



Live Event Technical Production Course: Sound, Lighting, Video and Rigging



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Introduction:

Live event technical production for sound, lighting, video and rigging is a 5-day course for production management, technical crew and venue technical roles, ending with a Technical Production Plan and Rider for a case concert or conference. Shows overrun, fail or put people at risk when riders arrive incomplete, PA coverage is guessed, power loads are unbalanced and truss loads go unchecked. Nominees already prepare, crew or host concerts and conferences, and learn through inspection walkthroughs of PA, lighting, video and rigging set-ups. CoreConcept Training Center delivers this live event technical production course.

Course Objectives:

- Analyse technical riders and venue site surveys to list sound, lighting, video, power and rigging gaps before suppliers are contracted
- Specify PA coverage, microphone choices, console patching and monitor mixes for concerts and conferences
- Plan stage lighting positions, fixture types and DMX512 control networks, and size LED walls and projection for audience viewing distance
- Approve truss and hoist load plans, hanging points and temporary power distribution with generator capacity and phase balance
- Run show control and cue calling against a production schedule covering load-in, rehearsal, show and load-out
- Assess crew, accessibility and audience safety risks and set controls inside a technical production plan

Target Audience:

- Production management staff responsible for contracting and coordinating sound, lighting, video and rigging suppliers
 - Technical crew leads responsible for setting up and operating PA, lighting and video systems on show day
 - Venue technical staff responsible for house rigging points, power supplies and in-house audiovisual systems
 - Stage management staff responsible for cue calling, rehearsals and backstage coordination
 - Event operations staff responsible for load-in schedules, contractor access and site safety
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Course Outline:

Day 1: Technical Production Workflow, Roles, Riders and Site Surveys

- Technical Production Workflow From Advance to Load-Out
- Production Department Roles and Crew Reporting Lines
- Technical Rider Analysis for Sound, Lighting and Video Requests
- Venue Site Survey of Rigging Points, Power and Access
- Technical Gap Register Against Rider and Venue Specification

Day 2: PA System Design, Microphones, Mixing and Monitoring

- PA System Coverage Design With Main, Fill and Delay Speakers
- Subwoofer Arrays and Crossover Settings for Even Low Frequency
- Microphone Selection Using Dynamic, Condenser and Cardioid Patterns
- FOH and Monitor Console Input List and Patch Sheet
- In-Ear Monitor and Wedge Mixes With Feedback Control

Day 3: Stage Lighting, LED Walls, Projection and Video Switching

- McCandless Method Key and Fill Angles for Presenters
- Profile, Fresnel, Wash and Moving Head Fixture Selection
- DMX512 Universes, RDM and sACN Lighting Control Networks
- LED Wall Pixel Pitch, Viewing Distance and Processor Setup
- Projection Throw, Screen Sizing and Video Switcher Signal Flow

Day 4: Rigging Safety, Temporary Power, Show Control and Risk

- Truss and Chain Hoist Load Plans With Safety Factors
- Hanging Point Approval, Bridles and Secondary Safety Bonds
- Temporary Power Distribution, Generator Sizing and Phase Balancing
- Show Control Cue Stack, Calling Script and Comms Plan
- Crew Risk Assessment, Accessibility Provisions and Audience Safety Checks

Day 5: Inspection Walkthrough and the Technical Production Plan and Rider

- Case Concert and Conference Brief With Venue Drawings
 - Inspection Walkthrough of PA, Lighting and Rigging Plots
 - Production Schedule With Load-In, Rehearsal and Load-Out Calls
 - Power and Rigging Sign-Off Checklist for the Case Venue
 - Technical Production Plan and Rider Completion and Review
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Skills You Will Gain:

- Technical Rider Analysis
- PA Coverage Planning
- Console Patch Management
- Lighting Control Networking
- LED Wall Specification
- Rigging Load Review
- Temporary Power Planning
- Show Cue Calling

Why Attend This Course:

- Hand a Technical Production Plan and Rider for a case concert or conference to the production director and the venue technical manager
- Decide which supplier quotes, fixtures, PA systems and power capacities a show actually requires from rider and survey evidence
- Avoid show stops, overloaded hanging points and tripped generators that delay doors and endanger crews and audiences
- Share patch sheets, cue scripts, rigging checklists and load-out schedules with technical crews and venue colleagues

Conclusion:

Back at work, the participant gives the Technical Production Plan and Rider to the production director, the venue technical manager and the contracted sound, lighting, video and rigging suppliers. They use it to agree equipment lists, hanging points, power capacity, crew calls and cue responsibilities before load-in begins. After the first show delivered with the plan, the team should review rider changes, load-in and load-out times, power and rigging sign-offs, cue errors and any incidents, then update the templates and supplier briefs for the next concert or conference.

Frequently Asked Questions FAQ:

What should participants know before the live event technical production course?

Participants should already prepare, crew or host concerts, conferences or similar live events and read basic stage plans. Bringing a recent rider, venue drawing or production schedule from their own work helps them apply the walkthroughs and the final plan.

How does live event technical production differ from an event design or event technology course?

It covers the technical departments behind the stage: PA, microphones, lighting control, LED walls, video switching, rigging, temporary power and cue calling. Event design courses centre on themes and décor, and event technology courses on registration, apps and attendee data.

Why do live event technical production teams rely on technical riders and site surveys?

A technical rider states what performers or speakers need, and a site survey shows what the venue can supply. Comparing the two early exposes missing power, rigging capacity or equipment before contracts are signed and crews arrive.

What do participants take back from the live event technical production course?

Participants take back a Technical Production Plan and Rider for a case concert or conference, with a PA and lighting plot, patch sheet, rigging and power checklist, cue script, production schedule and risk assessment.
