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

Reliable controls Authorized Dealer

BMA™ BACnet MANUFACTURERS ASSOCIATION MEMBER

THE resource

Official NEWSLETTER

QUARTERLY EDITION SPRING 2003

SOFTWARE HIGHLIGHTS

RC-WebView™ .net

A live demonstration of the .net version of RC-WebView™ is currently available for viewing (linked from the 'Home Page' of the Reliable Controls® Web site). RC-WebView™ is server based software that provides Internet Explorer based access to the Reliable Controls® MACH-System.

The advantages of browser based access to your building automation system include empowered employees, reduced maintenance costs, reduced installation costs, and shorter playback periods. With RC-WebView™, remote access to your system is as close as the nearest copy of Internet Explorer 5.5 or higher - across the office or across the country.

With RC-WebView™, any authorized operator is able to:

- ✓ view and manually override System Group points,
- ✓ adjust weekly and annual schedules,
- ✓ view, graph, and print trend and runtime logs,
- ✓ view, print, and acknowledge current alarms.

What's new

RC-WebView™ .net Features:

Enhanced graphical processing
For ease of viewing and more file types

Event logging through the Windows event log
For operator tracking

Enhanced Alarm Package (History and Actions)
For additional functionality

Drop down menus
For ease of changing viewing options

Enhanced trend log display
For better graph viewing

BACnet® Enabled
For interoperability

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PLC 04/03

What's new

Peripherals Vendors

This year, Reliable Controls® has added three new product lines to the list of preferred peripherals vendors.

ACI Automation Components Incorporated

Automation Components Incorporated (ACI) is a Wisconsin based provider of peripheral I/O devices.

CONNECT AIR International, Inc.

Connect-Air International, Incorporated is a Washington state based provider of wiring components.

POWER MEASUREMENT

Power Measurement Limited is a British Columbia based provider of power monitoring devices.

Reliable Controls® Authorized Dealers are encouraged to use appropriate peripherals from these vendors as their products have all been tested for compatibility with the Reliable Controls® MACH-System.

TRAINING HIGHLIGHTS

A new demonstration board has been added to the Ethernet connectivity demonstration in our training facility. The new board features all of the ACI products offered by Reliable Controls® and an additional MACH-Global™ controller that will be used to provide access to the peripherals. Currently, you can access the two ETHER-Link™ portals through one of two routers at http://24.65.0.218 or http://24.65.0.219 to experience the ease of Ethernet connectivity with the Reliable Controls® MACH-System.

The next Dealer Training session is scheduled for May 13, 14, 15, 16, 2003 in Victoria, BC. Western Canada customer training has been scheduled for April 24, 25 in Kelowna, BC and May 21, 22 in Kamloops BC. Eastern Canada customer training has been scheduled for June 23, 24 and June 25, 26 at Humber College in Toronto, ON. Additional customer courses may become available so please keep your eye on our Web site.

To reserve space in any training course please contact Mishelle Rowland at: mrowland@reliable-controls.com

Have you visited our web site recently? We always encourage your feedback. If there are any items you feel are not covered on the site that should be, we certainly would like to know.

www.reliable-controls.com

What's new

Room Temperature Sensor

The latest addition to the Reliable Controls® product line is a two wire room temperature sensor that features setpoint adjust. Temperature is monitored by a 10k thermistor that connects to a standard Reliable Controls® 10k pullup Input point. Setpoint adjust is accomplished through Control-BASIC™ code that reacts to presses on the tactile buttons behind the intuitive Up/Down chevrons on the product face.

Firmware Version 6.23

The recent release of Reliable Controls® firmware version 6.23, for the MACH-Global™ controller and the ETHER-Link™ portal, implements many BACnet® features within the Reliable Controls® MACH-System. The most noticeable difference is the 'IN Service' field on Input, Output, and Variable worksheets. This field must be set to 'Yes' for normal operation.

HARDWARE HIGHLIGHTS

MACH-Vision™ Testing

Programming and testing of the MACH-Vision™ controller is proceeding at a good pace. This exciting new product will find many applications, either within the Reliable Controls® MACH-System or as a stand-alone unitary controller for zone or equipment control. Look for the release of the MACH-Vision™ User Interface controller later this year.

On marketing

Did You Know?

- ✓ Reliable Controls® has been manufacturing building automation systems since 1986.
- ✓ All controllers in the Reliable Controls® MACH-System are peer-to-peer.
- ✓ All Reliable Controls® BACnet® protocol implementation conformance statements can be found at www.bacnetassociation.org as part of the BMA Product Catalog.
- ✓ The latest version of RC-Studio® supports seven different graphical formats for system groups. They are TIF, BMP, PNG, JPG, EMF, GIF, and DIB.
- ✓ Reliable Controls® grew by 25% in the year 2002. Not bad considering many companies experienced declines in business.
- ✓ We still have Reliable Controls® posters available for office or work space decoration.
- ✓ StormTech® outerwear with the Reliable Controls® logo makes for great gift giving or employee rewards.
- ✓ We have placed some Project Profiles on our Web site. From the 'Home' page, click on Sales and then click on Case Studies. If you would like to see one of your projects here, contact your Regional Sales Manager with the appropriate information.

BMA™ BACnet MANUFACTURERS ASSOCIATION MEMBER

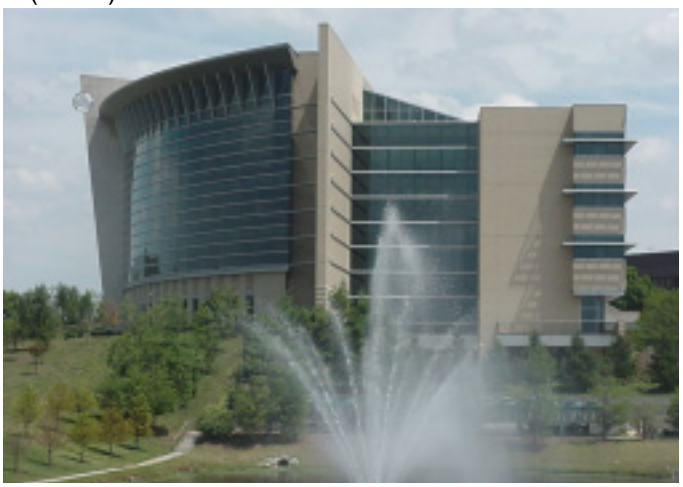
Reliable Controls™ is a proud member of the BMA

MARKETING HIGHLIGHTS

Dealer Profile

AUTOMATION SOLUTIONS GROUP

Automation Solutions Group is the largest service-oriented HVAC and DDC company in St. Louis, MO. In business since 1966 and employing 120 people across three divisions, this group of companies has all the bases covered. **Automation Solutions Group** handles all of the DDC design, installation, and integration services. Their sister company **Air Masters** has expertise in all aspects of HVAC applications. Their third division, **Gateway Mechanical** is responsible for catering to the custom hydronic pipe fitting needs of the building automation industry. The company recently completed an integration and retrofit upgrade to RC-Studio® in the Savvis Building (below).



Contact Information:
Automation Solutions Group
9102 Olive Blvd.
St. Louis, Missouri 63132
Contact: Mr. Brian Schumacher
Phone: (314) 336-5500
Fax: (314) 336-5504
email: sales@automationsolutionsgroup.com
Web: www.airmasters.com

BACnet® Timeline

BACnet™ is a registered trademark of ASHRAE

Reliable Controls® MACH-System BACnet® Capabilities

With the Reliable Controls® MACH-System you can:

- ✓ Build 'native' BACnet® systems exclusively with Reliable Controls® products.
- ✓ Interface to OEM equipment using the BACnet® protocol.
- ✓ Add to another manufacturer's 'native' BACnet® system using Reliable Controls® products.
- ✓ Mix Reliable Controls® protocol and BACnet® protocol networks in one system.
- ✓ Provide BACnet® access to non-BACnet® Burke, MACH-Net, and Local Controller products.
- ✓ Upgrade all earlier versions of MACH1™ and MACH2™ controllers to 'native' BACnet® networking.
- ✓ Upgrade MACH-Air™ controllers manufactured since August 2001, and MACH-Zone™ controllers manufactured since October 2001, to 'native' BACnet® networking.
- ✓ Configure a controller for either BACnet® or Reliable Controls® protocol while on the field.
- ✓ Operate BACnet® systems with Reliable Controls® front-end software - RC-Studio® and RC-WebView™.
- ✓ Operate a Reliable Controls® 'native' BACnet® system with another manufacturer's BACnet® software.

BACnet HIGHLIGHTS

BACstack™ Inside

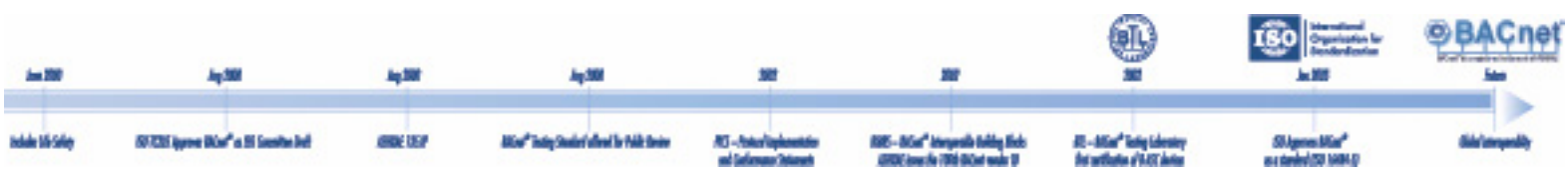
Reliable Controls® implementation of the BACnet® protocol is unique. We have incorporated a BACnet® operating stack in the firmware that runs our controllers. Having our own BACstack™ means that we can seamlessly and efficiently implement BACnet® at the panel level. There are no additional BACnet® servers or workstations to slow network traffic and no translation gateways required for our controllers to communicate with other vendor's devices. A simple firmware upgrade is all you need to enable full BACnet® communications within your existing Reliable Controls® MACH-System. Our dual protocol BACnet® implementation lets the controllers do all the talking for you to provide the simple, flexible, and economical building automation solutions that are the hallmark of Reliable Controls®.

Future-Proof

Your building automation system will begin paying dividends immediately through energy savings but will hidden expenses offset those savings when you need to expand or upgrade your system in years to come? How will you be able to ensure the availability of replacement components down the road? When you choose controllers that directly use the BACnet® protocol stack, you wil effectively ***'future proof'*** your system. Here's why:

- ✓ BACnet® will not become obsolete. It is an open source protocol that can be easily extended with new features.
- ✓ BACnet®, at the controller level, eliminates the need for expensive translation gateways that can cause communication bottlenecks.
- ✓ BACnet® allows you to 'break-free' from the chains of sole sourcing. You will have the freedom to choose your products and servics from over 100 BACnet manufacturers around the world.

BACnet® Timeline



Movers & shakers

SALES HIGHLIGHTS

New Reliable Controls® Authorized Dealers

Canadian

INS Building Automation, Inc.
Mississauga, ON
Contact: Norm Todesco - ntedesco@fms-ins.com

United States

Building Control Systems, Inc.
Carnegie, PA
Contact: Gary Handerhan - ghand@building-control-systems.com

Commercial Control Services, Inc.
Columbus, OH
Contact: Richard Rosine - info@commercialcontrol.com

Control Contractors, Inc.
Portland, OR
Contact: John Vanderford - johnv@controlcontractors.com

Digital Network Services, LLC
Newtown, CT
Contact: Mark Sleeva - sleevam@digitalnetworkservices.net

Peine Engineering CO., Inc.
Indianapolis, IN
Contact: Dave Abbott - dabbott@peineengineering.com

International

MP Service, S.A. de C.V.
San Salvador, El Salvador
Contact: Carlos Moreno - mpservice@tutopia.com

Sysinteg Automation SDN. BHD.
Selangor, Darul Ehsan, Malaysia
Contact: Arnasib Chik - arnasib@sysinteg.com.my

PRODUCTION HIGHLIGHTS

State of the Art

Cary Yan, manager of Prosemble, has recently returned from the APEX Electronic Manufacturing Equipment show held in Anaheim, California. Cary found that the manufacturing equipment currently used by Prosemble remains 'State of the Art', keeping Prosemble at the forefront of the electronic assembly industry in Western North America.

www.prosemble.net

Prosemble
ELECTRONICS CORPORATION

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

THE resource

Reliable Controls® MACH-System

Project profile

U of A Hospital

The University of Alberta Hospital (UAH), one of Canada's leading health sciences centres, provides a comprehensive range of diagnostic and treatment services. It is one of two trauma centres for the region, serving Alberta, northern BC, Yukon, the Northwest Territories and northern Saskatchewan.

In 1997, Serv-All Mechanical Services replaced an aging 4,000 point smoke control system with an Ethernet based Reliable Controls® MACH-System. Subsequently other control systems and functionality have been added. The current system monitors and controls over 12,000 hard points. Starting in Autumn 2003 the 650 bed 351,000 sq m facility will be expanding with the addition of a new 4-storey heart and stroke research centre. Doug Dunn, Manager of Building Operations has been instrumental in expanding the facility while reducing the overall energy use. In fiscal year 2000 the planning team reduced energy use to a level of 18% below 1996 levels. As a result the facility was honoured with two awards from the climate change Voluntary Challenge & Registry (VCR). The first award recognizes GOLD level reporting of energy performance and Reduced Emissions. The second award recognizes energy efficient retrofit and new construction projects nationally, across all sectors of Canadian business.

"The Reliable Controls® MACH-System and what it can do is quite exciting... the UAH wouldn't be a world-class facility without it. We are very, very proud of the system, it surpassed all our expectations."

Doug Dunn
Manager of Building Operations, University of Alberta Hospital

***MACH-Global™** Building Controller*

HEALTH CARE

Project Name:
University of Alberta Hospital

Location:
Edmonton, Alberta

Market Segment:
Health Care

Project Type:
Integrated (HVAC, lighting, smoke control)

Installation:
Retrofit & new construction

Installation Areas:
Operating Theatres, Research Labs, Critical Care Units, and Administration

Total Area:
351,000 sq. m (2.9 million sq. ft)

Network:
Fibre-optic thicknet

Integration:
PDP-11

Total System Points:
12,000 points

Consultant:
Suncord Engineering

Reliable Controls® Dealer:
SERV-ALL Mechanical Services

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

www.reliable-controls.com

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