Reliable® controls . . . people and technology you can rely on™

Reliable controls Authorized Dealer

BMA™ BACnet MANUFACTURERS ASSOCIATION MEMBER

THE resource

Official NEWSLETTER

QUARTERLY EDITION WINTER 2003

- Hardware
- Training
- BACnet
- Software
- Marketing
- Sales
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HARDWARE HIGHLIGHTS

What's new

MACH-Vision™ Features:

Custom Vision Groups
For point visibility
Menu Driven Display
For ease of access
Network or Unitary Control
For flexibility
Programmability
For control applications
Real Time Clock Option
For stand-alone use
Five Button Touchpad
For intuitive operator use
EIA-485 Communications
For system wide access
BACnet® Communications
For interoperability
Multiple Ports
For ease of service

MACH-Vision™ User Interface Controller

The latest addition to the Reliable Controls® product line is the MACH-Vision™ user interface controller. This LCD based, stand-alone controller incorporates all of the features of a MACH-Zone™ with a real time clock option. The panel provides 6 Vision Groups that will display up to 7 system points each on the large (128 x 64) dot matrix window. The operator accesses the menu driven display through a 5 button membrane keypad and is able to view and manipulate system points as required. The panel communicates on the EIA-485 network using the Reliable Controls® or BACnet® protocols. Support is included for up to 4 SMART-Sensors™. The MACH-Vision™ is entering the programming and alpha testing stage of development and should be ready for release in the fourth quarter of 2003.

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PLC 01/03

What's new

Regional Manager - Eastern USA

Reliable Controls® is pleased to announce the appointment of Mr. Chris Gleason as Regional Sales Manager for the Eastern United States. Chris is a technology sales and business development professional with 15 years experience selling to executives at the CEO/COO level and engineering executives in the areas of industrial automation systems, manufacturing, quality control, and vision technology. Managing channel sales, strategic selling, and team building are key strengths in Chris's portfolio. Operating from his home office in Philadelphia, PA, Chris will focus much of his talents on developing a strong dealer network from Baltimore, MD to Boston, MA.

Contact Chris at:
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TRAINING HIGHLIGHTS

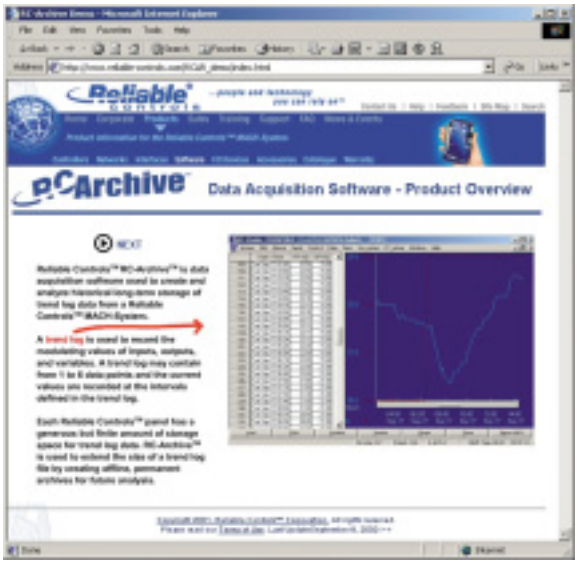
The Reliable Controls® training facility continues to evolve. The latest addition is a purpose built board that demonstrates the connectivity of two separate Ethernet systems via Internet protocol.

You can access the system at any time using RC-Studio™. Access to the system is through one of two routers - the router addresses are http://24.65.0.218 or http://24.65.0.219. You can use the system at any time to demonstrate how easy Internet access can be with the Reliable Controls® MACH-System.

The next Dealer Training session is scheduled for February 18, 19, 20, 21, 2003, in Victoria, BC. Contact Jutta Goebel for details: jgoebel@reliable-controls.com

RC-Archive™ Demonstration

A Flash presentation is now available that showcases the features and benefits of using RC-Archive™ for the creation of long term data archives of trend log information. Click the link from the 'Home Page' of our Web site to learn more about this exciting Data Acquisition Software.



BACnet HIGHLIGHTS

BACnet™ is a registered trademark of ASHRAE

Did You Know?

- ✓ Reliable Controls® has been manufacturing building automation systems since 1986.
- ✓ All current Reliable Controls® controllers are 'native' BACnet® and support one or more of the following implementations of the protocol - PTP, MS/TP, Ethernet, and B/IP.
- ✓ All Reliable Controls® Corporation BACnet® protocol implementation conformance statements (PICS) can be found at www.bacnetassociation.org as part of the BMA Product Catalog.
- ✓ All controllers in the Reliable Controls® MACH-System are peer-to-peer.
- ✓ At the BIG-NA plugfest in Ohio State there were only three manufacturers who could demonstrate BACnet® on MS/TP. They were Alerton, Delta, and Reliable Controls®.
- ✓ All Reliable Controls® products are backwards compatible with previous generation products, including KMD 5000, 5100, 5500, 6000, and 6900 products sold by KMC.

BACnet® World-Wide

The International Standards Organization (ISO) have adopted BACnet® as an international standard for the building automation industry (ISO-16484-5). This action serves to highlight the increasing world-wide acceptance of BACnet as the emerging standard for the building automation industry.

Representatives of the BACnet Interest Group - Europe (BIG-EU) attended a BTL meeting prior to the AHR EXPO in Chicago at the end of January. The objective was to integrate European testing standards with the BTL testing standards.

BMA Listing

Reliable Controls® products are now listed in the BACnet Manufacturers Association Product Catalog: www.bacnetassociation.org/BMAProductCatalog.htm Note that Reliable Controls® has products listed under three separate categories:

- ☞ B-ASC (Application Specific Controller)
- ☞ B-AAC (Advanced Application Controller)
- ☞ B-BC (Building Controller).

To see the list of BACnet® and Reliable Controls® MACH-System installations visit the BACnet® and Reliable Controls® page that is linked from the side bar of our Web site.

BTL Working Group

As a voting member of the BACnet Manufacturers Association (BMA), Reliable Controls® is priveledged to have Roland Laird participate in the BACnet Testing Laboratory (BTL) Working Group. The mandate of the BTL Working Group is to define and approve the tests used by the BTL in determining whether manufacturer's products meet the standards of the BACnet® protocol. The BTL Working Group goes beyond the BACnet® standard in order to guarantee the interoperability required by the industry.

Interoperability Workshop

Roland Laird attended the third BACnet® Interoperability Workshop sponsored by the BMA held in Kenesaw, Georgia. The interoperability workshops are held annually and are a valuable means of both confirming interoperability and rectifying any issues that arise.

This years workshop was attended by 17 manufacturers. Reliable Controls® was scheduled to conduct testing with 9 of the 17 vendors. The testing was successful in demonstrating interoperability on four different physical communication layers of BACnet® (PTP, MS/TP, B/IP, and Ethernet).

BMA™ BACnet MANUFACTURERS ASSOCIATION MEMBER

Reliable Controls™ is a proud member of the BMA

On line

SOFTWARE HIGHLIGHTS

Powerful, Intuitive Control

The Reliable Controls® suite of software is comprised of four purpose driven, Windows applications that service all the needs of the Reliable Controls® MACH-System:

- ✓ **RC-Studio™** - A full-featured, Windows-based operator interface for the Reliable Controls® MACH-System. RC-Studio™ allows operators to open any number of windows from multiple controllers at the same time, and allows full access to database, Control-Basic™, and graphics programming. This 32 bit all-in-one software package can be installed on any Windows '95, '98, NT, XP, 2000 machine. If you are not already familiar with our software, you may wish to try our on-line demo.
- ✓ **RC-Toolkit™** - A necessity for the dealer and administrator of large systems, RC-Toolkit™ contains a suite of five power tools: MSet (MACHSet) is an essential configuration tool for setting controller address, baud rate and network parameters; BACset is a convenient mapping tool for integrating data using BACnet®; Panel File Utility is a file utility that allows users to quickly and conveniently display, edit and clone the contents of a controller's panel file; MACH-Air™ Calibration is an important tool for calibrating the damper motor response in the MACH-Air™ VAV controller: OS Send is the essential utility to perform operating system firmware downloads to a controller's flash RAM over any network.
- ✓ **RC-Archive™** - RC-Archive™ provides customers with an efficient and flexible application for acquiring and archiving large amounts of trend log data from single and multiple systems. Using EIA-232 and Ethernet communications, RC-Archive™ can reside on any PC and poll the trend log data of multiple systems on user defined intervals. A separate archive is conveniently generated for each trend log in the host PC and large amounts of historical trend log data may be viewed in the graphical viewer, then exported to one of several popular file formats for importing into third party software analysis packages. RC-Archive™ is a must-have application for researchers and energy management consultants.
- ✓ **RC-WebView™** - RC-WebView™ enhances the Reliable Controls® suite of software by providing a Web based access solution that uses Microsoft Internet Explorer 5.0 in place of client side software. This server based software can reside anywhere on the Internet, and provides dynamically synchronized data using the same file structure as RC-Studio™. Operators are able to view and manually override points, adjust weekly schedules and annual schedules, graph and print trend and runtime logs, and view and print current alarms. RC-WebView™ is a must have application for remote and distributed access to any Reliable Controls® MACH-System.

On marketing

Dealer Profile - Aspen Controls

Located in Kamloops, British Columbia, Canada, Aspen has been promoting Reliable Controls® since 1986. Al Cline and his staff have served the area for over 20 years as electrical, controls, alarm, and data contractors. The company recently completed a project for Transport Canada. The Nav Canada building serves the air traffic control needs of the Pacific Northwest Corridor.

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Kamloops, B.C. V2H 1B5
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Phone: (250) 372-1611
Fax: (250) 372-5300
email: aspencontrol@telus.net

MARKETING HIGHLIGHTS

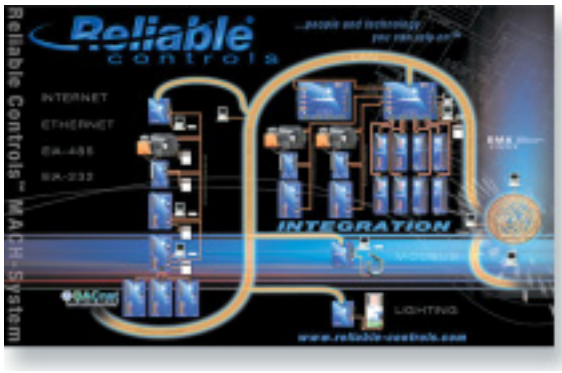
New Trade Show Booth

After eight years of use and abuse we've retired our first trade show booth and replaced it with a new gull wing design. The new booth features the latest art work by Richard Prevost. The entire booth packs into a convenient, small shipping case that doubles as a podium for the booth (not shown).

omotional Items

r stock of golf shirts, t-shirts, pens, screwdrivers, mugs, and STORMTECH™ outerwear has been replenished. All items bear the Reliable Controls™ logo and are great for gift giving.

We have added four stunning posters, to our line of promotional items, that are ideal for decorating your office or work space.



Upcoming Trade Shows

- ✓ **National Facilities Management and Technology -** Baltimore, MD, March 18-20. This show will be held at the Baltimore Convention Centre and our booth is #640.
- ✓ **ASHRAE, BC Chapter** - Vancouver, BC, April 16/17, 2003. This show will be held at the Italian Cultural Center on Slocan Street and our booth is #25.

Movers & shakers

SALES HIGHLIGHTS

New Reliable Controls® Authorized Dealers

Canadian

R.E.L. Controls, Inc.
Stittsville, ON
Contact: Dave Le Gard - dlegard@bascon.ca

United States

American Mechanical Services, Inc.
Englewood, CO
Contact: Jim Hepting - jhepting@ars.com

Applied Resource Management, LLC
Cincinnati, OH
Contact: Garyne Evans - gevans7@cinci.rr.com

Control Network Services
Colorado Springs, CO
Contact: Julian Smith - jbs@cn-services.com

Control Tech Corp.
Lubbock, TX
Contact: Troy Wesley - troy@controltechcorp.com

Dor-B, Inc.
Austin, TX
Contact: Robert Batch - rbatch@austin.rr.com

Hardy Services
Birmingham, AL
Contact: Wayne Mathews - wmathews@hardyserv.com

J & M Building Automation Systems
Mesa, AZ
Contact: James Smith - jandmems@yahoo.com

International

Sistemas Integrales De Control
Montevideo, Uruguay
Contact: Alfonso Salomon - sicuy@adinet.com.uy

Suhool Systems, Inc.
Riyadh, Saudi Arabia
Contact Majid Al-Sarhi - majid@matechcontrols.com

Quality Focus for 2003

Our product flow committee made solid progress, in 2002, resolving production issues related to timely order fulfillment. The additional focus for 2003 will be ensuring quality workmanship at all levels of the production process...starting with the vendors who supply our raw materials and ending with the feedback obtained from both Dealers and building operators alike. The goal, of both Prosemble Electronics and Reliable Controls®, is to provide simple, flexible, and economical products that function with a minimum requirement for additional time and effort.

Emmitt Bell and the rest of the R&D department are engaged in creating a very large network for protocol testing and quality control purposes. The network will contain 124 panels on a 4000 foot subnetwork.

PRODUCTION HIGHLIGHTS

Prosemble ELECTRONICS CORPORATION www.prosemble.net

Reliable® controls

The new Reliable Controls **MACH-Global™** building controller supports multiple **BACnet** LAN technologies with ease. When you need forward compatibility using BACnet over **Ethernet, B/IP, MS/TP** or **PTP,** the MACH-Global™ building controller *has all the bases covered.*

NEW

BACnet™ BMA™ BACnet MANUFACTURERS ASSOCIATION MEMBER

All controllers within the Reliable Controls MACH-System™, are **backward compatible** with previous generation systems, and ship with the industry's best **5-year warranty.** To learn more, visit us on-line at **www.reliable-controls.com.**

...people and technology you can rely on™

Cover your bases with reliable controls

Reliable Controls® MACH-System

Project profile

UNIVERSITY of VICTORIA

The University of Victoria (UVic), one of Canada's leading Universities, is located on 160 hectares in suburban Victoria, British Columbia. With over 17,000 students in ten faculties, UVic has reputation for innovation through its interdisciplinary research, professional schools, co-operative education program and distance education offerings.

Motivated to participate in the diminishing provincial utility rebate programs prior to their closure and to streamline the on-campus technical support from six building automation systems to just one, the university facility management staff found themselves in excellent position to consider a wholesale change-out of their varied controls infrastructure and to witness a campus-wide reduction in energy consumption.

The project would become the largest Canadian controls retrofit in 1994, and would see the first large-scale implementation of the British Columbia Buildings Corporation's Client Comfort Guideline specifications - a performance-based, graphics-oriented specification, that puts the control where it belongs..., into the hands of the building manager.

"The Reliable Controls® MACH-System is very simple to work with and very easy to expand."

Claude Champagne
BDC Operations Manager,
University of Victoria

In January, 1994, the contract was awarded to a local Reliable Controls dealer who proposed to deliver the entire project using the existing underground network cabling on the campus, in a time-frame that would be less than half of the next best proposal.

The entire retrofit was completed within budget and on schedule for the opening ceremonies of the 1994 Commonwealth Games, staged at UVic's Varsity Arena in September, 1994. Many new buildings have been added to the network since the completion of the original contract.

Today, the Reliable Controls® MACH-System installed at UVic, brings together the monitoring and control of the HVAC systems, lighting and critical alarms for some 27 campus buildings, including laboratories, lecture halls, libraries, swimming, skating and recreation facilities, cafeteria, retail and administrative offices. The single system monitors and controls over 3 million square feet of conditioned space, and is an essential diagnostics tool for the dozen facility management technicians who access the system on a regular basis.

MACRO™ Controller

The Reliable Controls® MACH-System installation costs were recovered by the University of Victoria within 4 years.

EDUCATION

Project Name:
University of Victoria

Location:
Victoria, British Columbia

Market Segment:
Schools

Project Type:
Multiple Building Campus
HVAC, Lighting, and Security

Installation:
Retrofit + new construction

Total Area:
3,000,000 sq. ft (36,000m²)

Number of Buildings:
27

Equipment Installed:
70-MACH-Net™ controllers
10-MACH2™ controllers
20-MACH2™ expansions cards

Network:
STP cable for EIA-485 network

Applications:
RC-Studio™ Software

Total System Points:
7,000 points

Consultant:
BCBC

Reliable Controls Rep:
Accutemp Refrigeration
and Air-conditioning

Reliable controls
...people and technology you can rely on™

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