

Project Introduction

Indiana University is restoring its historic WPA theatre to better serve the creative needs of the student population, both within department itself and throughout the larger campus, particularly with the creation of the Studio Theatre. This theatre will be the first venue in years to focus on undergraduate-driven productions, aimed at an undergraduate audience. This space will provide a live performance infrastructure that is accessible and operable at several levels of complexity, so that even though it can foster full-fledged scenic and lighting designs aspiring design students, it can also be used by a group of actors presenting a newly workshopped play, without requiring months of training, or the assistance of skilled technicians.

Programming Summary

The usability of this space by undergraduates is paramount; however, the particular character of the environment, as experienced by the audience is also very important to the client. In addition, the space will regularly function as an acting classroom, and occasionally function as a lecture venue. Because of the wide range of uses and users for this space, security and durability will be important considerations to ensure that this space remains useable for years to come.

Seating for performances and for classroom uses will need to be accessible, comfortable for long periods, and flexible in arrangement. Performances should accommodate about 50 patrons. Lighting systems will need to accommodate untrained users in classroom situations, as well as student lighting designers with a very wide range of abilities. It is also important to note that this space is intended for production use by unsupervised undergraduate design students, so safety ease of use and troubleshooting by one or two people is vital.

Finally, the character of the space as an environment where the audience can feel a part of the theatrical experience and process is critical to the audience development goals of the department. Special attention should be given to the aesthetics of the space wherever resources allow it.

System Design Description

The space is configurable for performances. Seating will be accomplished by a system of 6" collapsible risers and individual chairs. The chairs will be foldable as well as padded, will durable upholstery. Storage space will be necessary for the risers, as they will not be necessary for all audience configurations. Storage will be located in a closet located underneath the east catwalk and adjacent to the main audience entrance as well as underneath the west soffit. The bulk of the performance houselighting will be provided by

6" cylindrical downlights, each of which has an individual toggle switch so that it can be eliminated for a particular seating configuration if necessary. Additional houselighting is provided by downlights in the entryway and rustic decorative sconces on the north and south brick walls to accent its texture, age and ambiance. Flexible basic masking is provided by black drapes hung underneath the catwalks and along the west wall, below the pipe grid.

For non-performance situations, an energy-efficient compact-fluorescent lighting system is in place. This system is entirely independent of the dimmable houselighting system and will be operated by basic toggle-style light switches, familiar to all. The dimmable houselighting will be operable through the VisionNet system, which allows it to be controlled by the lighting console for advanced users, or through simple wall consoles with sliders and presets. For new lighting students or very small productions, simple theatrical cues can be programmed into VisionNet presets and sliders so that simple theatrical lighting can be accomplished independent of the main lighting console and its learning curve. The VisionNet system can also be passcode protected for security.

The theatrical lighting system can also accommodate a full-fledged lighting design. There are 90 dimmers available for theatrical lighting as well as an Advanced Control Network-ready data network for advanced lighting equipment. Because of the limited amount of available power and dimming, flexibility is a major concern. Six moveable dimmer packs

are located in the grid and can reach any point in the grid with a 15' extension cord to one of six three-phase power outlets. These dimmer packs are supplemented by four 12-circuit raceways along each wall or catwalk. This symmetrical density of dimmers at the extreme edges of the space will accommodate most audience configurations, especially arena and thrust styles. For more unusual configurations, the portable dimmer packs can be easily reconfigured to minimize cable runs.

With the exception of six circuits on the deck-level, which are housed with the houselighting dimmers in a remote rack, all of the theatre's lighting is distributed throughout the space. This system has three main advantages. First, each dimmer can be switched on with a button located next to the stage-pin socket. This will allow a single focuser to operate the system conveniently while focusing instruments without the need for remote control of the lighting system. Second, each dimmer has indicator lights which show whether or not the dimmer is outputting power as well as whether or not it is carrying a load. The proximity of this feature to the actual lighting fixture will be a significant time-saver in troubleshooting situations, and it is a very easy system for a new user to understand. The third advantage to the distributed dimming system is its use of data. Each dimmer distribution unit receives data through DMX protocol and can output that data stream. This means that data will always be easily accessible wherever dimmable power is accessible. Overall, distributed dimming provides an especially

flexible and efficient lighting system that exposes the flow of power and data to the user, making the system particularly easy for a new user to understand and troubleshoot.