

# Integrating Video Communication

Oconto Unified School District

*“The installation of Aiphone equipment was very simple and easy, especially the way it tied together.”*

Dave Stern  
President, M.A.D. Enterprises



# Case Study

## Oconto Unified School District

### Challenge

To interact with visitors at locked entrances at their school or other schools in the district.

### Solution

Installed Aiphone's AX Series video door station and the AXW-AVT to create a video intercom solution over the internet.

In the world of security integration, what you may think is simple can become complicated especially if a customer wants a little bit of everything from multiple systems. It is up to the security integrator to make it all work together properly.

"Sometimes you win; sometimes you lose," states Dave Stern, president, M.A.D. Enterprises, Luxemburg, WI. Thankfully, he was recently on the winning end of an install for the Oconto Unified School District located in northeastern Wisconsin. Stern came out Top of His Class, learning valuable lessons along the way.

### Finding the Best Solution

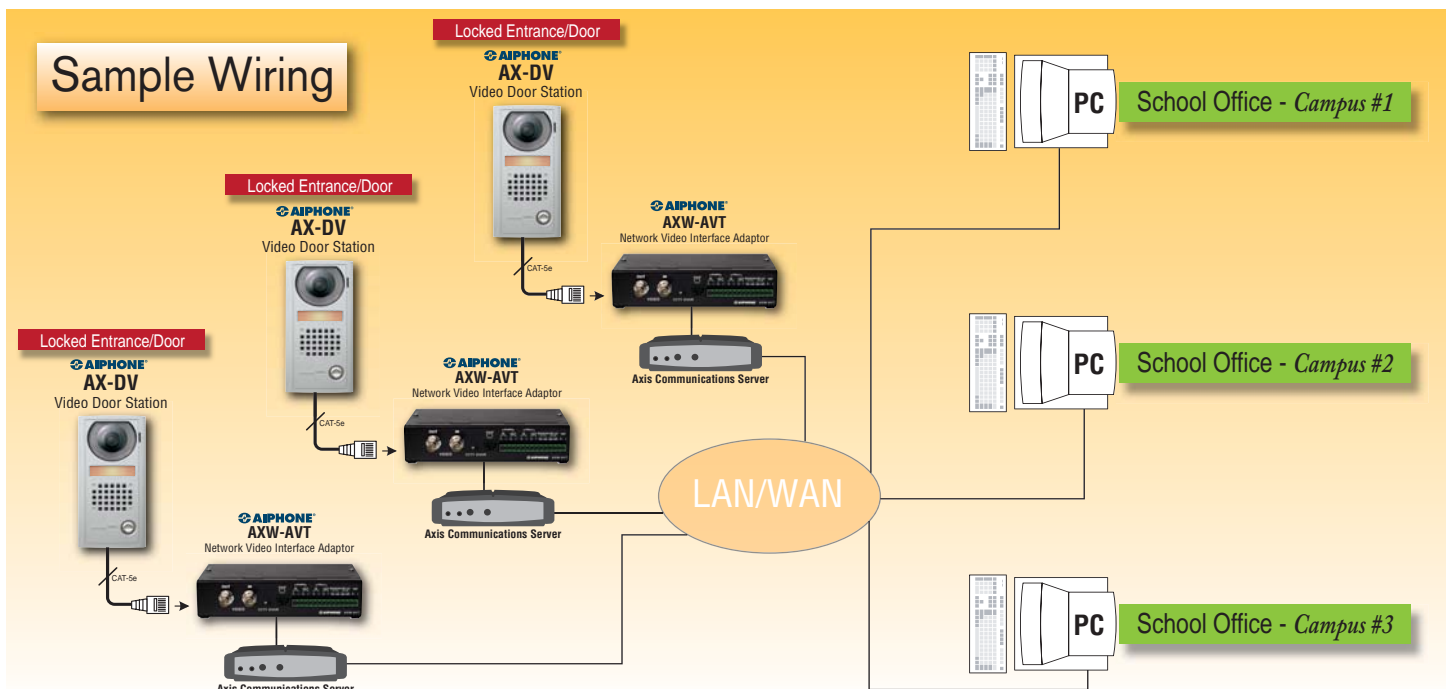
According to Stern, LaForce Inc. in Green Bay, WI, sold a job to Oconto Unified Schools to install an intercom system to be viewed over the Web. The client wanted to be able to view the intercom from any one of the three schools in case there wasn't anyone in the office at one of the locations. LaForce is a leading distributor in the Midwest for door

hardware and a manufacturer of custom hollow metal frames and doors. The LaForce corporate office and manufacturing shops are located in Green Bay, WI. Branch offices and manufacturing shops are located in Madison, WI., Cincinnati, OH, Menomonee Falls, WI (Milwaukee), Vernon Hills, IL (North Chicago), Willowbrook, IL (South Chicago), and Auburn Hills, MI (Detroit). In the last ten years, LaForce has expanded its operations to include residential and security hardware.

"LaForce Inc. does contract work through a lot of different organizations like schools or local businesses," comments Stern. "Since they supply all the doors and the door hardware for commercial doors, they got into systems integration, providing all the electronics that go on that door for security whether it is card access, an electric strike inside that can monitor that door, etc. Within the locations that it serves, for anyone who needs a door electrified, LaForce Inc. wants the business."

Stern hooked up with LaForce as a subcontractor through the company's systems integration manager several years ago. On the Oconto project, LaForce promised school officials they would get what they wanted. The company then enlisted the services of M.A.D. Enterprises.

"I've been in business since 2001," states Stern. "I started out wiring vehicles and race cars". A state certified Journeyman Electrician with 14 years in the field, he now also installs surveillance, access control and intercom systems for a host of clients from schools and universities to apartment buildings. Stern is certified with many credentials including: UDC Electrical Inspector for WI, SBCA certified (DirecTV and Dish Certified), Leviton Certified for Networking; and currently he is working to become NICET certified. The Oconto Unified School District is located in northeastern Wisconsin on the west shore of Green Bay. Covering 103



square miles, the school district encompasses the City of Oconto and parts of four adjacent townships - Abrams, Little River, Oconto, and Pensaukee.

- Oconto Elementary School, built in 2000, is an EC through Grade 4 facility housing 489 students.
- Oconto Middle School, built in 1990, is a Grade 5 -8 facility housing 296 students.
- Oconto High School, built in 1969, houses 411 students.

## Aiphone to the rescue ■

To accomplish this install at the three schools that comprise the Oconto School District, Stern used: the AXW-AVT Aiphone Interface; Aiphone AX-DV door station; Axis Communications Server 243SA Video Encoder; and the Controlware Software Package.

“The idea behind the whole thing, was to use the AXW-AVT to interface to the AXIS Encoder 243SA,” Stern says. “The encoder would make the intercom IP based to be viewed over the Web. The Controlware Software interfaces the intercom with the Axis Server so it is viewable on the schools’ PCs. Pretty simple concept. However, problems were encountered.”

According to Stern, the district wanted a system that if the schools go into lockdown, an intercom could be viewable from any one of those three schools. “If for some reason there was no one in an office (high school, middle school and elementary), anybody from the other offices could open a door from any of those three locations. In other words, it could be controlled from one of the locations,” he explains.

Remote monitoring is made possible through an all IP based system. “It’s all done over the Web. We have four Aiphone intercom units: two intercoms at the high school and one at each of the other schools.”

“I had to run Cat-5E from the AX-DV to the AXW-AVT. I wired the AXIS Encoder as per the installation instructions. You can simply wire all of this in one to two days depending on the distance.”

## Inexpensive solution-High quality product ■

The integrated intercom system is operational during school hours. As video communications intercom, the AX Series features an all-in-one door station, color video camera, microphone, speaker and call in button. Press the button on the unit located outside the school doors. It pops up on computer screens for all three schools. Whoever wants to grant access accepts the call using the Controlware Software. When they accept it, it drops off the other PCs so you know it is answered. From there you either have the control of talking to the person and granting or denying them access. After you have finished the conversation, the window closes.

“When you answer the call, the video pops up and you can literally talk to the person via your computer,” says Stern. “Aiphone is very reliable and a strong unit. It’s been proven, tested, and it’s been out there for many, many years. It’s a rock solid product.”

The AX Series integrates with CO lines, access control

hardware, network devices and surveillance systems. “The way I integrated it,” Stern explains, “the customer is getting enhanced features out of this AX Series normally associated with higher costing systems.”

You have to be cost effective when you are dealing with a small town of 3000-4000 people. “When you go to these small school districts, they do not have unlimited funds. Taxpayers are paying enough money already. Why make them pay even more. Here they are getting something to keep the school secure and can allow the right people to come in. Staff is able to function all three schools at once.”

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- Open locked school doors remotely
- Communicate with visitors via the internet
- Grant access only to welcome individuals

## AXW-AVT

- Allows AX-DV door station connected to AXW-AVT to communicate with a PC
- Easy wiring between AX-DV and AXW-AVT using CAT-5e cable
- Safe way to communicate with visitors
- Remote door opening



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**Aiphone Corporation**

1700 130th Ave NE  
Bellevue, WA 98005  
toll free: (800) 692-0200  
phone: (425) 455-0510  
fax: (425) 455-0071

**[www.aiphone.com](http://www.aiphone.com)**

