images
- Laptop for additional live content or remote contributors via video conferencing apps and NDI®

The crew:

- TriCaster operator (mandatory; any experience level from basic switching to skilled technical director or vision mixer)
- Camera operators (optional)
- Audio operator (optional)

SECTION 3

EVERYDAY LIVE STREAMING



3: EVERYDAY LIVE STREAMING

If you're looking to get more serious about live streaming, or you're producing shows more often, then this section is for you. We're going to talk about ideal equipment and preparations for productions that are aimed at larger audiences, have frequently scheduled programming, or may be based at a location where there is more ground or action to cover.

Typical scenarios

- ▶ Regular studio use for interviews, cut-ins and drop-in guests – either for live or on-demand streaming
- ▶ Seasonal coverage of professional sports events
- ▶ Corporate communications such as product launches and quarterly meetings
- ▶ Keynotes, association conferences and large all company meetings

SAMPLE KIT LIST

Must haves:

- Network connection and Ethernet cable
- TriCaster Mini 4K and Mini or TriCaster Flex Control Panel
- Up to 8 IP cameras
- Microphones (XLR or 1/4")

Indoor production: Lavalier microphones with wireless receivers or wireless system with handheld microphones

Outdoor production: Wired handheld microphones or wired condenser lavalier microphones
- Cabling

Sufficient cabling for Ethernet devices as well as HDMI or display port for monitoring

Sufficient length Audio to support as needed
- UPS power supply with power conditioning and surge protection
- Heavy-duty extension cords as needed
- At least two displays needed. These could both be 1920 x 1080 or one could be a 4K resolution monitor with HDMI or display port.

Seriously consider:

- Tripods

One per camera as needed (indoor/outdoor use)
- Studio camera pedestal or dolly

One per camera as needed or as space allows (indoor use)
- Green screen

Example choices include collapsible background or chroma cloth sheet. For a permanent fixture, consider green chroma key paint.
- Lighting kit

Stands, fixtures, bulbs and diffusers for minimum three-point lighting (key, fill and back light) on each scene
- Audio mixer

Table top to studio-grade audio mixer with enough inputs and outputs to accommodate your sound needs

Nice to have:

- Storage media, such as an external hard drive, for transferring video or images
- Laptop for additional live content or remote contributors via video conferencing apps and NDI

The crew:

- TriCaster operator (mandatory and preferably experienced)
- Camera operators (optional to mandatory, considering the scope of your coverage)
- Audio operator (optional to mandatory, considering scope of your coverage)

SECTION 4

**HIGH VALUE,
HIGH PERFORMANCE
LIVE STREAMING**

4: HIGH VALUE, HIGH PERFORMANCE LIVE STREAMING

Today's live stream audiences increasingly expect professional broadcast-quality programming. If you're looking to deliver shows on a par with mainstream broadcasters, this section is for you. You may be a professional broadcaster yourself, a top-tier sports organization, a high-profile brand, or a venue serving massive audiences. The key factor will be your demand for top-end production values, regardless of the transmission medium. Having a top-flight production system, a lot of advance prep and a creative professional at the controls sets the stage to extend your brand further with live streaming video.

Typical scenarios

- ▶ Dedicated or simulcast news and entertainment programming for broadcast and online viewing
- ▶ Network-style coverage of professional sports teams and leagues
- ▶ Global companies and corporations looking to make online video core to their brand
- ▶ Entertainment venues seeking to further monetise their live shows

SAMPLE KIT LIST

Must haves:

- Network connection and Ethernet cable
- TriCaster 1 Pro and TriCaster Flex Dual Control Panel
- Up to 16 IP or SDI Cameras
- Microphones (XLR or 1/4")
Indoor production: Lavalier microphones with wireless receivers or wireless system with handheld microphones
Outdoor production: Wired handheld microphones or wired condenser lavalier microphones
- Cabling
Sufficient cabling for Ethernet devices as well as HDMI or display port for monitoring
Sufficient length Audio and Video cable to support as needed
- UPS power supply with power conditioning and surge protection
- Heavy-duty extension cords as needed
- Up to 4 displays as needed. These could all be 1920 x 1080 or one could be a 4K resolution monitor with HDMI or display port.

Seriously consider:

- Tripods
One per camera as needed (indoor/outdoor use)
- Studio camera pedestal or dolly
One per camera as needed or as space allows (indoor use)
- Camera crane or jib arm
- Green screen
Example choices include collapsible background or chroma cloth sheet. For a permanent fixture, consider green chroma key paint.
- Lighting kit
Stands, fixtures, bulbs and diffusers for minimum three-point lighting (key, fill and back light) on each scene
- Audio mixer
Table top to studio-grade audio mixer with enough inputs and outputs to accommodate your sound needs

Nice to have:

- Two-way communication systems for director, talent and production personnel
- Storage media, such as an external hard drive, for transferring video or images
- Laptop for additional live content or remote contributors via video conferencing apps and NDI

The crew:

- Experienced TriCaster operator (mandatory)
- Camera operators (mandatory to get the best results)
- Sound operator (mandatory to get the best results)
- Technician or gear specialist (may also be your operator)



WHY LIVE STREAM?

With high-quality video equipment more budget-friendly than ever before, and daily online video views now in the billions, the question is no longer whether you should stream live video, but how you're going to turn a great idea into amazing online programming for your audience.

This cookbook is just a taste of what you'll need to take into consideration when moving forward with live streaming.

For more insight into Vizrt live production and streaming solutions, visit vizrt.com and check out the [Which TriCaster is Right for You](#) guide. This guide will help you find the TriCaster system that best fits your needs.





VIZRT TODAY

Vizrt is the leader in real-time graphics and live production solutions for content creators.

With a 25-year history of inventing new simplified workflows for storytelling whether it is in the news, sports, broadcast, education, entertainment, live events, digital media, advertising, or anywhere else video lives, Vizrt has helped define and reshape the way video is created and shared with the world.

Learn more at www.vizrt.com.

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