

## Stage lighting of the Vörösmarty Theater Hand-over: December, 2005

*Vörösmarty Theater could join the row of those theaters which were given the possibility to be fully renovated in both architectural and theatrical aspects. This renovation made it possible for Székesfehérvár to have a completely renewed theater having a stage lighting which satisfies all demands of modern age in every respect.*

### **The stage lighting system**

On the pages of this paper, several people have already written several times that in the field of stage lighting control there is an interim state. The new standards are already knocking on the gates of manufacturers, while good old DMX512 (already 20 years old) is a still indispensable protocol. This is why systems to be newly constructed should be designed and built in a way that the existing control and controlled devices should still operate with them, but they should be ready to receive future developments as well.

Naturally, in case of Vörösmarty Theater, the designers kept in mind the above mentioned facts, which we as system installers specified for the system to be delivered by us. This is how the control system of the theater was prepared, its frame is given by the Ethernet network, and in the end points there are DMX and Ethernet connection possibilities alike.

From the Ethernet output of the light control boards, control reaches the light current center in the thyristor room through Ethernet switches. The Ethernet control signal arriving to the light current center gets to an Ethernet/DMX transformer, from where the various DMX lines lead to the DMX distributors. From here, the end points come next.ek.

Switching of the directs is solved from even two places. A push-button wall switching panel of topological arrangement is installed with real-time feedback, the DMX output of which is connected to a DMX/Ethernet transformer, thus the control arriving from here could be connected to the Ethernet network. Naturally it is possible to switch the direct circuits from the counters, too, but, in case a direct is given in from the wall switching panel, it will appear on the monitor of the light control boards.





Altogether 4 DMX lines were built in the theater, where Line 1 is reserved for controlled and direct circuits, Line 2 for color changers, moving heads and a few intelligent floodlights, and Lines 3 and 4 are reserved for the mobile-yoke mobile-mirror and mobile-head intelligent floodlights.



## **Equipments**

The light control boards are the two largest members of the 4D family of Compulite; one is an Ovation 4D, and the other, a Micron 4D. Identical softwares are run on both boards, with identical physical out- and inputs, thus they are completely interchangeable with each other. The difference appears on the operating surface: the Ovation 4D has 18 more master keys, and with it the macros, snaps and libraries can be reached not only by using the touch screen but with traditional push-buttons as well.

The two boards can see each other through Ethernet, thus they can run in so-called Master/Slave mode, so one board can follow the other. The Master/Slave roles of the boards can be chosen optionally. This function is useful for lighting electricians from several aspects. During the play, in case of possible breakdown of the Master board, control can be taken over by the Slave board by pushing a button, from which the play can continue from where the problem arose. The other use of the Master/Slave function was shown by life itself. In most cases the lighting electricians like to program in the place where the director is. They just take down the smaller board, connect it up to the Ethernet network, set co-run, and everything that is done on the Master board will be carried out on the Slave board in the lighting room as well. In this way it will not be necessary to download the plays later from board to board, they can be sure that on both boards the same plays are saved with the same content.

Control end points are installed in each and every lighting position, totally 50 DMX-s and 26 Ethernets.

The DMX/Ethernet and Ethernet/DMX transformers are products of Compulite, while the wall direct switch table and the DMX distributors are manufactured by PLS Electronics Co. Ltd. of Székesfehérvár.i.

The dimmers and direct units are also products of Compulite. The 200 pcs 2,5kW, 36 pcs 5 kW controlled circuits as well as the 48 pcs 2,5kW and 24 pcs 5kW direct circuits are housed – by 4- and 2 circuit modules – in 12-circuit and 24-circuit racks of 6U height. These racks are built into altogether 3 lockup rack cupboards.

The traditional floodlights used come from the products of the French company Robert Juliat; the exact types – with special regard to the positions of floodlights – were chosen by the experts of the theater.

Of course, as per today's requirements – which here in Székesfehérvár is true at a highly increased rate, regarding the many musical plays – besides those already existing devices, the theater got moving heads, too: 10 pcs Martin MAC2000 moving head and 2 pcs Clay Paky GS4 scanner intelligent floodlights, totally 40 pcs Compulite Whisper motorized color changers with individually controllable cooling ventilator, 10 pcs ETC Revolution motorized yoke floodlights, 10 pcs Compulite Yoke motorized yokes, UV lamps, JEM smoke generators, Swefog fog generator, snow generators, Martin stroboscope.



### **Light control of auditoriums and public audience traffic areas**

It was a requirement that the lighting control of the auditorium and public audience traffic areas should be able to operate both integrated into the stage lighting system (that is, from the light control boards), and independently from the stage lighting system, too (cleaning or other programs). For this latter function, the wall control panels of the device ELC AC612XL are perfectly suitable. The panels can be taught the channels to be controlled even separately, so that they control only the given 12 circuits; 12 cues per channel can be stored with the relating swim-up times, and it is also possible to control by picture. Their programming is made from the large counters with a coach-up method. In the theater 2 such units were installed, one in the stage manager's place and the other on the right-side corridor. Integrating of the two ELC panels into the big system is made by a DMX mixer manufactured by Compulite. The wall panels can be disabled from the light control room.