

Educational Institution : 01
Case Study: Grunwald Musikhule

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Commercial Lighting Control Case Study

Grunwald Musikhule

Munich, Germany





THECHALLENGE › Design a lighting control system for this high quality venue for aspiring musicians of all ages that would both accommodate the various functions within, and maintain the Old-World charm of southern Munich, Germany.

SETTINGTHETONE › Concert hall uses latest lighting control technology.

From a distance, the new Grünwald music school in Munich resembles a stylish country hotel. The entrance to this architecturally striking building, surrounded by extensive landscaping and broad paths, has full-height glass facades that provide an attractive contrast

to the terracotta-colored paintwork.



If you approach the building at twilight, a warm glow emanates from the windows; this welcoming exterior was one of the features specifically requested from Biedermann, the team of architects responsible for designing the school. It was designed to be both an attractive place of learning for aspiring musicians, and a high-quality venue in which audiences could enjoy concerts and other cultural events in a pleasant atmosphere with outstanding acoustics. In short, the school was to be a temple to the Muses, where artists could work and develop their



talents in comfortable conditions.

The highly imaginative

architecture places the emphasis on transparency, with a maximum of natural light throughout the building and a sophisticated lighting control system that complements this with artificial illumination where required. The lighting in the rehearsal rooms is particularly flexible to meet the varying needs of musicians and teachers. At the heart of the building is a concert hall that seats more than 300 people where stage and auditorium lighting is operated by a central lighting control system.

FLEXIBLEFOYERLIGHTING ›

The music school is polygonal on the inside and circular on the outside.

The foyer areas are arranged around the concert hall with the rehearsal rooms and offices are located in the outer ring of the building. A continuous band of skylights around its circumference means that even the lower level enjoys natural light.

During the day the school's foyer is illuminated using Rode Lichttechnik lights, while at evening events, high-quality Hatec halogen effect lighting is used to illuminate the walls and emphasize the rounded architecture. Preset and stored light scenes can be recalled at the touch of a button using the Lutron®

GRAFIK 4000 lighting control system.

The system ensures that the lighting is precisely tailored to the situation,

and also helps to reduce energy costs. For example, a lamp

individually switched or dimmed. Four preset lighting scenes can be selected and controlled from wallstations in the space, and their brightness adjusted using a master control console. For example, one scene provides a relaxed, slightly diffused reddish light that fills the whole width of the room and is

Putting soloists in the spotlight

The two large duplex rehearsal rooms, named after Richard Strauss and George Gershwin, are equally suited to big bands or to soloists. Here again, users can choose from a variety of scenes to suit their particular needs, and the lighting can be dimmed depending on how many people are



dimmed 10% will last more than twice as long, thereby conserving both energy and resources.

One false dawn that won't disappoint

The early childhood musical education room is also equipped with a GRAFIK 4000 lighting control system. An individual dimmer circuit board with a variety of lights connected to it controls each lighting zone,

and the system allows each zone to be



particularly suited to playing and listening exercises.

For reading and other tasks requiring brighter lighting, another scene provides indirect, slightly cooler light with a high blue component that appeals particularly to children. Of course, the preset scenes are also freely adjustable. One highlight during children's education day is when the teacher switches on the preset Sunrise Scene, in which the light takes more than 30 minutes to reach full brightness; this never fails to delight the kids.

using the room and how much ambient daylight there is.

The scenes offered by the GRAFIK 4000 lighting control system include bright,



glittering light from low-voltage spots, for stage use for example, and point spots from

pendant lights combined with Fata Morgana uplights for the soloists in the wings. The evening scene ensures that instead of shining out of the full-height

The designers of the the Grunwald music school in Munich Germany wanted both a warm, attractive place of learning for aspiring musicians and a high quality venue in which audiences could enjoy concerts and other cultural events. They achieved it with a GRAFIK 4000 Lighting Control System from Lutron®.

PROJECT DATA

- › Project:
Grünwald Music School,
Munich
- › Planning:
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- › Architect:
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- › Electrical Contractor:
Kappenberger + Braun
Cham, Germany
- › Lighting Design:
Werner Lampl,
Diessen, Germany
- › Distribution:
ACT GmbH
Oberhaching, Germany
- › Lutron Products:
› GRX 4000 Control Units [6]
› LP panels [3]
› GRX AV interface [1]
› RS232 Interface [1]
› European Style Keypads [3]



GRAFIK Eye

windows, the light remains in the room and conveys a sense of warmth to the outside. Downlights in daylight colors can be used to pick out soloists so the rest of the hall fades into the background.

One-touch lighting control for the concert hall

The polygonal, amphitheatre-shaped August-Everding concert hall is paneled entirely in maple and lit by decorative halogen spots, some of which indirectly illuminate the walls. Its most important technical feature is the GRAFIK 4000 system that monitors and coordinates the auditorium, stage and emergency lighting, and which can be operated from the control room, by the stage manager or via a freely programmable radio controlled touch panel. During a stage rehearsal, for example, the production assistant can hang the panel around his/her neck and control all the scenes and spots required during the play.

The stage lighting, including the

traverses and spots, is managed using the Lutron® 2Link™ system.

This feature automatically recognizes whether the hardware connected



LP Panel

to it is using Lutron GRAFIK lighting control system signals or a theatrical lighting system based on USITT DMX512 protocol.

Preset entrance scenes with dimmed stage lighting and full auditorium lighting for concert, stage and theatre use blend subtly in with one another at different stages in the program. The Lutron lighting control system control ensures a harmonious sequence of scenes

separated by freely adjustable fade times, and the system also features sequence control, in which preset rotating lighting scenes can be run continuously.



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