



THE **trend**

THE OFFICIAL QUARTERLY NEWSLETTER OF RELIABLE CONTROLS® CORPORATION



INTRODUCING...
THE BIG NEW TOY



THE MACH-ProSYS AND MACH-ProPOINT

After two years of research and development, Reliable Controls® proudly released the latest editions to the MACH-Pro series of controllers, the MACH-ProSys™ building controller, and the MACH-ProPoint™ expansion module. These products made a prominent debut at the AHR Expo 2008 in New York and significantly raised the bar in the HVAC industry for design, function, and speed.

The MACH-ProSys™ is a sleek and powerful 32-bit BACnet® device that delivers unprecedented value in a high-performance, programmable building controller. The MACH-ProSys™ provides 10/100 MHz Ethernet/IP communications, 12 inputs and 8 outputs, and multi-protocol support, including SMTP, BACnet Ethernet/IP, MS/TP, PTP and Modbus master/slave on both RTU and TCP networks. The dual BACnet

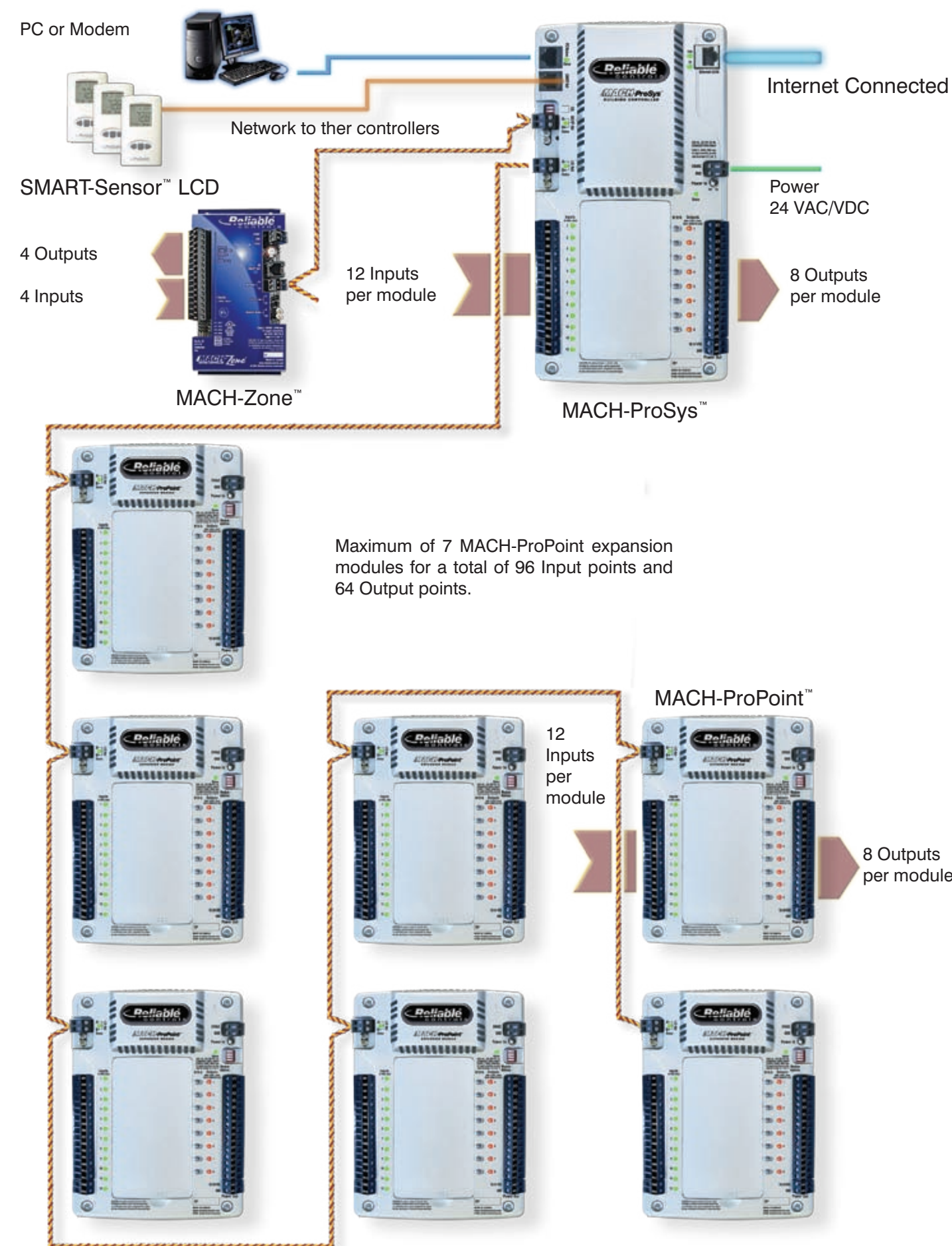
IP ports internal to the MACH-ProSys™ make integration to Wide Area Networks a snap. The SMTP protocol provides standard email configuration, allowing the MACH-ProSys™ to email alarm messages to any recipient list. All this functionality comes in addition to the MACH-Pro series' full backwards compatibility with legacy systems manufactured by Reliable Controls®.

The controller database allows users to define up to 160 universal I/O on a single address. Additional I/O points can be added using convenient MACH-ProPoint™ I/O expansion modules. Each MACH-ProPoint™ expansion module offers a robust 12 universal inputs and 8 universal outputs. Up to 7 MACH-ProPoint™

expansion modules can be added to each MACH-ProSys™ controller, allowing the controller I/O to easily match the applications found in a wide range of systems.

The MACH-ProSys™ and MACH-ProPoint™ each ship standard with rugged, removable 45 degree screw terminals and 24 VDC power supply for powering peripheral devices, as well as adjustable voltage trim potentiometers for convenient field override of each output. Hand/Off/Auto (HOA) switches are available as an option for all MACH-Pro products.

To learn more about these exciting new products, please visit the MACH-Pro series page on our website.



Interconnect 08

Over 150 attendees from more than 50 Reliable Controls® Authorized Dealers descended upon Lake Las Vegas to share in three days and three nights of food, drink, discussion, and fun. The Lake Las Vegas resort was the ideal venue for Interconnect 08, with enough variety of shops and services close by to keep everyone comfortable, yet far enough from the strip to keep everyone focused. The Ritz-Carlton ballrooms and salons were perfect for hosting the large meetings and delivering the food services needed to keep the busy agenda on track. The overall event was very well received, and by the time the farewell dinner ended, many people were smiling about the new friendships they had forged. Below is a sample of the comments which arrived by email in the days following the event:

Finally meeting other dealers, and meeting the Reliable Controls staff whom I spoke with for years, and listening to all the dealer input, was a great experience!
– **Dave Zinger, Jade Logic**

I could write for a long time of the things I liked about the meeting. I go away with many “Wow’s”. But the overriding thing is the level of respect, admiration and confidence I have for the entire team at Reliable Controls.
– **Irv Gupton, Setpoint Automation**

We thought the entire conference was extremely well planned, educational, and enjoyable. We are fortunate to be involved in other peripheral programs, and I have to say

Reliable Controls dealers are some of the nicest people. They truly understand our industry, the importance of relationships, and the positives of partnering with the right organizations!
– **Sarah Monteleone, Functional Devices Inc.**

I learned a great deal from other dealers and was extremely pleased with the itinerary of events and the important topics we covered. The venue was perfect. Thank you for making this event a reality!
– **Peter Laan, Control Solutions AB**

Thanks for including us at Interconnect ‘08. The event helped us get a better understanding of Reliable Control’s priorities and strategies, and provided us a unique opportunity to interact and support our common customers.
– **Lex van der Weerd, Belimo Americas**

Thank you for the wonderful event you put on. It was very well organized and was a fantastic exchange of ideas, information, future direction, wine, beer, lies and tall tales. All of us enjoyed being part of such a forward thinking organization. Your timing and organization of the day-to-day sessions kept us on time and on focus, and there was still enough time to listen and to exchange ideas. Great job!
– **Claude Nobauer, Control Solutions BC**

Reliable Controls® is committed to building relationships between dealers from all around the globe with the goal of bringing global knowledge to local customers like you.



CONGRATULATIONS TO ALL 2007 AWARD WINNERS

DEALER OF THE YEAR – 2007



To achieve Dealer of the Year, a dealer must be staffed with talented and skilled people, who are exceedingly organized and focused, excellent at communicating and delegating, stubborn, honest, perfectionist, and always willing to lend a hand. Having a good sense of humour really helps too! Enviromatic Systems has a house full of staff with all these qualities, and they keep them motivated and productive, year over year.

Congratulations to all of the staff at Enviromatic Systems for yet another outstanding year of excellent performance, clinching the number one position in our worldwide dealer network!

MILLION \$ MILESTONE

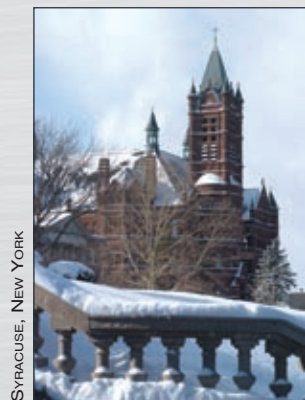
Congratulations to Fraser Valley Controls for achieving over \$1,000,000.00 in historical purchases with Reliable Controls®. This very significant milestone substantiates a strong and long-lasting commitment to Reliable Controls®, and provides a testimony of satisfaction from the life-long customers connected to a dealer of excellence. Congratulations!



	MVP OF THE YEAR	ENTREPRENEUR OF THE YEAR	DEALER OF THE YEAR
EASTERN USA	Intercon Systems	Precision Automation	Pritchett Controls
MIDWESTERN USA	FM Controls	Quality Control Services	Enviromatic Systems
WESTERN USA	Control Network Services	LPC Automation	Essential Building Technologies
EASTERN CANADA	Setpoint Building Automation	S & T Electrical Contractors	Les Services Technologiques A. C.
WESTERN CANADA	Look HVAC	Fraser Valley Controls	Control Solutions
INTERNATIONAL	Lucon Automation	RGM Control Systems	Austec Building Automation



NEW DEALERS



SYRACUSE, NEW YORK

DAVIS MECHANICAL SERVICE
6689 Old Collamer Road
East Syracuse, NY
13057

SOUTHEAST AUTOMATED SYSTEMS
1213 Summerhill Road
North Augusta, SC
29861



AUGUSTA, GEORGIA

SIMMONS HEATING & AIR CONDITIONING
11780 McColl Road
Laurinburg, NC
28532



FAYETTEVILLE, NORTH CAROLINA

BC ENERGY MANAGEMENT SYSTEMS
161 Fashion Lane, Suite 100
Tustin, CA
92780

W.H. DEMMONS
93 Warren Avenue
Portland, ME
04103

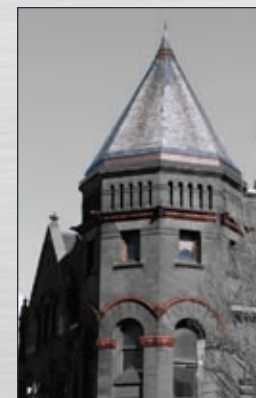
www.whdemmons.com



PORTLAND, MAINE

ADVANCED HVAC SOLUTIONS
2777 Ra-Wa-Si Avenue
Traverse City, MI
49684

INTUITIVE AUTOMATION
300 Bacon Rd
Red Lion, PA
17356



YORK, PENNSYLVANIA

INNOTECH
Carlos Salazar 1853
Monterrey, NL
Mexico

PERRY AUTOMATION AND CONTROLS
1009 Crystal Ave
Crystal Falls, MI
49920



ANAHEIM, CALIFORNIA



TRAVERSE CITY, MICHIGAN



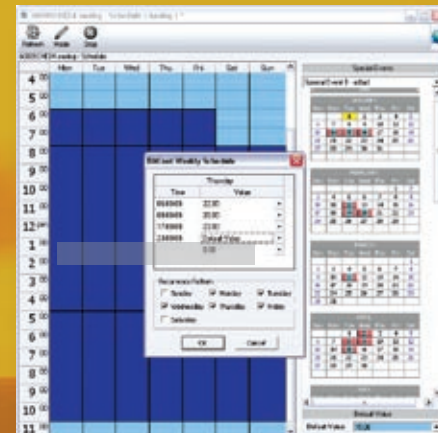
MONTERREY, MEXICO

NEW RC-STUDIO 2.0 UPDATE

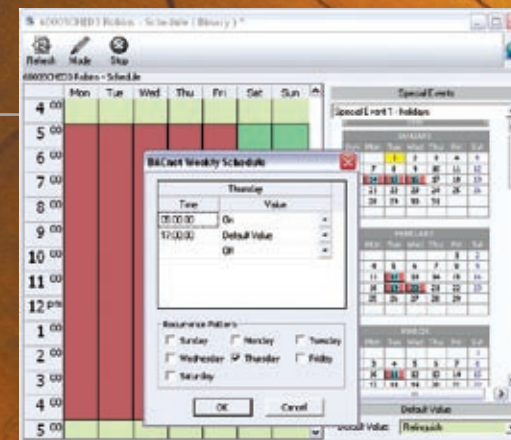
Update 1.41 for RC-Studio® 2.0 is now available for download in the Customer Support Center.

There are several major points of focus for Update 1.41, including MACH-ProSys™ and MACH-Pro-Point™ integration, additional BACnet support, including the BACnet Schedule Object, and support for RC-Archive™ 2.0 Log Status.

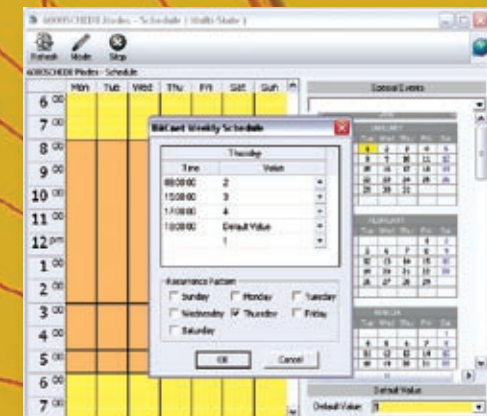
Visit our Customer Support Center today and download RC-Studio® 2.0 Update 1.41, for FREE.



BACNET WEEKLY SCHEDULE – ANALOG



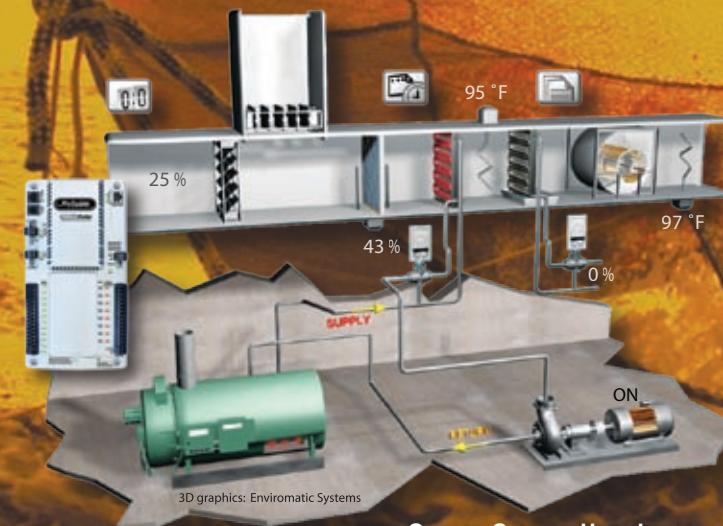
BACNET WEEKLY SCHEDULE – BINARY



BACNET WEEKLY SCHEDULE – MULTI

	ON	OFF	Duration Off	Duration On
1	17:10:00 12/12/2007	Thu Dec 06 17:46:30 2007		00:07:45
2	Fri Dec 07 07:02:44 2007	Fri Dec 07 07:49:39 2007	1:31:14	00:46:55
3	Fri Dec 07 07:56:51 2007	Fri Dec 07 08:02:16 2007	00:07:12	00:05:25
4	Fri Dec 07 08:07:40 2007	Fri Dec 07 08:13:40 2007	00:05:24	00:06:00
5	Fri Dec 07 08:19:15 2007	Fri Dec 07 08:26:15 2007	00:05:35	00:07:00
6	Fri Dec 07 08:32:51 2007	Fri Dec 07 08:38:15 2007	00:05:36	00:05:24
7	Fri Dec 07 08:44:16 2007	Fri Dec 07 08:52:16 2007	00:06:01	00:08:00
8	Fri Dec 07 09:06:38 2007	Fri Dec 07 09:15:04 2007	00:14:22	00:08:26
9	Fri Dec 07 09:28:33 2007	Fri Dec 07 09:33:40 2007	00:13:29	00:05:07

RUNTIME LOG



CUSTOM GRAPHIC USER INTERFACE

RC Studio®

Software for building solutions

MACH-ProCom & MACH ProSys Simulator

- Simulate all RCP points
- Simulate BACnet Schedules
- Simulate BACnet Trend Logs
- Simulate BACnet Notification Classes
- Simulate BACnet Calendars
- Simulate BACnet Intrinsic Alarm Settings
- Simulate device properties

BACnet Schedules

- Schedules worksheet has new columns, Data Type, Source, and In Service
- Greatly improved interface
- Schedules can be Binary, Analog, or Multi
- New fields and improvements made to the Special Events dialog box
- and more ...

Updates are FREE.

WHY OWNERS PREFER BACNET

At Reliable Controls®, we've been working with the Building Automation Control network (BACnet) since 1998. We've come a long way since then, and so has the standard. Nowadays, all new firmware and software features developed by Reliable Controls® are engineered around the BACnet standard. Our new MACH-Pro series of controllers are built *from the ground up* to be BACnet devices, making full use of the BACnet standard.

First published by ASHRAE in 1995, BACnet Standard 135 was described at that time as *a data communication protocol for building automation and control networks*.

So what are some of the benefits that are currently being enjoyed by those who have implemented the BACnet standard in their facilities?

First off, with BACnet, owners of Building Automation Systems (BAS) don't need to throw out their old system in order to work with a new building automation vendor.

BACnet removes long-standing roadblocks such as adding a new wing to an existing facility, or adding a new building to an existing campus. And, BACnet installations are competitively priced from a number of vendors.

With BACnet, owners can choose from 17 BAS vendors currently listed on the BACnet Testing Laboratory website with products tested to be compliant with the BACnet standard.

New BACnet BAS devices can be added to an existing BACnet network installation of controls from a different manufacturer. The new devices can access existing building parameters such as outdoor climate conditions, central heating and cooling plant temperatures and statuses. Existing BACnet devices and Operator Workstations can access information in the new devices.

But BACnet isn't just for HVAC controllers, it also provides a *window* into the operation of various mechanical and electrical equipment.

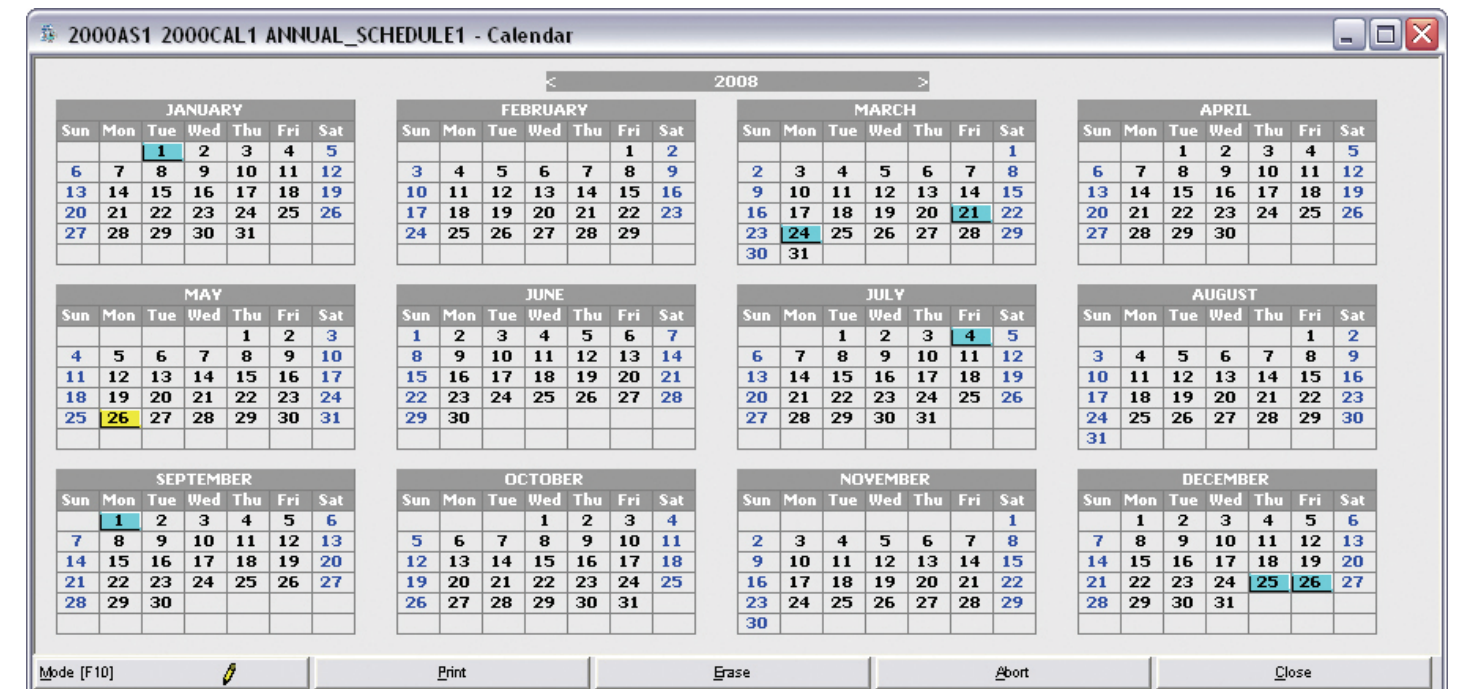
Numerous manufacturers of mechanical and electrical equipment have already adopted the BACnet standard for communications to their products. Available BACnet compatible equipment includes air handling units, heat pumps, VAV boxes, chillers, rooftop units, variable frequency drives, and much more.

Before BACnet, building automation contractors used to run a pair of wires for each parameter sent or received from mechanical/electrical equipment. Now, that same pair of wires can be used to extend a BACnet network to BACnet compatible equipment, providing access to every operational parameter of a mechanical/electrical component. A typical variable frequency drive can communicate over 70 parameters, including phase Amps, phase Voltage, Kw, frequency, RPM, start/stop, speed command, etc. With this staggering quantity of information, owners can gain greater control over their equipment, save energy, and maximize life cycle costs.

The BACnet standard is constantly expanding to incorporate other mechanical/electrical equipment used in buildings. Current equipment under consideration includes access control systems, elevators, life-safety systems, and low-voltage lighting systems.

To drive home the benefits of BACnet, let's consider a BACnet scenario. You're the BAS operator for a school district with 65 schools. The schools have a mix of building automation systems from 4 different vendors that span 2 product generations. You are tasked with programming a new school holiday into the system schedule.

With BACnet, the BAS in each school can reference a single BACnet schedule. All 65 schools can be scheduled in under 60 seconds – enjoy the rest of your day.



Here's what you need to know – BACnet Standard 135 is the only open, consensus-developed standard in the building control industry. And that's why BACnet drives building automation.

The new MACH-Pro™ Series

The new MACH-ProSys™ is the next wave in the MACH-Pro™ series of sleek and powerful BACnet® Building Controllers from Reliable Controls. The MACH-ProSys™ provides unprecedented value in a high performance, universal building controller.

Reliable Controls® takes the building controller to new heights.

Quality

Designed entirely in-house, by a team of highly skilled and dedicated engineers, the MACH-Pro™ Series is the culmination of 20 years of innovation excellence.

Confidence

Expand your building controls with confidence. The MACH-Pro™ Series is backed by an industry-best, no-nonsense, 5-year warranty. Sold and serviced through a strong network of independent Reliable Controls Authorized Dealers, we are dedicated to helping you succeed.

Freedom

Enjoy the freedom of choice. Choose from a pool of open protocols, and build a network architecture that best fits your way of thinking. The MACH-Pro™ Series gives you the freedom to change protocol whenever you want, wherever you want.



Better by design

www.reliablecontrols.com

Reliable
controls