

# grandMA

## Case Study

QVC, Inc. Studios



- grandMA – maximum power at full speed

# QVC Studios

New lighting control system  
for extensive networking  
capabilities



QVC, Inc., the lead electronic retailer, broadcasts live 24 hours a day, 364 days a year from its world headquarters in West Chester, PA (outside of Philadelphia). As the third largest television network in the United States (in terms of revenue), and reaching more than 86 million homes, QVC has a surprisingly modest lighting department. Lighting engineers look after the needs of the entire studio complex day and night.

Each studio at QVC features multiple sets that can change from day to day. New sets are built to accommodate new products, and old sets are occasionally revived. The exceptional high quality of QVC's productions, and its reluctance to even consider broadcasting footage from tape, means that lighting setups regularly have to be reproduced months or even years after they had been originally designed because of the ever-changing and varied schedule.

In order to better accommodate the diverse needs of this constantly challenging environment, QVC planned a major upgrade to its existing lighting scheme. Moving lights and motorized pantographs featured heavily in the new scheme and the ultimate aim was to have a completely automated series of studios, which could be easily changed from one lighting setup to another.

## Networking to enhance the working environment

In order to facilitate the new vision of the QVC studios, the lighting team would need to change their existing lighting control system. It had to be easy to use, with the ability to control moving lights and conventional lighting, and for future applications to control LEDs and videos. It also needed to have extensive networking capabilities. Networking would allow the QVC lighting staff to remotely adjust the lighting in any studio while they were in another studio or even in a completely different part of the building. Once the team at QVC started to think about what networking could do to enhance their working environment, the list of required features kept growing: central show backup, support for DMX over Ethernet devices, visualization software that was compatible with the set design department's existing software, and so on. Stage managers and other non-lighting personnel regularly play back lighting for rehearsals, so any new lighting system would have to be simple to operate and secure.

Ultimately, MA Lighting, and its North American distributors, A.C.T Lighting, Inc., worked closely with the lighting team at QVC to deliver a system that met and exceeded the original specifications.

The solution to QVC's needs was MA Lighting's grandMA range of consoles. The grandMA's multi-user capabilities allows a single show to be divided into separate sections using the grandMA's "worlds" feature. This feature was key in QVC's decision to use grandMA.

However, QVC was also impressed by how simple the grandMA was to use, configure, and tailor to its requirements, as well as being impressed by the grandMA's large range of accessories and additional software programs that were available to help 'flesh out' the system.

### Using Ethernet for DMX distribution

The grandMA's multi-user programming environment is the heart of the system at QVC. Although there are six distinct studios in the studio complex, the workload and restricted sight lines dictated that certain studios would require more than one console. It was decided that a multi-user session would be created for each studio, and that all consoles in that studio would be part of the session. Each lighting setup is divided up using the worlds feature so that a user can only affect the stage in front of them while still acting as a trackin backup for the other consoles in the studio.

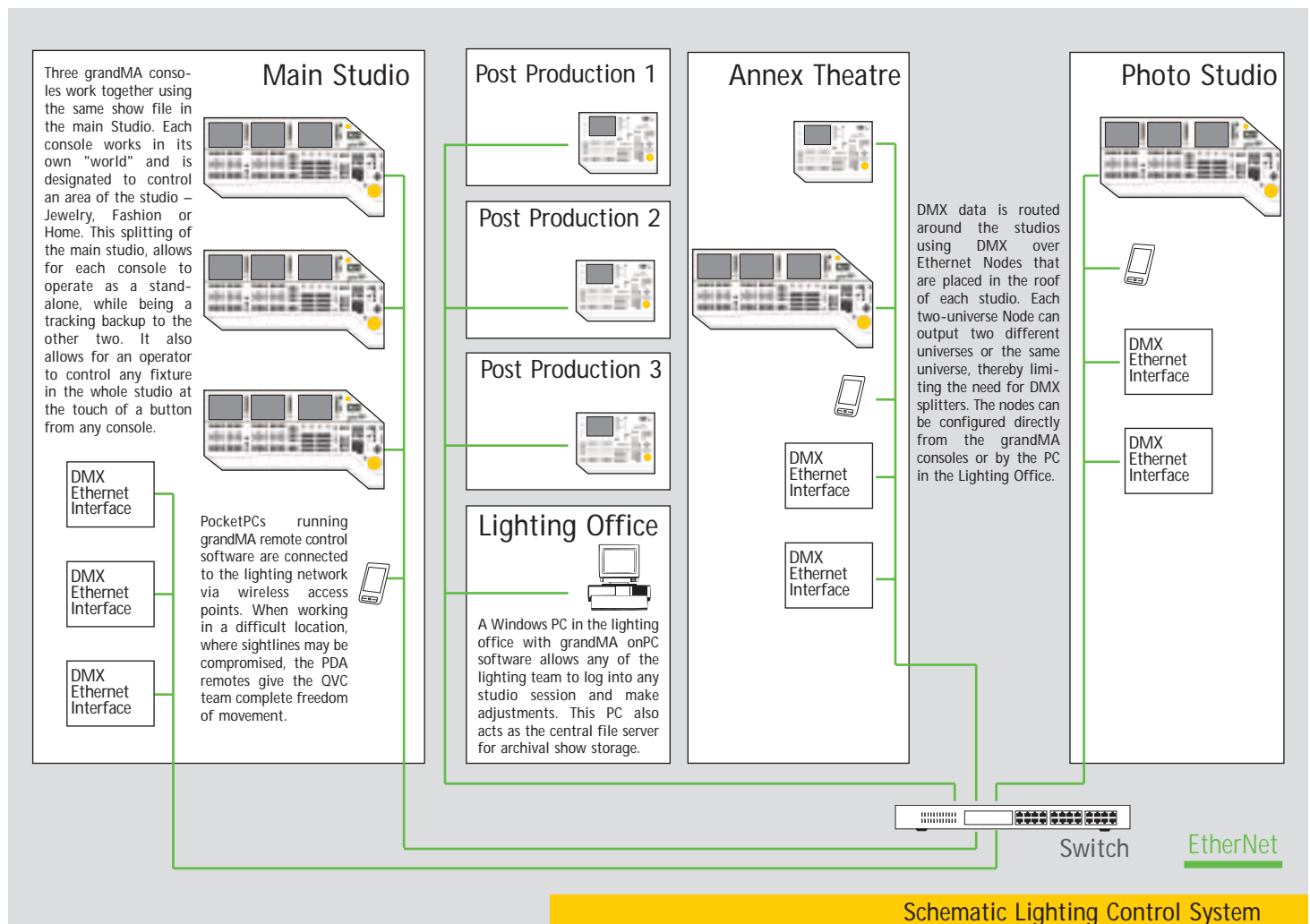
Any member of the lighting team, whether he or she is sitting at the computer, in the lighting office, or at a console, in one of the six studios, can browse the network and log in to one of the studio's sessions. The show data is automatically downloaded into the console or PC that they are using and then any changes can be made remotely to that show, including live-to-air adjustments. This also allows the team to troubleshoot problems and help less experienced users without leaving their current location.

An Ethernet backbone was installed throughout the studio complex. Every grandMA console in the studio complex is connected together via this specially installed lighting control network. DMX data is routed around the studios using DMX over Ethernet nodes that are placed in the roof of each studio. Each two-universe node can output two different universes or the same universe, thereby limiting the need for DMX splitters. The nodes can be configured directly from the grandMA consoles or by a PC in the lighting office. Since the distribution of data is handled electronically, a problem with one console can be easily resolved by having a second console take control of the DMX over Ethernet nodes. The use of Ethernet for DMX distribution also means that each console only requires an Ethernet cable and a power cable, making the grandMA easy to move around the studio.

### A PocketPC can be used as a remote control

In addition to the extensive wired Ethernet network, QVC now uses 802.11b wireless LAN technology with 128-bit encryption and a randomly generated pre-shared key. Each shift lighting designer has a PocketPC that can be used as a remote control for any of the consoles in each studio. Designers can make changes from one set or from the top of access equipment. By specifying which console they want to log in to, they do not have to worry about affecting other consoles in the session due to the separation that the worlds feature brings to the setup.

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A Tablet PC is used, running grandMA onPC, to provide a completely portable, hand-held control surface that has all the complete functionality of a full grandMA console. With six grandMA consoles (five grandMA full-size and a grandMA light) as well as two PCs running grandMA onPC, backing up data is a top priority. Shows are automatically archived to the PC in the lighting office. Shows can also be loaded from the QVC lighting office server by any console on the lighting network.

The system at QVC was created through the collaboration of MA Lighting, its North American distributor, A.C.T Lighting, and the entire lighting team at QVC. As MA Lighting responded to QVC's requests and ideas, new concepts and possibilities were constantly being realized. The collaborative process has produced a stable yet highly flexible system that the lighting team at QVC are constantly pushing in ways that were never envisioned at the start of the project.

The grandMA system is in a constant state of evolution and QVC's future needs, as well as those of users worldwide, are only limited by imagination rather than technology.

The statements and opinions expressed herein are solely those of the author and do not reflect those of QVC, Inc.

## Company Profile

■ Since its foundation in 1983, MA Lighting has expanded to become one of the internationally leading companies for computer-controlled light consoles, networking components and digital dimming systems. With integrated system solutions and the grandMA product family, international standards were set.

The leading international position of MA Lighting rests on two columns – MA Lighting Technology in Waldbuettelbrunn as the centre for production, research and development and MA Lighting International in Paderborn for marketing, distribution and technical support. Within a global service network, fast customer service and professional sales partners are ready to help users with advice and hands-on support when needed.



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All technical specifications are subject to change without notification.

We do not assume liability for any incorrect information in this case study.