When a group of developers decided to revive a tired hotel to make it worthy of its location in Phoenix’s vibrant arts district, they weren’t thinking small: The hotel’s exterior now displays an ever-changing multistory projection that has transformed the downtown landscape into a digital art spectacle.

Opening in October 2016, the FOUND:RE Phoenix is a 105-room industrial-chic hotel that takes inspiration from local contemporary art, culture, fashion and music – but the journey to its current state was a lengthy one. The eight-story building originally opened in the early 1970s as a budget chain hotel. Developers Habitat Metro and BOND Partners purchased the building in 2011 and began a $25 million renovation in 2015 to create a hotel better suited to its locale.

“We are in the heart of Roosevelt Row, an arts community in Phoenix that was named one of USA Today’s 10 Best city art districts in the country, so we wanted a property with a focus on arts and culture,” said Vittal Calamur, general manager of FOUND:RE Phoenix.

As the hotel’s design came together, the hotel’s cultural curator, Michael Oleskow, sourced more than 25 Arizona artists to infuse works of various media into every aspect of the guest experience. One medium the brand wanted to highlight was digital and interactive art, so the hotel planned a large-scale outdoor projection that would encompass several floors of the hotel and create a captivating public art display.

The planning was the easy part – the hard part was figuring out how to make the vision come to life.

The Technology

The hotel had engaged an AV company for the property’s AV package, including speakers and CCTVs, and was using a different company, Audio Visual Associates, for its in-house rentals. For the exterior projection project, the hotel put out a competitive bid between the two companies, and Audio Visual Associates won.

“The other company was proposing two projectors, stacked one on top of the other,” Calamur said. “But then you get into edge blending, and it became too complex. As I spoke to [James Spiro of JSAM LLC, who was working as a consultant for Audio Visual Associates] about the exterior project, I found out it was something he had experience with.”
Spiro suggested a single projector that would be able to get the job done: an NEC Display Solutions NP-PH1202HL1.

“I said, we can do this with one NEC projector, and we can put it anywhere,” Spiro said. “The built-in technology is that good.”

The other selling point was a trial run of the projector.

“He got the actual projector out so we could test it, and once we tested it, we were all in awe,” Calamur said. “The exterior surface is stucco, so we had concerns about what the image was going to look like on that surface, as well as how much light was going to be given off, because we are in a semi-residential area. James [Spiro] brought this projector to the table and had a lot of confidence it would work, and after we tested it, we were very happy with it.”

Spiro said he has used NEC projectors almost exclusively since 1999, calling them his “go-to.”

“I went with this model because laser projection offers such a dynamic range of contrast,” he said. “The colors are brilliant.”

Spiro added that the proprietary built-in 3-D cornerstone correction also helped this specific project work. When projecting an image onto a surface that is not directly ahead of a projector, an issue called “keystoning” can happen, which creates a warped image. The cornerstone correction lets a user move the image, using a grid and anchor points for reference, until it is lined up perfectly on a surface.

“In our case, if we didn’t have that, the image on the side of the hotel would be a bizarre trapezoidal shape, because we’re overshooting the building in certain areas,” Spiro said. “But with the cornerstone correction built in, we don’t need to put the projector 14 feet off the ground and smack-dab in front of the building as with [the other suggested technology]—we could put it just where the hotel wanted it.”

The Installation

Discussions for the design began in May 2016, with the demonstration and a couple of rounds of testing occurring in September. The installation of the projector and its components— all of which had to be lifted by crane onto the hotel roof— took just a single day.

Some of those components included a custom-built booth, to house the projector and protect it from the elements, and a custom-built stand, which would hold the projector in portrait mode instead of the traditional landscape mode.

“Because of the shape of the building, the projector had to be in portrait mode,” Spiro said. “That was another factor that locked in the NEC projector, because that particular model is built to do that sort of thing.”

The stand had to be custom fabricated to orient the several-hundred-pound projector in portrait mode, which created some challenges, Spiro said.

“We had to work with the booth fabricator to coordinate where the stand should be,” he said. “There was a lot of fine tuning.”
When it came time to put everything together, Spiro said there was a challenge: The stand and the booth – made by two different fabricators – didn’t quite line up with each other.

“Something was off in the calculations,” Spiro said. “We got the stand in the booth and it didn’t fit right – the image projection was hitting the top of the ceiling. Plus, there was a rain gutter on the booth catching all the light.”

The fix was surprisingly simple.

“We figured it out on the fly,” Spiro said. “We took the projector out of the stand, turned the stand around, and put it in backward … and we had our image.”

The Result

The projector installation was ready for the hotel’s grand opening in October 2016, and has been dazzling hotel guests and locals since with digital video creations from a variety of local artists.

“People are blown away by it,” Calamur said. “Everyone who sees it is very impressed with an image that large – when you’re driving down the street and see these artistic images playing on the side of the building, it’s pretty impressive. We’ve had great feedback from our guests.”

Calamur added that the digital projection lends itself well to the hotel’s whimsical, art-centric décor and speaks to one of its four core values – to create a sense of wonder.

“As you walk around the hotel, you get a sense of all types of art – not just photos, not just painting, but also digital and interactive arts,” he said.

Spiro, whose company JSAV LLC has since bought out Audio Visual Associates in Arizona, noted that managing the projector since installation has been easy: Everything is run remotely, with the projector programmed to turn on and off at specific times, so there is no need for anyone to climb up to the projection booth except for standard maintenance. The content plays on autopilot from a computer loaded with NEC’s NaViSet Administrator 2 software, which is connected via Cat 5 to the projector.

“The installation gets a lot of attention because it’s right next to a light rail stop and near condos, so people are always watching the projector,” Spiro said. “If the computer ever freezes, within minutes, someone is calling to say the image is down.”

Calamur added that seeing the projector in action has inspired the hotel to experiment with similar art installations in the future.

“Having experienced this definitely gives us ideas for what we want to do on future projects,” he said.