College Solves a Projector Problem

THROW DISTANCES CAN BE A MAJOR HEADACHE IN UPGRADING INSTALLED PROJECTORS.

By Don Kreski

Replacing an older ceiling-mounted projector is rarely an easy task. The biggest problem is that the hundreds of different projector models sold over the years each have their own unique range of throw distances to fill a particular size screen. Most often, you have to move or replace the entire projector mount. That can easily double the cost of replacing a projector — as it seemed it would at the College of Staten Island (CSI) in New York.

"We would have been fine if we could have kept purchasing the same projector model," says Linda John, director of Academic Computing for the College. "But after a few years, models change and so we ran into certain problems."

Even though CSI had standardized on a particular projector brand, the throw distances for newer models never matched the old. "In some rooms the image would project a foot or two beyond the borders of the screens," says Don Silver, partner and executive vice president for the AV integration firm Colortone AV in Elmsford, NY. "In others they would not fill it. Fortunately, once Linda came to us with the problem, we were able to solve it very nicely and economically."

SMART CLASSROOMS

The College of Staten Island, part of the City University of New York, offers bachelors and graduate degrees to about 13,000 students in a variety of fields, including liberal arts, computer science, and engineering.

To date, CSI has equipped about 155 of the existing classrooms, conference rooms, and computer labs on campus with projection systems. John says they are moving to a "smart classroom" standard, where every media-equipped classroom will include a projector, Dell MediaTech podium with a computer, Smart Sympodium, and DVD/VCR installed, plus a simple wall-mounted Pixie Controller from SP Controls. As part of that effort, they began to replace any projectors that are obsolete or have aged to the point where they are no longer cost-effective to maintain.

"I was on campus in the spring and Linda showed me the problems they were having replacing projectors," Silver says. John explains that, "Our ceiling mounts are secured to concrete, and the labor involved in moving them was just ridiculous." Had he done the work, Silver says he would have had to charge $800 to $1,000 per mount, plus the cost of replacing any VGA and any video and audio cables that might not reach a projector in its new location. It's also possible that AC power would have had to be relocated in some instances. John actually uses a local electrical contractor to handle her installation labor, but the issue was the same, and she was reluctant to spend the extra money.

Silver says he looked at the problem and proposed a simple solution, based on the Casio Super Slim projector line. All of the Super Slim models include a 2:1 power zoom lens — a feature that's difficult to find in any other available projector.

"We can put this projector on any existing ceiling mount and, assuming it isn't a special setup with a long-throw lens, know that zoom will exactly fill the screen." Colortone normally supplies a mounting bracket to fit the projector, but in this case CSI was able to reuse the existing universal mounts already in place for the older projectors.

"Don gave us a Casio loaner to test out," John explains. "We took it to different kinds of rooms — computer labs, smart classrooms, and some of our older classrooms. It was fine." CSI bought ten units in the spring of 2009 and liked them so much that they came back with an order for 31 more in June.

"Sometimes the things you never plan on work out really well," John says. "It was perfect. The lens is great. The performance is very good. We like the size — it has a sleek, aesthetic look. And we haven't had any problems with any of the projectors."

A COMMON PROBLEM

Joe Gillio, director of product management at Casio America, says CSI's problem is very common. "I don't know of any projector manufacturer who has found it possible to stick with a given set of throw distances. Even if they don't change the lenses they're using, new DLP chipsets and LCD panels are never the same sizes as the old. New technologies come along and chipsets have to change. That throws everything off."

Some schools and corporate campuses have purchased several different brands of projectors, while others, like CSI, have standardized on just one. But even within one projector line, the throw distances can be different. Casio has worked around the problem by providing customers with a lens that gives them much more flexibility than others would consider necessary.

Not only is this extremely helpful in a retrofit situation, but it simplifies new installations as well. Normally you have a 20 percent zoom range to work with, Silver explains. That's fine, unless you happen to run into ductwork or some other obstruction in the ceiling. "I have another client who has their maintenance staff doing the installations. They called and asked where they had to hang the projector. I said, 'Put it about 14 feet from the screen.' 'OK,' they said, 'do you mean 14 feet, 2 inches, or 14 feet 4 inches, or maybe 13 feet, 8 inches?' I said anything between 10 and 16

feet. That took the worry away, and that is the advantage you get with that versatile lens."

In addition to the long zoom range, Casio offers USB control inputs as well as RS-232C, a unique WiFi adapter, and motorized zoom and focus, which means that if a customer needs to make an adjustment, she doesn't have to stand on a chair.

For the College of Staten Island, the Casio projector and lens made a huge difference, both for image quality and installed cost. As Silver says, "The Super Slim projector is a real problem solver."

INFO

CASIO: www.superslimprojector.com
DELL: www.dell.com
SMART: smarttech.com
SP CONTROLS: www.spcontrols.com
COLORTONE AUDIO VISUAL: www.colortone-av.com

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It's not unusual for heavy users of installed video projectors to replace them every three to five years. If you're re-installing the same model projector, it's a fairly simple job. But what happens if your projector model has been discontinued? Or you simply must have the features of one of the newer models? Hundreds of new projectors are introduced each year, usually with improved performance and lower cost. Does the old mount fit the new projector? Probably not, unless you were smart enough to install a universal mount with the original projector.

Most projector mount manufacturers offer a vast selection of dedicated mounts for specific projector males/models, as well as the more versatile universal mounts. Here are some tips when selecting a universal mount:

- Some universal mounts trade aesthetics and/or durability for installation time. If the "look" of the finished job is important — and you know you will stick with the same model for many replacement cycles — you may want to find a dedicated mount for your projector.
- Make sure the hardware that's supplied with your mount fits directly into your new projector.
- When you need to install a projector extremely tight to the ceiling, look for the smallest overall dimensions in your projector mount. Reading the specifications, be sure you're seeing the overall dimensions of the bracket, not just the depth dimensions of the upper portion or base box.
- Only use mounts made from top-quality materials. Some mounts use low-cost composite blends of low-grade metals or ABS plastic. You don't want to trade off price against the safety of those sitting below a ceiling-mounted projector.