

Central Control Rooms

Distance Learning

Energy Management / Conservation

Environmental Control / Automation

Equipment Monitoring

Local Network Administration

Arizona State University

Media Scheduling and Distribution

Networked Campuses

Room Reservations / Setup

Security



Higher Learning EDUCATION

Today's educators are challenged like never before to make students learn more in less time. To aid in the retention and understanding of increasingly complex topics, a multitude of media are being utilized. AMX is the one solution that brings all of the necessary media components together in an easy to understand and utilize fashion. With the touch of a series of intuitive buttons on a single AMX Touch Panel, the modern technology-enriched classroom comes alive, successfully engaging every student. After all, technology is meant to simplify the educator's life, not further complicate it. Leave the technology integration to AMX and let the educators focus on teaching.

At first, educators may be apprehensive of using integrated multimedia for a lesson plan. It requires many different pieces of information to come together and numerous technologies that all work differently. In most of today's classrooms and auditoriums, multimedia presentations and other interactive lessons fall back on traditional methods: a cart of electronic equipment, audio and video selections checked out from the library, presentations manually loaded on to a computer, and stacks of paper handouts. Imagine being able to instantly cue an audio/video selection, freeze it at any time, and seamlessly transition to a PowerPoint presentation. Meanwhile, you simultaneously raise the lights and access a Website or LAN with relevant information. Moments later, you can return to the

audio/video selection, dim the lights, and conclude your presentation by making it readily available on the Internet. These "integrated functions" may appear like complicated tasks that demand a staff dedicated to setup and production. However, all this can be achieved through a simple-to-navigate AMX user interface. Our easy-to-understand, effortless-to-use Touch Panels are so well designed that a single educator without any prior training or technology experience can take control in a matter of minutes. In educational settings already equipped with AMX, faculty members share a high amount of enthusiasm because students remain engaged by interactive lessons, which result in greater overall retention. Now isn't that what education is all about?

Systems integration through AMX control is fast, effective and reliable. Whether for a single auditorium, classroom or campus that stretches the globe with multiple locations, AMX can effectively network all of your multimedia and facility operation equipment into a time-saving, cost-cutting solution. From kindergarten to university post-graduate levels of education, as well as corporate training, AMX has the perfect solution to meet your needs. You will find that the learning curve for using an AMX system is minimal and the rewards are great. Reason enough for the tens of thousands of classrooms around the world that are currently using AMX control. We would like to welcome you to our AMX family – your faculty and students will thank you.

ARIZONA STATE UNIVERSITY

TEMPE, AZ

application profile

NAME

Arizona State University
Lattie F. Coor Building

LOCATION

Tempe, AZ

AMX DEALER

Technology Providers, Inc. (TPI)

PROJECT MANAGER

TPI President Ralph Cruz, ASU Senior
Technology Analyst Sean Snitzer

INTEGRATED MANUFACTURERS EQUIPMENT

Alinex, Ashly, Audio Technica, BTX
Technologies, D Link, Elo, Extron, Furman,
IMP, Link Electronics, Listen Technologies,
Middle Atlantic, Panasonic, Rane, Shure,
Smart Technologies, Sony, Wolfvision

AMX PRODUCT FAMILY

NetLinX

OVERVIEW

This 275,000 square-foot academic center, which cost approximately \$59 million to build during a two-year span, relies on AMX NI Series controllers as the proverbial lifeline to automate and monitor a variety of audio/video equipment. Technology Providers, Inc. (TPI), an AMX dealer based in Phoenix, Ari., partnered with CSS Presentations to work with ASU's IT technical support team to complete a \$2.4 million integrated control system that includes 24 mediated classrooms and a 299-seat auditorium.

HIGHLIGHT

The 24 mediated classrooms, which reside on the second floor, use a consistent, standardized platform. Every room is facilitated through designs based on TPI's exclusive MLX teaching station. These 7-foot adjustable MCLs — mediated classroom lecterns — act as a single interface for ASU instructors to easily select source equipment, access and view data, and request IT support from a touch screen. Equipped with the NI-3000 Integrated Controller from AMX, the stations also provide the ability to activate and control connected DVD and VCR players, two projectors, two projection screens, visiting laptop computers, as well as image previewing and volume output.

THE FUTURE IS NOW

When the new Lattie F. Coor Building, located on the main campus of Arizona State University (ASU) in Tempe, opened its doors in January 2004, it ushered faculty, students and IT technical support staff into the future of enhanced teaching methods, technology-aided learning, proactive maintenance and rapid response times — a future that is being experienced here and now.

This 275,000 square-foot academic center, which cost approximately \$59 million to build during a two-year span, relies on AMX NI Series controllers as the proverbial lifeline to automate and monitor a variety of audio/video equipment. Technology Providers Incorporated (TPI), an AMX dealer based in Phoenix, AZ, partnered with CSS Presentations to work with ASU's IT technical support team to complete a \$2.4 million integrated control system that includes 24 mediated classrooms and a 299-seat auditorium.

"ASU is probably one of the most progressive institutions in the country as far as introducing technology into the classroom," said TPI President Ralph Cruz. "For the past five to six years, they have been extremely aggressive in outfitting their classrooms with mediated systems, providing the instructors with intuitive control so that students receive the best education possible."

MCLS & NETLINX

The 24 mediated classrooms, which reside on the second floor, use a consistent, standardized platform. Every room is facilitated through designs based on TPI's exclusive MLX teaching station.

These 7-foot adjustable MCLs — mediated classroom lecterns — act as a single interface for ASU instructors to easily select source equipment, access and view data, and request IT support from a touch screen. Equipped with the NI-3000 Integrated Controller from AMX, the stations also provide the ability to activate and control connected DVD and VCR players, two projectors, two projection screens, visiting laptop computers, as well as image previewing and volume output.

"This is the first building on ASU's campus to be entirely uniformed using this kind of technology," Cruz said. "Any instructor can go from room to room and experience a mediated classroom environment that is identical to all the others."



The same design concept was implemented in the auditorium located on the first floor. A few extra audio/video devices exist here in order to provide high-level audio and video playback. Ultimately, the control capabilities are virtually the same as those in the mediated classrooms. A 5.1 DVD player, for example, delivers a formidable graphics presentation and sound system. Multiple projectors display images across several large projection screens in order to accommodate hundreds of students or audience members in attendance. ASU instructors take control with maximum confidence and receive results in a much more expansive setting.

REMOTE MONITORING

ASU's IT staff uses the university's local network and the Internet to remotely monitor all integrated pieces of equipment, from any location on campus, at any time. The NI-3000 controllers in the mediated classrooms and auditorium provide Web-based integration and control that, in essence, makes downtime virtually non-existent. IT can respond to any situation — equipment maintenance, user assistance — in a matter of moments.



Using NetLinX, IT also has the ability to distribute content throughout the building from five different camera-outfitted classrooms and the auditorium, remaining in control on both ends of the video feed.

A Web camera positioned at the rear of each classroom gives IT staff members the ability to see exactly what is happening in the room and how to offer the appropriate support. The moment an instructor calls for assistance, usually by email

or phone, the IT staff member can simply enter the IP address of the classroom's Web camera. In a matter of seconds, IT is virtually in the room and can visually diagnose any problems that the instructor may have encountered.

After connecting to the classroom's Web camera, IT can then access the NI-3000 controller also using an IP address. This gives IT instant control of all integrated devices.

"Much of what is happening in the Lattie F. Coor building comes down to technical support," said Sean Snitzer, Senior Tech Support Analyst at ASU. "NetLinX is the only way to go as the convergence of IT and A/V become more prevalent in the university environment. Any additional support we can provide will reduce downtime in the classrooms, and that means a lot to the students who are paying top dollar for an education."

About midway through the construction of the Lattie F. Coor building, TPI met with ASU officials to display a prototype of the stand-alone MLX mediated teaching station / lectern.

Technology Providers, Inc. (TPI)

ADDRESS

531 East Elliot Road, Ste. 145
Chandler, AZ 85225

PHONE

480-857-0099

WEBSITE

www.technoprov.com

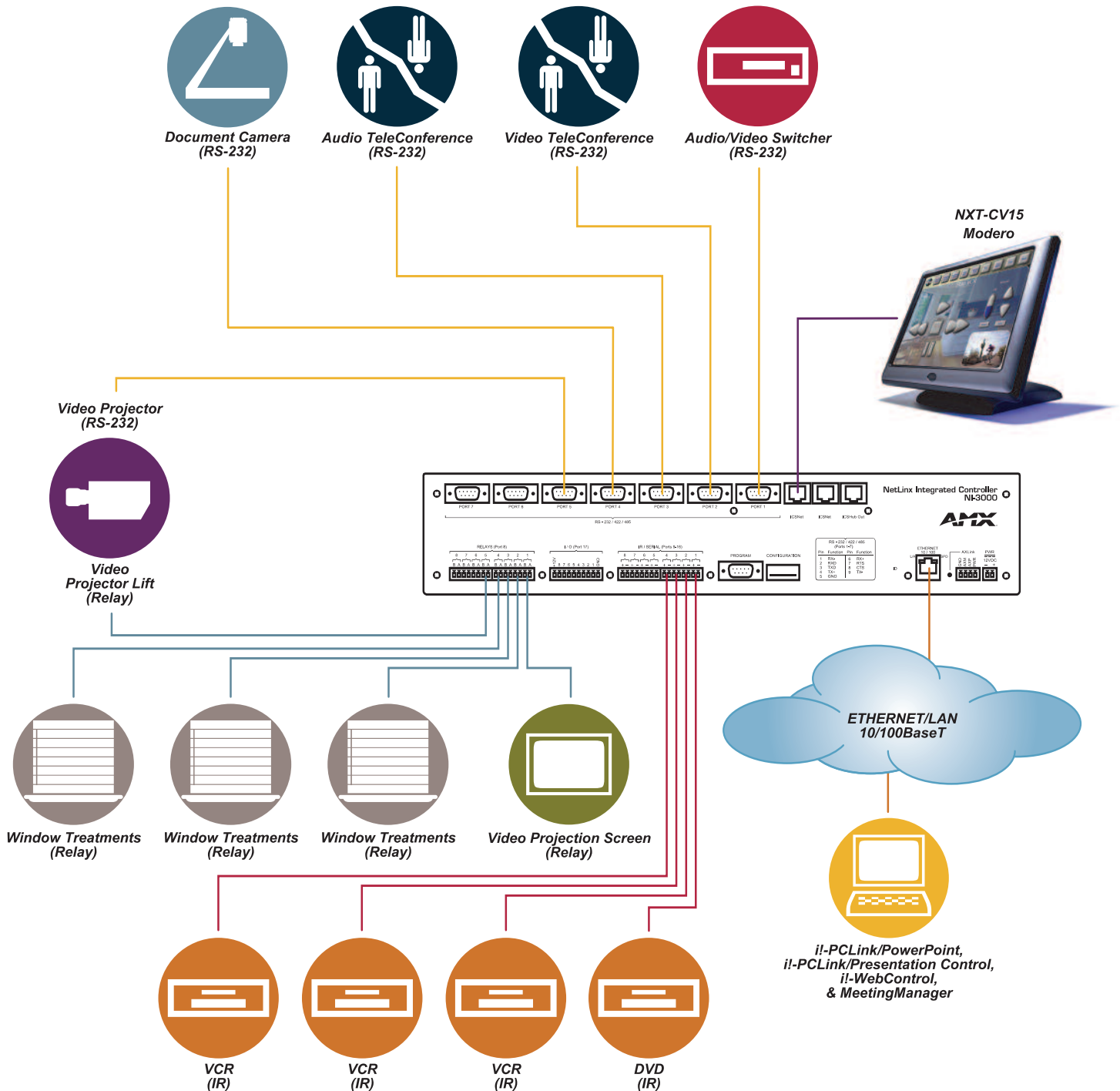
BUSINESS FOCUS

Technology Providers, Inc. is a new type of multimedia integration company with corporate offices in Phoenix, as well as regional offices Dallas and Colorado Springs. TPI is a leading integrator specializing in turnkey audiovisual solutions for the corporate environment. Working with a wide variety of organizations, TPI designs, builds, and delivers systems all over the country with great success. TPI's systems are engineered to be cost effective, reliable, and without question easy to use. The applications TPI develops range from simple mediated conference rooms to sophisticated video conferencing suites. TPI takes great pride in the fact that when they say they can do it, they can.



EDUCATION

- IR
- RELAY
- ICSNET or ETHERNET
- ETHERNET
- RS-232



IT'S YOUR WORLD. TAKE CONTROL.

ARGENTINA • AUSTRALIA • BELGIUM • BRAZIL • CANADA • CHINA • ENGLAND • FRANCE • GERMANY • GREECE • HONG KONG • INDIA • INDONESIA • ITALY • JAPAN
 LEBANON • MALAYSIA • MEXICO • NETHERLANDS • NEW ZEALAND • PHILIPPINES • PORTUGAL • RUSSIA • SINGAPORE • SPAIN • SWITZERLAND • THAILAND • TURKEY • USA
 ATLANTA • BOSTON • CHICAGO • CLEVELAND • DALLAS • DENVER • INDIANAPOLIS • LOS ANGELES • MINNEAPOLIS • PHILADELPHIA • PHOENIX • PORTLAND • SPOKANE • TAMPA
 3000 RESEARCH DRIVE, RICHARDSON, TX 75082 • 800.222.0193 • 469.624.8000 • +1.469.624.7400 • 469.624.7153 fax • www.amx.com

© 2009 AMX Corporation. All rights reserved. AMX and the AMX logo are all trademarks of AMX Corporation. AMX reserves the right to alter specifications without notice at any time.