



Finale Ultimo

Mötley Crüe bids farewell to live touring with a pentagram of lights, columns of flame, and the last word in drum gags

By: Sharon Stancavage

Mötley Crüe is known for its extravagant touring productions, featuring everything from pyro to half-clad dancers to Tommy Lee's drum antics. The results are always memorable. For this year's *The Final Tour*, creating memories for the fans was critical, so they turned to a fan favorite: a Tommy Lee drum gag. And it had to be special: "This is their last tour, so it had to trump anything they've done in the past, as well as anything else anyone could ever do. And it had to solidify that Tommy Lee was the king of drum gags," notes Eric Pearce, owner of SGPS ShowRig, and the man who, over the years, has engineered each edition of this particular gag for Tommy Lee.

The drum gag to end them all was envisioned by production designers Sooner Routhier and Robert Long, of SRae Productions. "Tommy has wanted to do a roller-coaster for a very, very, very long time, so it was kind of a no-brainer," says Routhier. "No matter how many different ideas we put at him, he said, 'No, I want to do this one.' So that was it."

The Crüecify, as it is known, takes Tommy Lee on a journey into a wild, curving, upside-down trip over the audience. "Tommy has an incredibly strong stomach and is used to all these gags," says Pearce. "We have always twisted him around. It takes a lot more effort than you would realize when you see him perform. He makes it look very simple, but it's actually very strenuous, since he's playing against gravity."

The structure of the Crüecify is massive. "The 219 linear feet of track curves in both directions—both convex and concave—of course, it's a double track," Pearce says. "It was a lot of custom HUD truss and sprocket work to build the system."

The nexus of the design is the new 24"-high SGPS KB Effects track truss. "The real engineering challenge on this was the fact that the track first curves in one direction and

then in the opposite," Pearce says. "It's those transitional moments that were the challenge. The other biggest problem with the design was figuring out how to deal with the power feed cable going up and down the curvatures."

Many of the mathematical problems were solved by Pearce's staff of five engineers. He adds that the cabling issue was addressed with a product in the SGPS inventory: "The solution was to adopt the Buz Bar system, where power rails are installed inside the truss."

The drum riser moves via a system of sprockets and trolleys, as Pearce explains: "There is a continuously machined aluminum sprocket on each side of each track—a toothed sprocket—that runs the whole length of track, and there are four trolleys—two at the front and two at the back—that simultaneously engage a special sprocket into that track. That's what pulls it along and gives it absolute positional control all the time, so there's no slipping when Tommy is almost vertical."

The Crüecify riser and Lee rotate 360°. "It's capable of spinning incredibly fast. In fact, we run it at about one-tenth of its capability," Pearce says. This was another complex problem solved by math, he notes: "A lot of design time was spent trying to figure out how to build that rotational capability into as small a physical space as possible, [making it] as light as possible to fit into the window of packaging and handling issues that were involved. So it was just a matter of working through the math of what you require at the end in order to figure out what the ratio on the gear boxes needed to be, and what size motor capacity we needed to drive them."

Keeping Lee's drum kit in place on the riser was another concern. Pearce notes, "We ended up with a lot of direct welding brackets. We didn't want any nuts and bolts that might vibrate loose in the trucks, so, wherever we could, we directly welded the attachments to the bar grating." Control of the unit is via a TAIT Navigator motion

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control system.

Transportation of the Crüecifly riser is staggeringly simple, notes Pearce: “In order to make it quick to assemble every day, you simply lower the piece down, disconnect the drum kit tray that runs between the two tracks, and then a section of the track, with all this trolley mechanism on it, drops straight into a cart, which rolls into the truck.” However, he adds, assembling the Crüecifly is complex: “It would have been a lot easier to build something and put it in a fairground than do something that can come apart in two hours, get put together in three, and operate every day.”

Lighting is also integrated into the gag. Routhier explains, “The Crüecifly track is lined in [Elation Professional] Flex pixel tape and [Martin Professional] MAC 101s.” The Flex pixel tape is thin, can be cut to size, and is flexible.

Illuminating the Crüecifly wasn’t the only task facing the lighting crew. “Tommy Lee has this new thing called Bright Beats, which is basically an LED drum kit,” says lighting director/programmer Matt Mills. “Whenever he hits the head of the drum, it lights up. I can control the color and I have the option to turn it on as if it were a lighting instrument.”

For the Crüecifly, the drum kit had to be wireless, adds Mills: “There is no power whatsoever on that riser, so we figured out the amperage and how much power we needed, and we are running that entire thing wirelessly—the power is from a rackmount UPS [battery backup] that

anybody can buy—we bought it at Walmart for something like \$99. We were able to get 22 minutes out of it with all the LEDs at full and all we need is nine-and-a-half minutes.”

For the most part, the Crüecifly is only used in arenas, because of rigging issues. In certain amphitheatres, a B version of the unit can be used—once again, this is determined by the weight capacity of the ceilings and is decided on a day-by-day basis. Routhier says, “I love that Tommy still enjoys pushing the limits and making sure that he does something crazy and different to entertain the fans.”

The Crüecifly is the metaphorical cherry on the cake of the Mötley Crüe production. Routhier notes, “The biggest thing that you have to remember when designing or drawing a Mötley Crüe show is that it can’t be clean—it has to be messy and has to look like a junk yard.”

For this tour, the band came to Routhier and Long with a picture consisting of several old PA cabinets. “We expanded on that—there were many different versions,” Routhier says. “We did about seven or eight full complete redesigns of the show and then narrowed it down through smaller edits.”

The final design was centered on upstage scaffolding provided by SGPS. “We have a chrome scaffold cube look,” Routhier says. “It’s a modular system made of shiny aluminum frames, they all have decks—there’s a series of

The core of the truss design is a pentagram, which recalls the band's album, *Shout at the Devil*.



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The upstage scaffold is also where one can find 85 faux speaker cabinets, fabricated by Wide Angle Group. “For the scaffolding, we also cut down some perforated metal to do a little bit of a scenic treatment to it,” says Routhier. “That way, light can catch the perforated metal whenever it swings by. There are also two Plexi shadow boxes for the sexy dancers to stand behind.” The upstage area also includes some poles for the dancers and a variety of ramps.

The finale is performed at the front of house on a double telescoping platform from SGPS that raises the band 18’ over the audience. “The band wanted to be with the fans at the back of the house during the show, and it seemed appropriate to do it for the last song, ‘Home Sweet Home,’” Routhier comments.

Lighting

The custom fabrication from SPGS also touches the lighting rig. “We custom-built the triangulated lighting pods that form the halo over the stage,” Pearce says. “The initial design for them took up almost a truck of space alone. So we kept scaling them down, and making them thinner and smaller until we were able to get them into 15’ of truck space.” The lighting pods—filled with Martin Mac 101s—form a pentagram.

The outside circle of the pentagram is lined by Ayrton MagicPanel 602 units. “The MagicPanels are the biggest part of the show, and they give us a really cool look,” Routhier comments. Programmer (and former lighting director) Mike Cooper adds, “This light is super-bright, versatile, and is a tank. They can take a beating on the road and still keep pounding show after show.”

Personally, Mills is a fan of the Martin Viper AirFX, of which there are 38 in the show. “I’d say the Vipers are definitely the workhorse,” he says. “It’s a great new fixture that we use mainly for aerial effects; they also have a great gobo palette.”

The lighting rig, provided by Christie Lites’ Las Vegas office, also contains 16 Martin Professional Mac 2000 XB Washes, five Martin Mac III Profiles, 16 Mac Auras, 52 ETC Source Four PARs, eight Clay Paky Sharpys, and 40 Martin Atomic strobes. There’s also plenty of atmosphere, via four Martin Jem ZR44 foggers, four Ultratec FX Radiance hazers, and two Reel EFX DF-50 hazers.

The rig also contains some custom fixtures. Mills tells the story: “Either Tommy or [bassist] Nikki Sixx was inter-



Tommy Lee upside down on the B version of the Crüecify gag.

ested in having a red flashing radio antenna light, so we have what we call jelly jar lights. Each one is literally a mason jar with a red gel wrapped around it, sitting on top of the end cap of a Source Four Leko for a light source. They stay on for the whole show; they give the guys enough of a glow on stage that whenever I do go to black, they’re not lost.”

Programming for the production was handled by Routhier, Mills, and Cooper, who was unavailable for the lighting director duties on this run. Mills explains, “We were discussing the work we did on the Vegas residency [at The Joint, in the Hard Rock Hotel, in 2013] and we thought it would be cool if we were able to use that show file and build off of it, because we have a lot of the same fixtures. I agreed. If you have a foundation put down, use it.”

Cooper and Mills worked on cloning the rig on an MA Lighting grandMA2 programming wing at Mills’ home office. “Once we were able to get out and have the real rig in front of us, we were so far ahead of the game,” Mills reports. Two grandMA2 lights are also used. “We’re driving some 40-odd universes, with five grandMA 2 NPU’s, and six NSPs around the rig distributing Ethernet over DMX to Magic Panels and other places,” explains Cooper.

Parts of production are very aggressively cued. “The show has 1,695 cues in the board. ‘Wild Side’ and ‘Primal

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Top: Ayrton MagicPanel 602 units in action around the circular truss. Bottom: No Crüe show is complete without massive flames, courtesy of ffp.

Scream' are both over 100 cues, and that doesn't include bumps," Cooper says. "Dr. Feelgood' has just under 30, but there's a lot of meaningful cues in that one."

Routhier's favorite song in the set, "Dr. Feelgood," is notable for two reasons. One is the medical-looking red crosses on the Magic Panels. "That was one of those 'duh' moments," Mills says with a chuckle. "I was just sitting there looking at it and thinking, why the hell hasn't this been like this for the whole damn time?"

"Dr. Feelgood" is a primarily a red song, and when Routhier wanted to introduce green into the mix—to reflect the cover of the same name—Mills and Cooper were a bit skeptical. "Lighting people don't really use them together unless it's Christmastime," Mills says. "But sure enough, Sooner sat there programming for 30 — 45 minutes with the album cover in front of her, mixing 'Dr. Feelgood' green in and I've got to say she got it and we were both blown away."

The show's video component is achieved via an Art-

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Net—DMX merge. "I pixel-mapped every LED fixture we have in the rig into Catalyst using the pixelMAD feature, so we can control them as a regular lighting fixture from the console, or we play a video back on top of the entire rig," says Mills. The process can be time-intensive and complex. Cooper explains, "In the background is all of the data coming down one Ethernet cable, and the console is taking that information and spitting that information out to the light. But the console can take over at any moment, and tell those lights to do something else. So we can toggle between video and lighting instantly in real time. That the console does all of this on board is fantastic."

The show is time-coded. "Last fall, when we were in Vegas, I had to hand the gig off to Chris Lose, the house LD at the Joint, to run it, and there were 1,700 cues or so," Cooper says. "For this show, I didn't want it to get messy, and time code was available. The band plays to a click track, so we went through and time-coded all the songs. It worked out pretty well, because then you can spend more time calling spots."

As for spots, there are five in the house. But they are not on Tommy Lee. Cooper explains, "The vibe that Tommy likes to have around him on stage is dark and smoky. He likes to perform in silhouette, which is why we don't use front key lights."

Effects

The color palette relies on primary colors, including lots of reds, oranges, and ambers, which work in harmony with the isoparaffin and lycopodium flames provided by effects coordinator Nicolai Sabottka, of Berlin, Germany-based ffp Spezialeffekte & Veranstaltungslogistik GmbH. The firm recently opened ffp effects, Inc. in Los Angeles, to better serve North American clients; Sabottka is dividing his time between both locations.

The show features ample use of fire in all names, shapes, and forms. There are three double-headed XXL ffp lycopodium systems and seven LFM [Liquid Flame Mega] Isoparaffin flames; four of the latter are on moving racks. Routhier says, "One of the biggest things that Mötley Crüe requires from us is to try and come up with different gags that can really push the envelope."

One unique gag features two 20' high x 6' wide pyro blast panels located on the scaffolding upstage. Sabottka explains, "These panels were the result of a long conference call between Robert, Sooner, and I before the start of this tour. We had already reached the budget limit but were still looking into how we could push this to another level with what we already had. So we started shooting flames of all different kinds to large steel plates in different angles home at the Berlin headquarters and ended up with a V-shaped steel column upstage that is built into the set—the columns release large isopar flames during the show. While the steel heats up, the isopar sticks to it and keeps burning even if you shut the flame off for a short period of time."

Flames are also part of "Shout at The Devil." The song opens with Sixx lighting up the stage with a flame-throwing bass. Sabottka explains, "The bass flame is a slightly modified LFM. Nikki enjoys playing with it probably as much as the tech on the other end of the hose that has the dead man switch and triggers the effect."

There's also a pyro component in the shape of gold glitter and SP flashtrays, laser comets, hotburst and colored airbursts, cannon simulators, mortar hits of different kinds, and more; all are manufactured by Evolution Pyrotechnics, of Acton, Montana. "Russ Nickel and Anthony Santore, Jr. at Evolution are just the greatest people you can imagine working within the industry, as they allow us to be involved in R&D of new product," Sabottka notes.

There's also cryo in the effects mix. "The CO2 system we had built for Rammstein several years back has been modified to a higher performance for Mötley Crüe," Sabottka remarks. There are a total of eight high-power ffp Superjets located on different levels of the scaffolding, shooting horizontally. To complete the effects picture, there's also confetti used during "Without You."

Mötley Crüe's *The Final Tour* spent the summer in amphitheaters; at press the routing takes them through arenas until late November. 📶