

## The Verdict is in and the Decision is Unanimous - Clockaudio's Custom Goosenecks Help Win A/V Design Awards in Historic Legislative Setting



### THE CLIENT

The Illinois State Capitol, located in Springfield, Illinois, is the building that houses the executive and legislative branches of the government of the U.S. state of Illinois. The capitol is in the architectural style of the French Renaissance and was designed by Cochrane and Garnsey, an architecture and design firm based in Chicago.

The dome is covered in zinc to provide a silvery facade which does not weather. The interior of the dome features a plaster frieze painted to resemble bronze, which illustrates scenes from Illinois history, and stained glass windows (including a stained glass replica of the state seal in the oculus of the dome).

### THE CHALLENGE

A majestic building with a rich history, the capitol building needed a truly mindful specification and integration team as well as customized equipment that could work within the stringent parameters of its classic architecture while

providing a much needed upgrade to its integrated A/V systems.

Clockaudio's custom-engineered extra-long gooseneck microphones were featured in this award-winning AV installation, where elected officials such as Barack Obama have handled the business of state.

Of course, Illinois' most famous legislator since Abraham Lincoln left the Chambers long before AV consultancy **Lipp A/V Design** was commissioned to import 21st century technology into these prestigious rooms. "This was a historic restoration project," explains Jeffrey Lipp. "The A/V system components had to integrate seamlessly into the extraordinary 130-year old structure."

More than 200 microphones, two massive DSP matrices, and new video and loudspeaker systems had to be unobtrusively installed by integrator **Bennet Electronics**. Cameras were concealed in a metal clock in the Senate Chambers, loudspeakers were literally plastered into the ceiling and painted over with gold leaf. As well as the replacement of all technical systems, the original architecture, furnishings and room finishes of these important legislative facilities were returned to their 1870s glory by Vinci Hamp Architects.

### PRODUCT PROFILE

In both the Senate and the House, Clockaudio custom-designed gooseneck mics with hidden shock mounts were built into the Chambers' historic roll-top desks. Jeffrey Lipp explains that he initially had great difficulty in sourcing the right microphones for the job.

Legislators sit at desks in the Chambers but are required by Illinois law to stand up to address the

institution. The gooseneck microphones therefore were required to extend 34" in length to reach mouth height – some were even longer to meet the requirements of the tallest legislators – with sufficient flex to fold down to just 4" for storage in the roll-top desks.

Jeffrey Lipp comments, "We checked all of the manufacturers. The problem lay in sourcing the gooseneck material which would be long enough and strong enough so that the mics would not droop. **The only company which was able to supply us with what we needed was Clockaudio in England.**"

Lipp adds, "it was a pleasure to deal with the Clockaudio people. They had custom-made samples flown to us from the UK so we could test their size and rigidity. We were impressed by the sound quality of the mics, but we were really impressed by their great customer service."

## OVERALL AV SYSTEM FUNCTION

According to Lipp, the key to the AV system in both chambers is the voting system, which controls both the microphones and cameras in addition to tallying votes from the floor. Simply pressing the "Speak" button on the desk-mounted voting panel sets off a string of commands. When the request to speak is granted by the presiding officer, the sound operator presses a button on a large touch screen that remotely controls the entire system.

The system sends a command to the Crestron AV2 control system that simultaneously sends a control string to the Peavey DSP Matrix to turn on the mic and to the pan-and-tilt cameras, mounted behind the rostrum, directing one to pan to the legislator who has the floor. A Chyron title generator sends the legislator's name to the existing LED displays mounted to the sides of the chambers as well as to the press feeds and Internet streaming system.

## AWARD WINNING INSTALLATION

Upon completion of the project, Lipp A/V Design garnered a prestigious Spotlight Award from ProAV magazine, as well as an Honorable Mention from ARCHI-TECH magazine's annual A/V awards, for its work in Springfield, Illinois.

## EQUIPMENT LIST

Steerable Line-Array Speakers – Renkus-Heinz - IC24

**Mics – Clock Audio – Custom 34" gooseneck mic**  
DSP Matrix – Peavey - Nion Media Matrix w/  
Cobranet (Very large 150x24 size for the House)  
Control System – Part of Voting System with  
Creston interface

Voting System – Custom designed software by  
Illinois LIS

Voting System Display Panels – Barco (in Senate)  
& Existing Daktronics (in House)

## PROJECT UPDATE

It has been eight years since the project's completion and Lipp A/V Design, Inc. is still leading the "courts" when it comes to technology upgrades for its A/V system needs.

This case study was reformatted from an initial Clockaudio write up from 2008.

## ABOUT LIPP A/V DESIGN, INC.

**Lipp AV Design, Inc.** provides **sound, video and audio visual** system design consulting services.

Incorporated in 1998, they are located in Buffalo Grove, Illinois (Northwest suburb of Chicago) and primarily serve the architectural community for new construction or major rehab projects. They are industry specialists who provide specifications and drawings which can be used for competitive bidding for their clients.

The firm's principal consultant, Jeffrey Lipp, has spent over 20 years in the sound and video business. His experience ranges from system operation to design and project management for

a large A/V contractor and a national equipment dealer.

Jeffrey stays ahead of evolving technology by remaining plugged in and by writing for industry magazines lecturing at trade shows and teaching a university system design class. For more information about Lipp A/V Design, Inc., contact Jeffrey Lipp by phone or email at (847) 808-8790 or [jeff@lippav.com](mailto:jeff@lippav.com)



*This case study was created to highlight a significant past Clockaudio installation.*

*Information for the study was obtained from a previously published Clockaudio write up.*

*Clockaudio is proud to have been part of this installation and to have been able to customize the solution that met or exceeded the specifications as required for the project.*

## ABOUT CLOCKAUDIO

For over 20 years, Clockaudio has been dedicated to manufacturing innovative pro-audio products.

With corporate headquarters located in the United Kingdom and additional offices in both North America (Montreal, Canada) and Asia (Singapore), Clockaudio is led by a talented team of audio specialists dedicated to quality, service and innovation.

Globally, audio professionals actively seek out and recommend Clockaudio for its reputation as a trusted and responsive manufacturer and its customer driven approach to audio solutions. Central to this is the in-house research and development that Clockaudio consistently reinvests in which allows clients to explore customized prototypes and develop specific briefs in partnership.

Consultants and contractors alike help to drive Clockaudio's product development process and appreciate the opportunity to be involved in the engineering process and final solution. The ability to customize is just one of the many factors which makes Clockaudio...clearly different.

\* \* \* \* \*

*For more on this project or other Clockaudio projects, please contact [news@clockaudio.com](mailto:news@clockaudio.com).*