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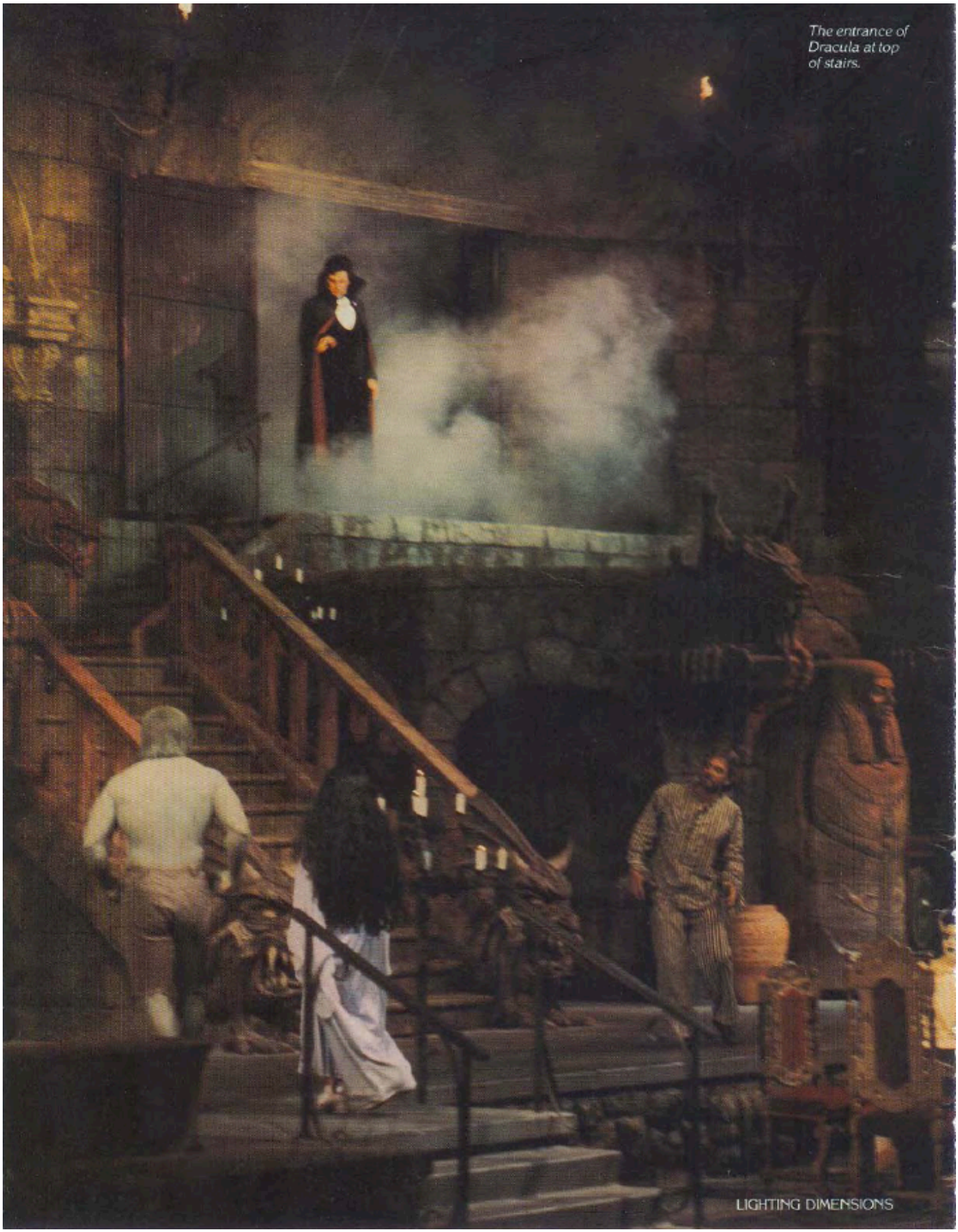


Castle Dracula

More than three million people have made Castle Dracula the top draw in it's first eight months.

Castle Dracula, the newest, most expensive and most complex attraction created at Universal Studios Tour, is a 2500 seat theatre where tour guests meet up with many of the classic horror film characters from Universal's renowned films of the 1930s and 1940s.

Built over eight months, at a cost in excess of $2.5 million, Castle Dracula features an interior recreated from authentic medieval castles formed into an elaborate five-level stage complete with gargoyles, trap doors, coffins, bats, rats and other creatures of the night. Lord of Castle Dracula is the Prince of Darkness himself, Count Dracula, immortalized by Bela Lugosi in Universal's 1930 production of *Dracula*.

Dracula is brought to life again during Castle Dracula's 20 minute show, where visitors to Universal Studios Tour learn firsthand how cinema special effects experts create techniques of horror, terror and even comedy. During each show, Count Dracula is joined by the likes of Renfield, his bug-eating valet, Frankenstein, the Phantom of the Opera, The Mummy, The Wolfman and The Incredible Hulk. And, in keeping with Universal Studios Tour's aim to allow guests to participate in the art of moviemaking, tour guests are randomly chosen prior to each performance to be made up to play the roles of other characters, including the Bride of Frankenstein and the Brides of Dracula.

In order to fully support the character, while providing the ghoulish visage and ambience appropriate for such a setting, Castle Dracula required and unusual lighting system. The lights, Castle Dracula's creators deemed, had to assist the audience in following the often fast flow of action, while not deteriorating from the myriad of special effects (falling gargoyles, torture racks, trap doors and even a replica of a six foot black wolf) intrinsic to the show.

Janek Kaliczak, lighting consultant for MCA Recreation Services, was retained to design and implement the lighting for Castle Dracula. (MCA Recreation Services is the division of MCA, Inc., responsible for Universal Studios Tour, the Universal Amphitheatre, Womphopper's Wagonworks Restaurant and other attractions. In addition, Kaliczak had already helped construct the lighting for another Tour attraction, *Battle of Galactica*.)

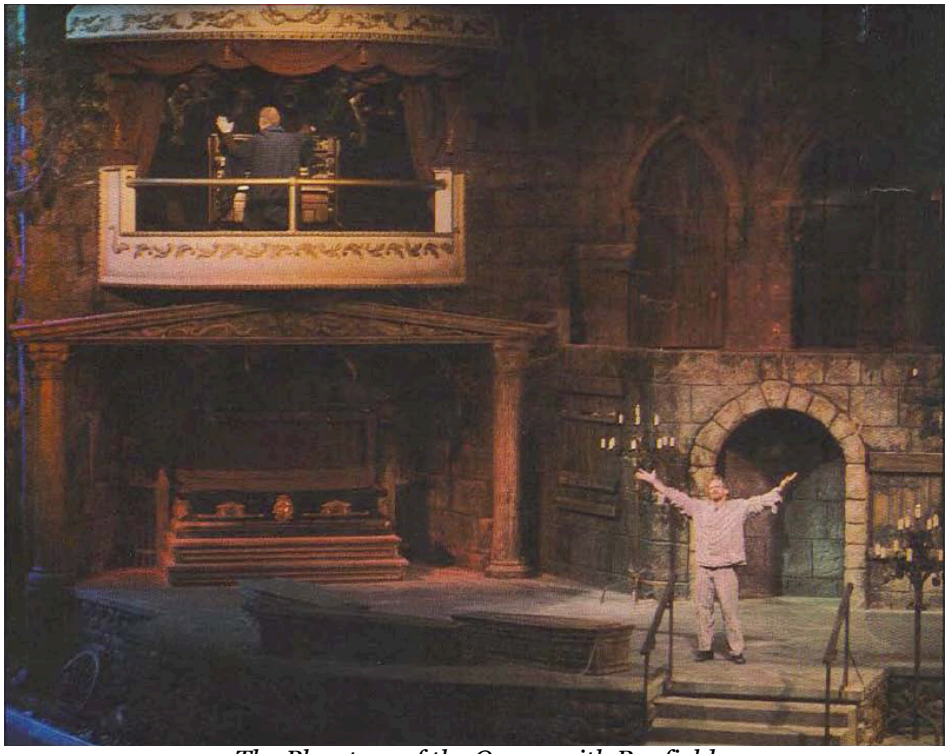
Kaliczak's first objective and ultimate watchword for the entire lighting project was to focus in and highlight the show's characters. The lighting, it was emphasized in even the earliest strategy meetings, had to support the action on stage, not hide or overshadow it. Each piece had to be coordinated with the primary needs of the characters and their movements.

The task of lighting Castle Dracula, which ultimately resulted in four lighting plans and a working budget in excess of $25,000, was begun in brainstorming sessions with artists, art directors, makeup artists and costume designers. Sample swatches of the key colors used throughout the show were made with each main color representing a major character. Red was associated with Dracula, yellow and amber with Renfield and Kelly green with the Incredible Hulk.

It was determined that the introduction of each character, or an important movement by that character, would be preceded by the introduction of his primary color. As the show's writers and directors began blocking out the acting onstage, Kaliczak began working with painters, dappling the appropriate stage locations with the appropriate colors. The profound color throughout the

Castle's stage was a murky steel grey. An almost scary incandescence was created when the right shades were painted on their spots, then illuminated by complimentary support lighting from the lighting catwalk above the audience.

While intending to light the stage in a way that would best support the action, Kaliczak also began situating the lights for his primary colors in a way that would heighten the interchange and conflicts among the characters. During the show, tension builds between Dracula and the Hulk. Finally, there is a confrontation between the two characters. In order to highlight that activity, reds and greens dominate the lighting, allowing the audience to concentrate on those two characters while other special effects and characters prepare for upcoming scenes with a definite element of surprise. Kaliczak's lighting calls for sensitizing the audience first to Dracula via reds, then turning up greens, helping to create the illusion of the Hulk's size.



The Phantom of the Opera with Renfield

"Green is a potentially difficult color for lighting a normal show because it can hurt the clarity of an image," claims Kaliczak. "But in a fantasy show like Castle Dracula, imagination is an important component, allowing, for example, the audience to perceive the Hulk larger than he actually is."

To further enhance the shadowy, horrific ambience with Castle Dracula, little straight lighting is used. Instead, highly saturated primary and secondary lights are used providing "hints" of character action and appearance. By keeping the lights simply "suggestive" neither the characters nor their actions lose the aspect of fantasy.

Once the colors were coded with characters and the characters' movements established, Kaliczak developed thumbnail sketches of all lighting locations with each new sketch relating to a new scene onstage, resulting in a lighting plot. Lighting locations were established by draft calculations. Kaliczak then explored various control systems that would operate the lights in adherence to the lighting plot.

The operation of the lights was achieved through the use of a lighting computer, triggered by the manual actions of the actors, the music and the extensive use of computerized animation in the show. (The Phantom of the Opera and the block wolf, for example, are actually animated, computerized characters, making Castle Dracula the only show of its kind where real actors, computerized characters and Tour guests all act in the same show.) The actors, by pushing discreetly placed buttons, as well as the sound and animation computers, activate the lighting computer.

Kaliczak described the lighting computer as "small and simple – the bare ingredients of a memory system." The console, built by Teatronics, Inc., San Luis Obispo, California, was designed to

operate automatically and has functions for cross-fading forward, backward and re-winding on command.

The computer, which features a 72 hour memory, is supported by a transfer box built to initiate switch closures and to protect the computer from outside voltage sources. Acting as a sentry, the transfer box allows the computer to operate independently from computers responsible for the other functions within the show. The interfacing system, designed by Kaliczsak with the assistance of studio electricians, is also fully automated.

At the beginning of the Castle Dracula show, Tour guests entering the attraction are greeted by great claps of thunder via Sensurround, which is supported by cloud projections on two rain windows situated stage left and stage right. The clouds, which appear red-orange in tint, are created with the assistance of plastic prisms, by projectors housed in tiny rooms behind the set.

However, due to the size of the room and the energy used to operate the projectors, Kaliczak found the prisms would melt. To alleviate the problem, he rigged a standard ellipsoidal lighting fixture on which the prisms rotate, reducing the heat build up.

In the cloud rooms, lightning effects are produced by placing two 50-watt second strobes, which vary the speed, rate and intensity of the “lightning” flashes. The strobes were modified to interface with the lighting computer, creating the effect of lightning “travelling” across each window. The strobes flash 12 times per second to produce one “bolt” of lightning.

In addition to the cloud room lightning strobes, nine other strobes are used during the show to help manipulate audience attention toward or away from a character or point of action. One strobe, for example, is used as a misdirection device to keep the audience from concentrating on Dracula during his numerous vanishes and his attempts to avoid the Hulk. During one sequence, a strobe is placed directly on a falling gargoyle special effect, which “falls” on an unsuspecting Hulk. While the audience concentrates on the Hulk and the gargoyle, Dracula is able to activate a smoke device and escape through a hidden trap door. Heightened greens, complimented by the strobe, help focus attention on the Hulk and away from Dracula.

The lamps for Castle Dracula’s lighting are situated on one catwalk above the audience. The lamps equal 4000 hour Pars. Kaliczak predicts that sometime in the future the lights will begin to fade, but high strength glass filters manufactured by Liberty Mirror will prevent a large measure of the fading. The pyrex glass filters are coated with a dichroic coating which reflects back unwanted colors from the set. In addition, a 132 volt dimmer is used with the lamps.

The lighting system for Castle Dracula is unique for a number of reasons. Primarily, the lighting must support a show that combines professional actors, animation and amateur actors (tour guests).

“That could have been a horror story of control,” Kaliczak reminisced. By implementing ideas such as glass filters, the system was modified to work in conjunction with the other component parts.

Renfield up stage, and all the dinner monsters looking at stage right action.

Article scan courtesy Janek Kaliczak

For more on Castle Dracula see www.thestudiotour.com