

FUNKYGENE

OUTDOOR STREAMING GUIDE

Outdoor livestreams fail differently than studio streams. Plan for the environment, power, connectivity and people before you plan the fancy shots.

THE BIG IDEA

Outside, the location becomes part of your streaming system. Sun, heat, wind, weather, crowds, distance, power and changing internet conditions can all affect the broadcast. Reliability starts before the equipment leaves the case.

1. WALK THE LOCATION FIRST

- **Find the important action:** decide what the audience actually needs to see before choosing camera positions.
- **Check sun direction:** a perfect morning angle may become a backlit problem later in the day.
- **Look for power and network access:** verify them instead of assuming an outlet or Wi-Fi signal will be usable.
- **Map cable paths:** keep cables away from traffic or protect them appropriately.
- **Identify shelter:** know where computers, routers, batteries and operators can be protected from weather and direct sun.

2. BUILD A POWER PLAN

Device	Question to answer
Cameras	How long can each position run, and what is the battery/power swap plan?
Computer / switcher	What happens if venue power disappears or a cable is unplugged?
Network gear	Are modem, router, hotspot or satellite equipment powered for the entire show?
Audio / wireless	Are batteries fresh, charged and accessible during production?
Lighting	Is lighting truly necessary outdoors, and can the power system support it?

3. TREAT INTERNET AS A PRODUCTION DEPARTMENT

- Test connectivity from every location that needs to send video - not only from the start/finish or control position.
- Test again when the venue is busy. Crowds can change cellular and shared-network performance.
- Use Ethernet where practical for fixed production positions.
- For important events, have a backup path and know how you would actually switch to it.
- Do not build a stream that consumes nearly all the upload bandwidth seen during one ideal test.

4. PROTECT THE GEAR

- **Heat:** shade cameras, computers, batteries and network hardware when possible; watch devices for thermal problems.
- **Wind:** secure lightweight stands, umbrellas, modifiers, signs and microphones. Wind can become both a safety and audio problem.
- **Moisture:** have covers available before weather arrives, not after equipment is already wet.
- **Dust:** avoid unnecessary lens changes and keep connectors/cases closed when conditions are dirty.
- **Crowds:** protect tripods, cables and control areas from accidental bumps and curious hands.

5. AUDIO OUTSIDE IS ITS OWN PROBLEM

- Wind that feels mild can sound severe through a microphone. Use appropriate wind protection.
- Get microphones close to the people you actually need to hear instead of trying to capture everything from the camera position.
- Keep PA speakers and live microphones in mind when choosing positions to reduce feedback and confusing delayed sound.
- Use headphones. Outdoor ambient noise can make it hard to judge the outgoing program by ear alone.
- If natural ambience matters, capture it intentionally rather than leaving every camera microphone open.

6. CAMERA POSITIONS SHOULD HAVE A JOB

Wide / safety: Shows the overall event and gives the director a dependable shot when other cameras are moving.

Primary action: Covers the most important subject, stage, start/finish or competition area.

Detail / roaming: Adds emotion, interviews, spectators, close-ups and movement.

Remote position: Adds coverage from another location, but introduces connectivity, power and communication requirements.

Every additional camera should solve a coverage problem. Adding feeds without a reason can create more failure points and more work for the crew.

7. COMMUNICATION & CREW

- Assign who is watching the outgoing stream instead of assuming someone else is.
- Give camera operators a simple way to communicate with the control position when the production needs it.
- Make battery changes, breaks and position moves part of the plan.
- Keep a simple contact sheet or crew channel for key people.
- For long events, fatigue is a technical risk. Build realistic coverage and breaks into the workflow.

8. THE OUTDOOR PRE-FLIGHT

- Weather checked and shelter plan ready.
- Sun direction checked for the production window.
- Each camera position tested.
- Power runtime and spare batteries confirmed.
- Primary internet tested at the actual location.
- Backup connectivity identified for important streams.
- Audio tested with wind/PA/crowd conditions in mind.
- Cables protected and stands secured.
- Local recording/backup plan confirmed.
- Crew knows positions, communication method and failure plan.

WHERE EVENT ENGINEERING STARTS

Distributed cameras, long cable runs, remote feeds, Starlink/cellular redundancy, SRT contribution, battery systems, crew communications and multi-location productions need a site-specific design. The right answer changes with terrain, coverage, crowd size, distance and available infrastructure.

TAKE THE STREAM OUTSIDE WITHOUT TAKING A GAMBLE.

FUNKYGENE can plan camera positions, power, audio, connectivity, OBS, remote feeds and backup workflows around your actual event location - then test the system before the audience arrives.