

P D F I I // T E C H N I C A L O V E R V I E W

Production Pipeline.

Workflow, software platforms, content formats, and façade-mapping methodology for
the BLINK 2026 commission.

S T R A N G E L O O P S T U D I O S // C I N C I N N A T I , O C T O B E R 2 0 2 6

The Building Is Treated as the Instrument, Not the Canvas.

Every phase of our pipeline begins from one fixed input: the actual geometry of Cincinnati Music Hall's façade. We do not design imagery and stretch it onto a building. We model the building first, light its surfaces in 3D, and let the imagery emerge from what the architecture itself can hold.

PRINCIPLE 01

Geometry First.

A reference plate of the façade, sourced in pre-production from publicly available references and on-site survey, is the project's source of truth. Every render and every composite is keyed to that plate.

PRINCIPLE 02

Hybrid Rendering.

Notch and Unreal are used in parallel: Notch for parametric, audio-reactive look-dev; Unreal for cinematic 3D and architectural matte work. Outputs converge in compositing.

PRINCIPLE 03

Score-Locked Timing.

The piece is cut to the CSO recording of Copland's *Fanfare* from day one. Every transition, every swell, every held beat is scored before any final render is committed.

Four Platforms, One Pipeline.

01 // REAL-TIME LOOK DEV

Notch

PARAMETRIC, AUDIO-REACTIVE SCENES

Generative content, particle systems, audio-driven look-dev. Notch carries the live, breathing quality of the piece. Outputs are pre-rendered to disk for the final delivery, captured at 4K at native frame rate.

02 // CINEMATIC 3D

Unreal Engine

ARCHITECTURAL SCENES + MATTE WORK

For the prairie horizon, the steel construction climb, and the tunnel-perspective inversion. Lumen-rendered architectural matte paintings, Niagara particle systems for sparks and pixel-streams. Movie Render Queue export at 4K, EXR sequence.

03 // SUPPLEMENTAL RENDER

TouchDesigner

REAL-TIME RENDER LAYERS, WHERE USEFUL

Used selectively as a supplemental real-time render layer alongside Notch when a scene calls for it. Outputs feed back into the compositing pipeline as additional plates. Mapping itself is handled on site, working with whatever playout servers and projector array the festival supplies.

04 // COMPOSITING + FINISH

Adobe Suite

AFTER EFFECTS, PREMIERE, COLOR

After Effects compositing, layer integration of Notch and Unreal passes, beauty work, light-spill control, and final color and grade against Rec.709 / sRGB reference. Premiere for assembly, timeline, and master output.

Concept → Render → Composite → Map.



Specs Match the Festival Playout Requirements.

MASTER FORMAT

ProRes 422 HQ

10-bit, full quality, archive-grade master file delivered to the festival ahead of installation

REVIEW FORMAT

H.264, 25 Mbps

For online previews, internal QC, and stakeholder review.

SOURCE RESOLUTION

4K minimum (3840 × 2160), final native resolution matched to the playout specification supplied by the festival

FRAME RATE

30 fps

Confirmed in pre-production with the festival production team. Adjustable to 25 / 60 fps if required.

COLOR SPACE

Rec.709 / sRGB display reference, 10-bit color, gamma 2.4

AUDIO

Aligned to CSO recording of Copland's *Fanfare for the Common Man*; visuals scored to provided audio reference; no audio shipped in master video

FAÇADE PLATE

Reference plate of Cincinnati Music Hall

Sourced in pre-production from publicly available references and on-site survey. Used as the source-of-truth for every render and composite. On-site, we work with the supplied playout servers and projector array to make sure the mapping carries onto the actual façade.

MAPPOINT LENGTH - SITE COMMISSIONING

3:00 to 5:00, scored to *Fanfare for the Common Man*; seamless loop point at the close of the final chord

From Plate to Projection, On Site With the Festival Crew.

STEP 01

Façade Plate

A reference plate of the Music Hall façade, sourced in pre-production from publicly available references and on-site survey, becomes the source of truth for every render. The plate is shared across Notch, Unreal, and the compositing pass so that what we light in 3D is exactly what the building can carry.

STEP 02

Render Against the Façade

All Notch and Unreal scenes are framed, lit, and graded against the façade plate in their respective DCCs. No content is designed without the building in frame. Light spill is kept inside the building's silhouette as a strict rule of the production.

STEP 03

Composite to Master

Render passes are integrated in After Effects, with final color and grade against Rec.709 reference. Master file is rendered as ProRes 422 HQ at the resolution required by the supplied playout system. Loop-point match at the close of the final chord.

STEP 04

Delivery + On-Site Mapping

Master ProRes file is delivered ahead of installation. Mapping, UV correction, edge blending, and projector calibration are handled on site, working with the supplied playout servers and projector array. We are on site through commissioning to make sure the mapping carries cleanly onto the actual façade.

STEP 05

On-Site Commissioning + QC

Two- to three-night commissioning window on site with the festival projection crew. Test patterns, fine alignment, brightness and color balance per projector, full-show QC pass under live festival conditions. Final lock and handoff to nightly playout for

PRODUCTION READINESS

Built for the Façade. On Site for the Festival.

Strangeloop Studios has produced large-format projection and architectural visuals for major touring artists and venues, including David Gilmour at the Hollywood Bowl. Every stage of this pipeline is one we have run before.

Strangeloop Studios

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