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## E11EVEN Miami

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# taking it to E11EVEN

A top Miami club gets an infusion of new technology

By: Richard Cadena  
All photos: Adi Adinayev

Is it a dessert topping or is it a floor wax? Trying to describe ultraclub E11EVEN Miami is kind of like trying to describe New Shimmer, the dessert topping and floor wax (*SNL*, season one, episode nine). E11even Miami has been called an “energetic, neon-lit night spot with trapeze dancers, burlesque shows, DJs, and live music performances.” It’s situated in the heart of Miami’s downtown club district, and, in normal times, it’s open 24 hours a day, seven days a week. (Currently, it is operating at 50% of capacity and hours are limited.) It’s as well-known for its rooftop restaurant, which has a full menu, as it is for hosting live performances by the likes of Usher, Drake, and Nicki Minaj. But it’s also known for guest appearances by famous DJs like The Chainsmokers, DIPLO, Steve Aoki, and Skrillex, as well as for the topless dancers, aerialists, contortionists, and cirque acts.

## The seeds of the Halo

According to one reviewer, the place is “always crowded.” At least some of the reason for that can be attributed to its “neon-lit” dance floor and the state-of-the-art sound system. The former is really a beautifully designed moving light rig with over 100 fixtures complemented by a number of 2.8mm pixel pitch video displays around the perimeter of the dance floor and hydraulic stage, and it’s all woven together by an eye-catching radial LED center piece. Both systems are designed, installed, programmed, and maintained by ideoign, a Miami-based firm founded and led by Michael Meacham.

The main feature, not only of the lighting system, but also of the club, is the ceiling lighting sculpture, dubbed “the Halo.” It’s comprises 360 one-meter RGB LED digital iStrips with 13mm pixel pitch, and its radial design naturally leads the eye to the center of the room. Its design originated back in 2013 when the ultraclub first opened, and it

was a captivating centerpiece from the start. It also had an unlikely influence.

“Myself; the architect Tom Telesco, from Telesco and Associates; and the [club] owner, Dennis DeGori, were in conceptual design meetings,” Meacham says, “and, one day, Dennis said, ‘I’d like to do something in-the-round.’ I said, ‘Give me 24 hours. I think I have something that’s going to work’.”

What Meacham had in mind was inspired by the 2010 Super Bowl halftime show, during which The Who performed in the center of Sun Life Stadium in Miami. A radial strip light design covered the entire field, and the pixel-mapped content swept the eye to the stage in the center of it all. Meacham pointed to it as “the seed of the design that made everything happen,” and that’s how the Halo, which he describes as “hella bright,” was born.

## The revamp

When it was time to update the club in 2020, everything except the Halo was completely revamped. One of the more striking features of the club, besides the Halo, is the 25’ ceiling height. It not only provides a lot of space for aerial acrobatics and the necessary rigging, but it also makes for some strikingly long beam throws. So, when it came time to choose the fixtures for the redesign, it only made sense to employ some bright moving lights with sharp beams.

The goal was to tie in all of these elements and to avoid just making it “about moving lights and flashy LEDs.” The instruments of choice chosen by Meacham are from the line of Adam Hall/Cameo LED color mixing fixtures.

“The first time I saw Cameo, a couple of years ago at LDI, I was so impressed with the quality of light and the economics,” he says. “I was impressed with the light output of the [Cameo Opus S5], which is the main workhorse fixture.”



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But before he would spec the “new-to-him” fixtures, he did his due diligence and traveled to visit the manufacturer, Adam Hall.

“I wanted to go see how it’s put together, what they’re assembling, and the team that’s doing it. So, we flew to Germany and met with their team.”

### Lighting gear

The club now has 36 Cameo Opus S5 moving yoke spot fixtures, 32 Cameo Movo Beam 100 moving head beam fixtures with unlimited pan and tilt and an LED ring, and one Cameo EVOS W7 moving head, with 19 individually controllable 40W RGBW LEDs, in the dead center of the Halo. Given the high ceiling and the long throw, when these lights are on in full white, they create their own attraction.

“I wanted something feature-rich with animation wheels and color mixing,” Meacham says. “I kind of wanted it all.”

Color mixing and the ability to match colors between

different design elements, like the fixtures, the Halo, and the video walls, were top priorities

“We did spend a decent amount of time getting everything dialed in to match colors as best as we could so you could do all that really cool, intricate color programming and mixing,” he says. “We even do something interesting where we use an Avolites AI media server to turn each of the spokes into an RGB fixture. Instead of displaying video, which it does, we also treat them like we would any other RGB LED fixtures. We do cool chases that keep up with the moving lights and really interesting programming.”

While the vertical beams of the fixtures define the ceiling height, the spokes of the Halo and the laser beams from the four 6W RGB lasers from LaserNet define the width of the dance floor. The rig is sweetened with 16 SGM X5 white LED strobes, 28 Elation Professional Dartz 360 beam fixtures, and four Chauvet Professional Rogue 2 LED wash lights. The haze is provided by two Cameo 1400 hazers.

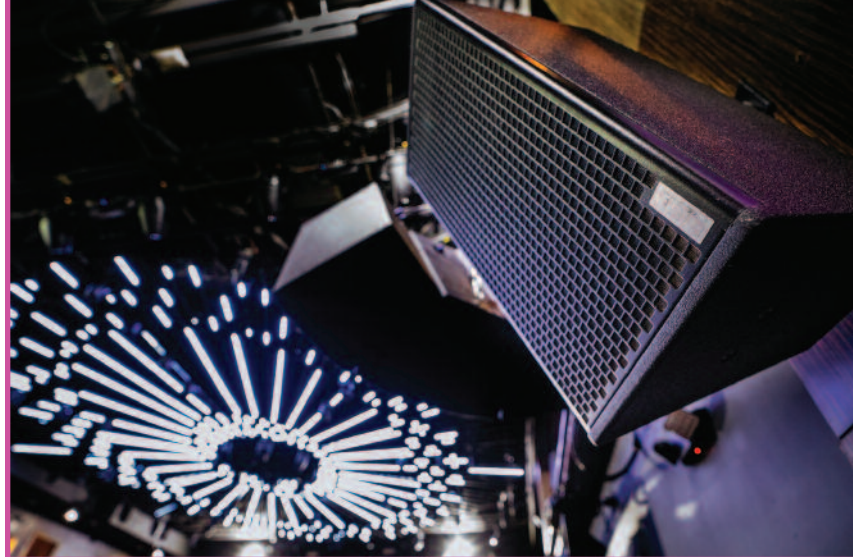


### Truss-free

One design element that is conspicuously absent is truss. “I wanted something very clean and utilitarian,” Meacham explains. “So, I’m just using schedule 40 pipe. I also wanted a very open space because, remember, we also have performers that come from the ceiling, so I didn’t want anything cluttering it up.”

### Programming with time code

The lighting is controlled by an MA grandma2 light with a



The audio system was designed by John Fiorito, including custom speaker cabinets that were built by DAS Audio. They resulted in a new line for DAS called E11even Sound.

Fader Wing while the video is driven by an Avolites AI media server. Depending on what’s going on, the lighting and video are synchronized using SMPTE time code and ShowControl software.

Some of the visuals were shot with live performers on a green screen. The idesign crew, under the direction of Meacham, went into a studio and captured the acrobatic performers on video, then added background visuals in post-production to create stories. Those clips can then be seamlessly integrated with the live performance using time code while they are played on the video displays.

Meacham programmed the console to play along with the videos using a visualizer from Synchronorm called Depence2. You can be forgiven if you’re in entertainment lighting and you’ve never heard of it: It’s a rendering engine made specifically for multimedia shows, including water fountains, lighting, lasers, video, and special effects.

“I got involved with [Synchronorm] because their soft-

ware does real-world water fluid dynamics for pre-viz,” he says, “and I’m also a fountain programmer. It’s insane how realistic it is for both water and pre-viz. I’ve never seen anything like it.”

It’s also an idesign crew that runs the lighting. Because the club is open 24 hours a day, they work 12-hour shifts.

“Our guys are great. You have to be if you’re there for a 12-hour lighting shift,” Meacham says. “These guys know so much more than I do, even though I programmed it.”

### Custom audio gear

The audio system was designed by John Fiorito, including custom speaker cabinets that were built by DAS Audio. The custom speakers resulted in a new line for DAS called E11even Sound.



At the time, Fiorito worked for Sound Investment Audio, the exclusive importer and distributor for Funktion-One. Fiorito says Funktion-One has very good dance club products, but the club owner, DeGori, challenged him to make them even better. Fiorito believed it was possible to develop a “better dance club product that’s also more affordable.” He started “with the one thing that the [existing line] was lacking,” which was a triple 15" midrange cabinet.

Each corner of the dance floor has a flown midrange bass cabinet, and when Fiorito met with DAS Audio engineers, he said, “We need to add another 15 in every corner to give a larger midrange presence. That’s that feeling of you getting punched in the face on a dance floor. It’s that impact that nothing delivers between the frequencies of above 80Hz to 200Hz, in that range where the sub-bass

leads off.” Next, they added a 12" mid, which, he says, is a much more coherent sounding speaker versus a 10", and bullet tweeters for the super-high frequencies.

“The top speaker at E11even is a true four-way box,” Fiorito says. “You’re not missing any audible frequencies in that box, and you’re not trying to force horns to reproduce frequencies they’re struggling to reproduce.”

## Clarity and power

Fiorito says the loudspeakers can handle a lot more power; also, they deliver a lot more sound pressure: “You can play it at a lower volume and cover the room better.”

At the low end, he helped DAS Audio develop a dual 21" clamshell that, he says, is “just devastating. It spreads out so much better than any other box that I’ve ever heard or worked with.”

Lastly, he added a Powersoft motor-driven 30" sub that covers from 40Hz to 60Hz.

“The whole idea is that you can stand in that party pit anywhere and it’s a sweet spot everywhere,” he says. “We can sit here and have a conversation like we’re doing right now, and our ears are not ringing. You’re just hearing the rich, clear highs and clarity of the system.”

## Amplification and processing

All of the amplifiers, except for the deep sub, are from MC2 Audio. “We use a class D amplifier on all subs and mids,” Fiorito says, “and anything from mid-high to high frequencies is a class AB bipolar amplifier because you get a much crisper, cleaner sound.”

The signal processing is manufactured by UK-based NST Audio. “We had them OEM a custom processor with all the presets and factory tuning recommendations for all E11even sound products,” Fiorito says.

He says the system is generally tuned for hip-hop because “hip-hop is always the hardest to sound good.”

“We designed this system for hip-hop so that we could not just do DJs, we could do live acts,” Fiorito says. “It functions quite well for track acts, and we simply adjust the settings based on the artist. We’ve had tons of headliners—Marshmallow, Markus Schulz—and they absolutely loved the system.”

The timing of the lighting and audio upgrade might not have been the best, but the club is still thriving, albeit with a 50% reduced capacity.

## “Incredible people”

“We finished it literally the day that the club got shut down,” Meacham says. “It was brutal.” Yet, he still maintains that it was and continues to be a fun project.

“They’re incredible people too,” he says. “They’re always about, ‘How far can we push this? How deep can we go creatively?’ And they’ve assembled a fantastic team to make this all happen.” 🎧

## Personnel

Lead audio technician: John Fiorito  
Lighting/visuals, design, and programming: Michael Meacham  
Creator, E11even owner: Dennis DeGori  
Architect: Tom Telesco and Associates  
General Contractor: Telesco Construction  
idesign installation team  
Project manager: Holmes Ives  
Light operators: Ben Sahagun, Len Rowe  
Lighting and video maintenance by idesign

## Gear

### Lighting

(36) Cameo Opus S5  
(32) Cameo Movo Beam 100  
(1) Cameo EVOS W7  
(2) Cameo 1400 hazers  
(16) SGM X5 LED white strobes  
(28) Elation Dartz 360  
(360) 1m RGB LED digital iStrips  
(4) Chauvet Rogue 2 Wash LEDs  
(4) 6W RGB lasers

### Video

Main room + DJ Booth: (122) 2mm 4K LED video cabinets;  
28'W x 10'H screen  
Day room: (82) 3mm HD LED video cabinets; 21'W x 10'H screen  
Front entrance: (39) 6mm HD LED video cabinets; 4'W x 12'H screen

### Control

(2) Avolites Ai Infinity RX8 media servers  
MA Lighting grandMA2 Light  
MA Lighting grandMA2 fader wing  
MA Lighting grandMA2 NPU





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