

## ➔ Challenge

Create an AV system with enough flexibility, intuitive controls, and sophistication to satisfy a leading engineering consulting firm in their own LEED® Platinum headquarters.

## ➔ Solution

Utilize Crestron hardware and software solutions to create an AV system that raises the bar on multi-room conference centers.



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— **Leonard Klein**  
Glumac

## Raising the Bar

*Engineering firm, Glumac, chooses Crestron technology for new conference and collaboration spaces*

The Portland, Oregon offices of Glumac have become the meeting place of choice for clients and collaborators alike, since the firm premiered its new multi-faceted conference rooms. After gutting the entire floor of a fifty-year-old building in downtown Portland, the company, long dedicated to green building practices, achieved its own LEED Platinum certification by employing sustainable building systems and materials. Naturally, the firm wanted the same flexibility and sophistication they provide for clients in their new conference center—a goal achieved with the installation of Crestron controlled AV technology, which has transformed the way they do business on a daily basis.

“The new technology has completely changed the dynamics of client and team meetings,” says Leonard Klein, Mechanical Engineer and Principal of Glumac. “Historically, consultants go to their client's office for meetings. Once we moved into this space, architects and building owners asked to come over to our office. The conference rooms have transformed into collaborative spaces.”

The new center consists of two large conference rooms and a bistro area that can be used separately or combined into one large space. While divisible conference space isn't a new concept, Glumac wanted technology that would be as flexible and creative as the clients they serve. Only Crestron offered them the compatible, flexible hardware and software solutions they needed.



“The breadth of the Crestron product line is huge,” says Andrew Birkliid, AV Designer and Project Manager for Tempest Technologies LLC. “They were able to provide us with resources for audio, video, and control in a way that allowed all the devices to communicate harmoniously with one another. Because of the Crestron technology, the system design is clean and effective.”

## The new meeting center

The two conference rooms, named “Spruce” and “Douglas Fir,” have identical technology, starting with a 70" touch screen display suspended above a console at the front of the room. Anyone with a Wi-Fi® equipped PC or Mac® can connect immediately to the system through the Crestron AirMedia™ wireless presentation gateway. Presenters with mobile devices, including Apple® and Android™ tablets and smartphones, need only download the free AirMedia app from the iTunes® or Google Play™ stores, respectively, to present instantly. A pop-up panel in the console opens to reveal digital and analog connections and power outlets compatible with any Apple or Windows® computer, even those without Wi-Fi or digital connections.

“It’s phenomenal,” says Klein. “You’re walking around with your iPad Mini® looking at this drawing, and then it shows up on this 70" display seamlessly. No connecting required.”

Above each display is a high-definition camera used for online video conferencing with colleagues at the firm’s other eight offices in the U.S. and China, or with clients across the globe.

Birkliid used the Crestron app to bring together audio, video, lighting, and shading controls, creating a comprehensive touch screen control center on each iPad® in the conference room. From any iPad, Glumac personnel can power on technology in the room, instantly call up any source (including cable TV, AirMedia, or Apple TV®), change the lighting, and even duplicate the signal on two rear screen projectors in the outer office area. Once the command is given, a Crestron DigitalMedia™ 8X8 matrix switcher routes the high-definition audio and video from the chosen source to its destination. Personnel can choose one source for each display, or feed one source to all displays at once, depending on how they’re using the room.

All furniture is on wheels, so staff can fold tables and stack chairs to clear the two conference rooms when the larger space is needed for company meetings, parties, training, and other events. With the Crestron control system the audio, lighting, and shading seamlessly adjust.

Monitoring the rooms will be much simpler once Tempest Technologies installs Crestron Fusion® software, which schedules, manages, and monitors room usage and energy consumption. Anyone that wants to use a room will be able to reserve it using Microsoft® Outlook® or by touching a button on the Crestron scheduling touch screen mounted outside the door. Additionally, they will be able to determine at a glance if the room is occupied or available. When the touch screen glows green, the room is available; if the touch screen is red, the room is reserved. Crestron Fusion will also track equipment status and indicate when maintenance is required. It will even track data on energy usage from the building automation system.



## Very high expectations

Klein says even the architects, who once came to meetings with large rolls of marked-up plans under their arms, now arrive with just a laptop, plug it in, and pull up the firm's 3D modeling software on the AV system. "The architects can walk over to the displays and make changes right on the touch screens. After two or three visits, they stopped bringing their hardcopy drawings."

Although the iPad is the primary control center for the conference rooms, a Crestron touch screen is also hard-wired into one of the AV cabinets as a backup. The bistro area has its own cable TV box and flat screen display, which become part of the combined system when the bistro wall is open. A projector located in the lobby displays digital signage and videos on a wall behind the receptionist's desk, while another projects onto the clear glass wall of the first conference room. Images from the second projector are visible from within the conference room, so the glass wall can serve as an additional video display.

"Crestron gave us the flexibility we needed to give [Glumac] everything they asked for," says Birkliid. "The most challenging part of the project was accommodating the many uses of the space. We needed to do it in a way that was economically sound and gave them the flexibility to grow into the system. We didn't want to give them something that would lock them down. Using the Crestron processor and DigitalMedia technology means future changes can be as simple as swapping out a card in the switcher."

In the end, Klein says, they couldn't be happier with their conference rooms, and they are the envy of their peers.

"We set the bar, and now our other offices are looking to one-up us with the technology when their leases expire," says Klein. "Anytime you invest in an AV system, it will cost more money. But, without a doubt, it's been worth it. The new technology has far exceeded my expectations, and I had very high expectations."



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*Tempest Technologies LLC*

### Integrator

Tempest Technologies LLC  
<http://www.tempest-av.com/>