Building Automation Without Limits

The *Continuum*™ Building Automation System is not just a new product, but a totally new approach to managing your building—your way. Fully programmable, completely flexible, and incredibly easy to use! *Continuum* features a totally modular plug-and-play design, a powerful 32-bit CPU with FLASH memory, and a Windows NT front-end workstation—all *directly* connected to your high-speed Ethernet network. And of course, *Continuum* is backward-compatible to *Infinity*, our highly successful building automation system currently installed in over 40,000 facilities worldwide.

From the smallest system to the largest; from a single unit ventilator to a central utilities plant—*Continuum* is designed to meet the demands of any facility with:

- Powerful networking capabilities
- Unmatched flexibility and programmability
- Interoperability with your existing systems and support for "open systems"
- Scalability, so your initial investment can grow with your building's needs

The state-of-the-art in Building Automation has changed.

Single User
- Windows NT Workstation
- MS Access database
- Non-proprietary PC platforms
- LAN or dial-up configurations
- Native Ethernet TCP/IP connectivity at the controller level

- Windows NT Server
- SQL database
- Non-proprietary PC platforms
- LAN and WAN communications
- Native Ethernet TCP/IP connectivity at the controller level

Multi-User
- Windows NT Workstation
- Graphical interface
  HTML reports
  Alarm management
  Scheduling
  Graphic floor plans
- E-mail

- Familiar web browser interface
- Set occupancy schedules
- Run reports

Ethernet TCP/IP

Local Input/Output
- Digital
- High-speed counters (10 kHz)
- Current
- Voltage
- Temperature (RTD, thermistor)
- Pneumatic

- High-density alarm monitoring
- Central utility plants
- Process control applications

Local Control Network
- Packaged units
- Chillers
- Boilers
- VAV boxes
- Terminal units
- 254 controllers per Ethernet controller
- 1,000,000 alarm points
- Hundreds of workstations
- 4 million Ethernet nodes

Third-Party Interfaces
- Power monitoring
- Fire and smoke detection
- UPS
- PLCs

- Lighting control
- Alarm monitoring
- Voice annunciation and control via touch-tone telephone keypad

- Programmable remote user interface
- Modify setpoints
- View equipment status
- Adjust schedules

Networkable

The *Continuum* Building Automation System brings the benefits of the world's most popular networking standard—Ethernet TCP/IP—directly to the controller level. There are no gateways, terminal servers, or other miscellaneous hardware, so you benefit from high-speed communications, lower installation and operating costs, and easier network management. Most important—you can use your building's existing corporate network as your main system backbone. Tackle your most demanding building automation applications in both LAN and WAN configurations—send alarms via e-mail and pagers, and even retrieve system data via the Internet! In all, up to 4 millions users can access the Ethernet simultaneously!

Flexible and Programmable

Building automation requirements are different in every building. You need flexibility to implement custom applications that fit your building control philosophy—you don't want a system that limits you to fixed control, canned alarm, and rigid communication strategies. With Andover Controls *Plain English*®, an easy-to-understand programming language that works for all *Continuum* controllers, Andover Controls redefines the word "flexible." You can optimize equipment runtimes, override standard operating schedules based on various conditions, and create custom reports that can be used by any third-party application software. There's no limit to the power of *Plain English*.

Interoperable

Andover Controls is committed to interoperability and open systems. *Continuum* software is designed around the widely accepted desktop standards driving the computer industry (OLE, COM, DCOM, ODBC, etc.). Embracing these standards makes *Continuum* as familiar and easy-to-use as the other applications on your desktop. And *Continuum's* ODBC-compliant database means you can share information with your company's existing information systems—from the maintenance management system to the tenant billing system. By providing a library of interfaces to other manufacturers' systems, *Continuum* can talk to your entire building. There are currently 100 available communications drivers to third-party systems—chillers, fire alarm panels, air handlers, CCTV systems, emergency generators, lighting controllers, fuel tank monitoring systems, and more.

Scalable and Affordable

From the smallest system to the largest, *Continuum* offers a true building block approach to system expansion. Simply add, mix, and match the right combination of CPU power and I/O for your requirements. Rest assured that your initial investment in *Continuum* is secure and will grow along with your building and control requirements. And because there's only *one system* to learn—even as the system grows, you get the benefit of reduced installation, training, and operating costs for many years to come.

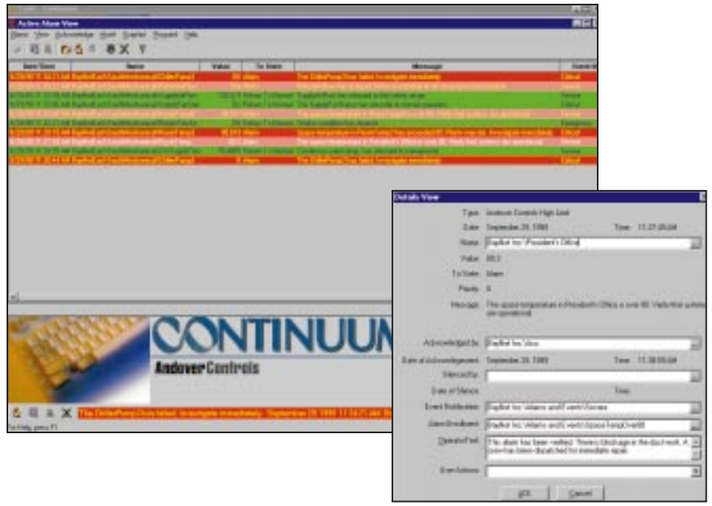
Continuum™ CyberStation™—The Most Powerful Window in Your Building

The *Continuum* CyberStation front-end is the focal point for running your building. From a single *Continuum* workstation, you can centrally manage as *one seamless* system the vast amounts of information your building generates each day. And it's so easy to use. *Continuum* presents information to the operator using a graphical menu system and dynamic color graphic screens to paint a picture of conditions throughout your facility. View and acknowledge alarms, monitor building systems, turn lighting and equipment on and off, run reports, modify schedules and setpoints, and more.

The state-of-the-art in Building Automation has changed.

Graphic Display System

- Import any common background file
- Extensive library of built-in controls
- Add live animations to show damper operation, point status, fan motor control, fuel levels, etc.
- Easily configurable menus with web-like hotspots
- Link video files and documents to assist on maintenance tasks



Alarm Management

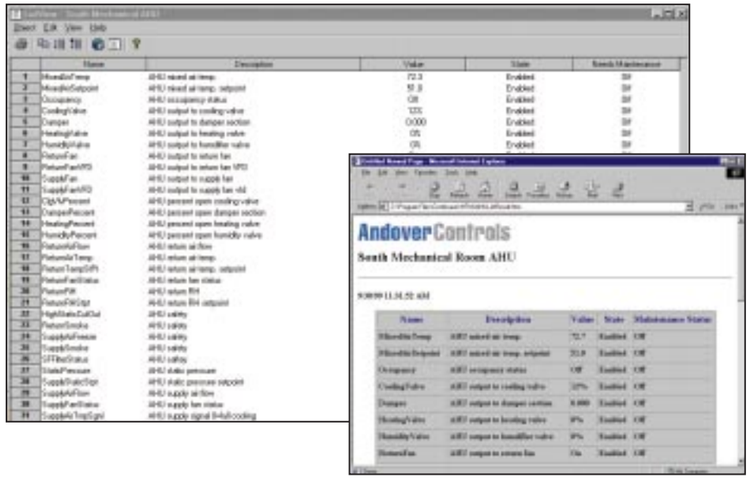
- Immediate notification and logging of all alarm events
- Current alarms with status displayed, sorted by priority and/or date and time
- Primary and backup alarm paths with repeat and escalate for true reliability
- Built-in audio/video for alarm annunciation
- Display an on-screen graphic panel and/or print a report in response to an alarm
- Send alarms effortlessly through corporate e-mail and paging systems

Schedules

- Easy to create and simple to modify
- Standard and user-defined day types
- Tabs "zoom-in" from yearly to monthly, weekly, or daily
- Use schedules for any time-based strategy:
  Lighting control Alarm routing
  Elevator control Report printing
  Equipment start/stop
- Calendar through the year 2100

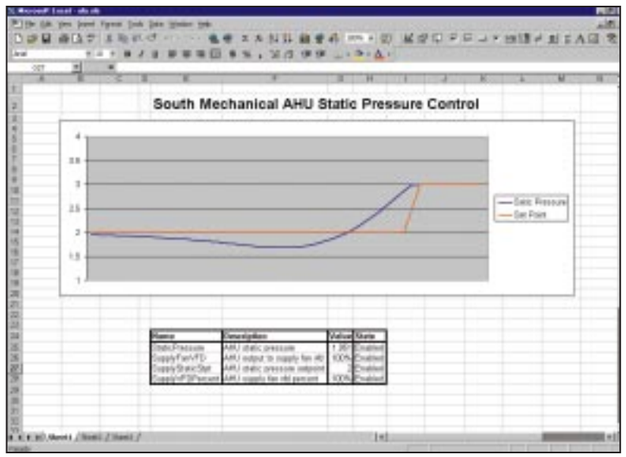
ListViews and Custom Report Generation

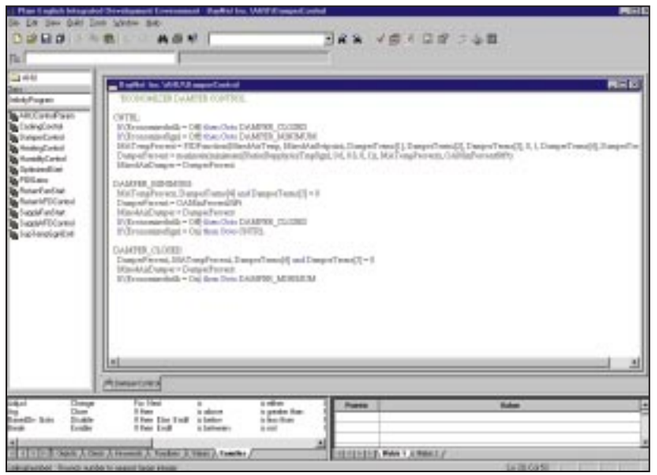
- ListViews—easy to set up, pull up, and read
- Use for any type of object—inputs, outputs, events
- User-defined columns, filtering criteria, sort order, fonts, colors
- Optional prompts for user input
- Generate custom reports using *Plain English* or SQL queries
- Total control of output format
- Interface with maintenance management systems, data archiving programs, etc
- Can output reports in HTML web format



OLE Interface

- Drop pre-built OCX control on third-party spreadsheet
- Graph logged data
- Display dynamic lists from CyberStation database
- Display live data at any location in the workbook
- Allow point changes directly from third-party package using security that overlays CyberStation user security





Plain English Integrated Development Environment (IDE)

- Powerful *Plain English* application language
- Color-enhanced, graphical environment makes creating, editing programs simple
- IDE "Assistant" eliminates typing of keywords, point names, and paths
- Provides flexibility to address custom building automation applications such as load shedding, demand limiting, occupancy-based lighting control, setpoint reset, equipment optimization, etc.

Continuum™ Building Automation Modules—Redefining Flexibility

Continuum hardware—sleek, modular, and designed for DIN rail or panel mounting. The *Continuum* NetController CPU, power supply, and numerous I/O modules are all individual modules, each enclosed in a compact, lightweight casing. Standard connectors on the left and right sides of each module snap together to carry power and communications signals from one module to the next. Installation couldn't be easier!

All *Continuum* modules can also be mounted in an optional seven-inch deep NEMA 1-style enclosure. For added flexibility and convenience in applications such as lighting control, central plant control, or MCC panels, a single module or groups of modules can be remotely located and powered from a local 24 VDC power supply—full networking support is built in.

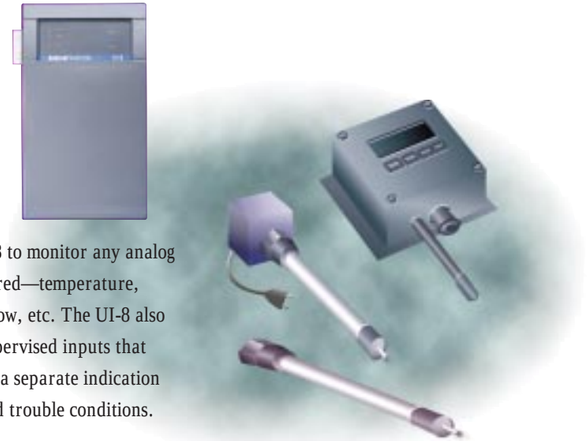
Continuum provides a complete set of input, output, and special application modules to meet any building's automation needs. With the *Continuum* system, as your BAS network grows, simply add or replace I/O modules as needed. Your original investment is always preserved.

The state-of-the-art in Building Automation has changed.

Module Features

- Built-in signal conditioning—saves valuable field installation time and money
- Status indicators—provide easy viewing
- 3-position, flip-up front cover—hands-free access
- Removable input and output connectors—easy maintenance
- Push-button commission switch—eliminates DIP switches

The AO-4-8 provides full analog control with 8 bit resolution. It can be applied to any device, from valves to drives, that accepts a 0–10 V or 0–20 mA signal. Full override capability is available permitting emergency manual operation over the full range of the device.



Use the UI-8 to monitor any analog signal required—temperature, humidity, flow, etc. The UI-8 also provides supervised inputs that can deliver a separate indication of alarm and trouble conditions.

The NetController CPU brings the power and benefits of Ethernet TCP/IP networking directly to the controller level. Four programmable communication ports provide third-party communications to fire systems, fume hoods, paging systems, factory mounted controls on chillers, boilers, air handlers, VFDs, etc.

Use the DO-4 (or one of our other output modules) to control any digital device—fans, pumps, fire dampers, etc. Groups of DO-4s can be combined for complete control of multi-cell cooling towers or other devices that might require local staging.

Other Family Members

DI-8	8 digital or counter inputs
DI-6-AC	6 high-voltage digital inputs
DO-6-TR	6 triac digital outputs
DM-20	20 digital inputs/outputs
AC-1	1 card reader input; 3 supervised alarm imputs; 2 form C relay door outputs

Continuum System Certifications

- UL 864
- UL/CUL 916
- UL 1076
- UL 294
- FCC
- CE

The VT-1 provides you easy-to-use, voice-prompted data entry capabilities for the *Continuum* control system using your familiar telephone keypad. Perfect solution for tenant override control.

The LO-2 permits the control of 2 high-voltage lighting circuits. Control can be accomplished based upon time schedule alone, or in conjunction with a photocell. Momentary overrides can allow unscheduled operation while relay status feedback will indicate true operating position.