# FLEX-LT Case Study

Alpha Natural Resources
Running Right Leadership Academy





Alpha is a leading global coal company and the world's third largest metallurgical coal supplier. In summer 2013, it opened up the Running Right Leadership Academy, a state-of-the-art education facility and comprehensive training ground for safety and operational excellence for up to 300 people. Through partnerships with world-class institutions like Virginia Tech, West Virginia University and the University of Utah, offers a curriculum that includes technical skills, safety and leadership. It includes a mine lab with 96,000 sq. ft. that simulates real mine situations and conditions; a virtual reality lab with simulators to provide training on a continuous mining machine, roof bolter, scoop and haul truck; multiple labs for electrical, maintenance and welding training; facilities and equipment for supervisory leadership skills training; and a command center for mine rescue and emergency preparedness training.

WHERE: Julian, West Virginia

WHEN: January 2013

WHAT: FSR FLEX Control System

WHO: Mr. Mike Carroll, Creative Audio Visual Group

# Challenge

To design and deliver a user-friendly, cost-effective control solution for modular-shaped classrooms and lecture halls that would also be flexible for reconfigurable rooms.

#### Solution

An FSR FLEX-LT self-contained control system that can be placed in numerous locations and offers customized programming capabilities and remote control operation for the utmost flexibility.

#### Results

A user-friendly system designed to control a wide range of equipment including speakers, networked configurable amps, drop-down screens, projectors, document cameras, DVD players, wireless mics, source switching volume, and more.

### The Project

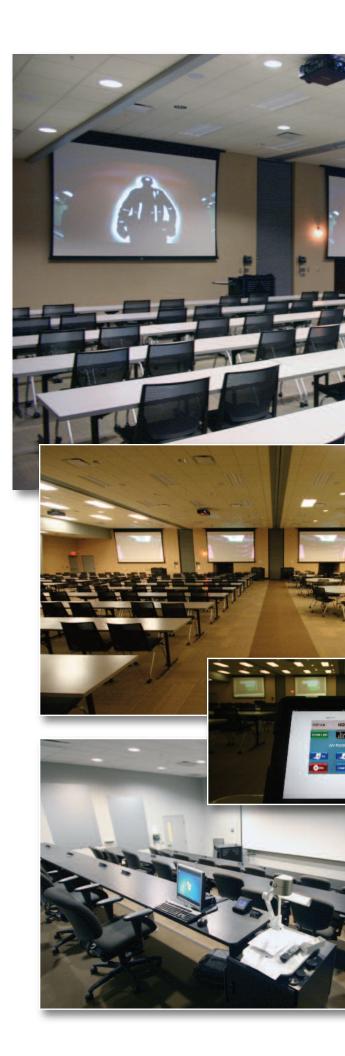
When Alpha Natural Resources, a leading global coal company and the world's third largest metallurgical coal supplier, decided to open up its Running Right Leadership Academy in Julian, West Virginia, it knew it would need a robust control system to handle the vast amount of equipment that would be required for its state-of-the-art education facility and comprehensive training ground for safety and operational excellence.

The brand new 136,000-square-foot training facility was outfitted with four large partitioned and modular lecture halls that would be combinable, a variety of combining classrooms, a theater, an underground mine simulator and a mobile command facility. Among the large requirements list, the Academy would need a control system sturdy enough to control the projectors, screens and audio in modifiable rooms, and intuitive enough for users of different technology capabilities to operate. At the top of the list, these systems needed to be able to interface with and control multiple manufacturers' products.

Creative Audio Visual Group, (creativeavgroup.com) a leading solutions provider that furnishes design, engineering and audio/visual integration services, was tasked with installing and programming the control system. He chose 15 FLEX-LT self-contained control systems from FSR with a wide range of features and an affordable price point. The FLEX-LT system can be mounted on a wall or placed on a desk. Its easy-to-use and understand color touch screen allows the user to choose which source is being displayed and control it, change the volume, turn lights on and off, raise or lower the shades or screen and more. These features are just what the Academy needed, since the control system would need to manage 110 Bose speakers and Bose networked configurable amps, program drop-down screens, turn on/off projectors, control doc cameras, DVD players, wireless mics, switch source and volume, and more, all on a networked scheduling system.

In addition to using the 15 FLEX-LT systems, Carroll chose the FLEX control manager iPad app to allow for remote control of the equipment from afar, as well.

The modular classrooms and lecture halls presented a challenge. The four partitioned rooms needed to be controlled individually when separated, and as two rooms when the partition would be removed. The furniture also needed to be movable based on the configurations necessary for the programs being presented. The control systems could not simply be embedded into the podium (although that certainly would have made it easy for presenters) but also on the walls so that they worked when the rooms were modified.





Reliability was a huge concern since some spaces were to be in-use 24/7. Being

a small company and not tied to a specific manufacturer's solution, Creative Audio Visual Group found that the FSR FLEX-LT control system could "play well" with

other manufacturer's product and was easily programmable. It was also robust enough to control the AV equipment that had been chosen for the job.

"The FLEX was a great fit," says Carroll. "We found that there was great support from FSR when programming the FLEX, and that we were able to customize it to do what we wanted without much fuss. Aside from it being able to control other manufacturer's

products, the training associated with the handoff

to the end user was minimal."

Carroll was also pleased that training was kept to a minimum. "The goal when handing off a system like this is that it had to be as simple as possible, and we had

to set it up right and make it easy for the end user."

The Academy would have only one person on staff to oversee the day-to-day operations of AV and IT, trained to troubleshoot any issues and use the iPad app to monitor the systems in the building. Carroll explains that based on feedback from The Academy, "they really like the systems. They are reliable, intuitive and work well. They have an older building with unreliable equipment and they actually called us back to quote the Flex control systems in that location as well."

Ultimately, the key is to have a control system that works seamlessly and flawlessly. Carroll has seen unreliable equipment "especially coming from overseas, so it is nice to find a U.S.-based manufacturer that stands behind the quality product it produces."





# **Looking Forward**

An older building will also likely get an overhaul, and Alpha anticipates using the Flex control systems again for reliable, seamless control.

#### **About FLEX-LT**

The Flex-LT is a self-contained control system that has a vast number of features and a price point that everyone can afford. The Flex-LT mounts in a wall or sits on a desk and presents the an easy-to-use and understand color touch screen. Through the touch screen the user can choose what source is being displayed, change the volume, control the various sources, turn lights on and off, raise or lower the shades or screen and much more!

Using the built in scheduler, the Flex-LT can automatically shut off displays that have been accidentally left on and also alert the support staff if there is an issue in the room such as the lamp life getting too high in order to reduce the down time of the room.

The Flex-Able configuration utility features an easy to use method to get the most out of the system. The contractor is presented with an easy to follow drag 'n drop programming methodology; no need to learn another programming language. Flex-Able eases device control by offering IR libraries or if a library is not available, the Flex-IR learner is a snap to use.

FLEX-LT 300 is a specialty member of the FLEX family. The LT300 can be mounted in a rack or Ceiling Box and connected to all of the devices that need to be controlled. The user interface is provided by the LT150.



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#### **About FSR**

FSR, established in 1981, manufactures a wide variety of signal management and infrastructure solutions for the audio / video, datacom, education, hospitality, government, and religious markets, including floor, wall, table, and ceiling connectivity boxes, as well as a full line of interfaces, distribution amplifiers, matrix switchers, seamless switchers and HDBaseT & CAT-X signal delivery solutions.

The company is an Energy Star Partner and complies with the American Recovery and Reinvestment Act of 2009 to demonstrate its deep commitment to preserving the planet. FSR offers live 24/7 technical and sales support throughout the country from expertly trained technicians and sales representatives.

For more info: fsrinc.com.

# About Creative Audio Visual Group

Creative Audio Visual Group is a solutions provider of the design, engineering and integration of audio/visual challenges of its customers. Creative Audio Visual Group is located in Ona, WV and can be reached through their website at cretiveavgroup.com, by phone at 304-733-0874, or by email at mikec@creativeavgroup.com.

CAVG is known as the "go-to" company for all things involving sound, lighting, and video in the tri-state area and beyond. The staff at CAVG consists of some of the most credentialed and talented people in the business from audio engineers, theatrical/stagecraft, lighting, and video experts with countless years of experience.

As fully licensed and insured contractors, CAVG is involved in all A/V disciplines of the construction process. From design, bid, and build, CAVG can be the link between customer, architect, engineer, and builder.