



Hardware

Software

Marketing

BACnet

Sales

Web Site

HARDWARE HIGHLIGHTS

MACH-Vision™ Release Party



On January 19, 2004, the management and staff of Reliable Controls® gathered to celebrate the final release of the MACH-Vision™ User Interface Controller. This product is the first to go through the complete 'Gate Process' used to ensure product quality. On-site beta testing, by a number of Reliable Controls® Authorized Dealers, proved invaluable in identifying and rectifying minor issues with this exciting addition to the Reliable Controls® MACH-System. Contact your Dealer today to learn how the MACH-Vision™ can enhance the visibility and accessibility of the Reliable Controls® MACH-System in your facility.

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



Contact Us

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1 (250) 475-2096

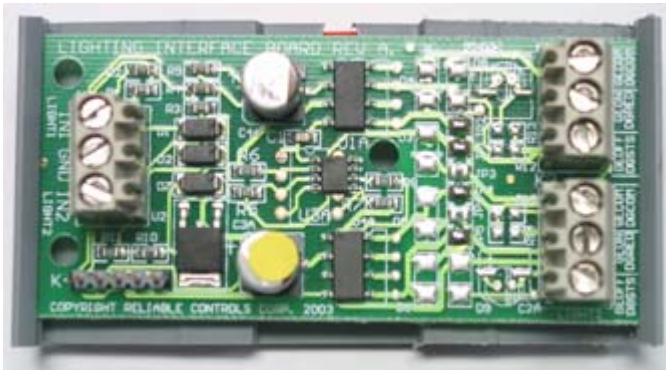
Internet
www.reliablecontrols.com

Mailing Address
#207 3375 Whittier Avenue
Victoria, British Columbia
Canada V8Z 3R1

What's new

Lighting Interface Modules

Two new lighting interface modules are now available to incorporate Douglas 'HID' and GE 'RR' series relays in the Reliable Controls® MACH-System. Each module takes the signal from any universal output of a MACH-Series controller and sends a 24 VAC pulse to the relay, latching the relay 'On'. When the output is turned off, the module sends a second 24 VAC signal to the relay, latching it 'Off'. Each module will accept input from two universal outputs and may be used to switch two lighting relays. Relay position feedback, to RC-Studio®, is available for the Douglas lighting module.



HARDWARE HIGHLIGHTS

Did You Know?

- ✓ The RC-Search function is available to assist in finding specific documentation resources in the secure areas of the Reliable Controls® Web site. Simply enter keywords in the search box, and initiate the search, to see a list of all the documents containing the keywords. Click on the document of interest to continue your information quest.
- ✓ You can 'Drag and Drop' points selected through a Wild Card search (F2) to a System Group screen in RC-Studio®.
- ✓ VAR1, of the panel file included with each MACH-Air™ controller is used for the calibration constant. If the flow rate does not meet your expectations, modify the value of VAR1 until you achieve the result required.
- ✓ The ETHER-Link™ Portal requires entries in the IP address table for every controller on the main network even if the ETHER-Link™ is not connected to the Ethernet.

New Belimo Motor for MACH-Air™ VAV Controller

The MACH-Air™ VAV Controller is slated for a new Belimo motor in the first half of 2004. The new 'Holomo' DC motor relies on brushless technology. The motor includes a built in integrated circuit to control motor operation. The Holomo motor has less moving parts to wear out and will provide more reliable damper actuation. The remainder of the MACH-Air™ will remain untouched. The programming and Input/Output configuration will be no different from the MACH-Air™ controllers being shipped now.

Surge Protection

All controllers produced by Reliable Controls® incorporate surge protection, in the form of 'Network Bulbs', that protects the network from 24 VAC power surges. The network bulbs absorb any excess energy by lighting up as required. The bulbs generally take an extended surge of power before the bulb will blow. In the event a bulb is blown, they are very easy to replace. Replacement network bulbs are available from Reliable Controls® (Order # NA-BULB).

Reliable
controls

*...people and technology
you can rely on™*

the **ULTIMATE**
Building Controller

BACnet B/IP

BACnet PTP-1
SMART-Net

BACnet PTP-2
AUX EIA-232

BACnet MS/TP-1
AUX EIA-485

BACnet MS/TP-2
128 Universal I/O

BACnet MS/TP-3

BMA
BACNET MANUFACTURERS
ASSOCIATION
MEMBER

Some things don't have to be complicated.

Optimize your graphic development time line.

Create your custom user interface in record time with the symbol library. Review multiple export styles to keep file size small. Free updates to the Developers Library when available.

Symbol library drag and drop functionality

With the new GrafXSet you will find hundreds of drawings from pre-configured systems to all the parts and pieces to create your own unique system.

Industry standard tools at your finger tips

The power of scalable vector graphics with the exportable options of pixel based images. With Illustrator[®] or Freehand[®] you'll have all the productivity enhancements of the worlds leading graphic software.

Selective anti-aliasing of type

Make smaller text easier to view in your user interface by selecting individual lines of text and turning off the anti-aliasing while maintaining smooth transitions in the rest of you graphics.

Dynamic Data-Driven Graphics

Produce numerous variations of a design automatically. Simply use the variables palette to automate the preparation of repetitive artwork by defining variable objects in the database fields.



SOFTWARE HIGHLIGHTS

RC-Studio[®] Beta Update 1.27

This recently released version of RC-Studio[®] incorporates changes to keep pace with recent firmware releases (6.24 and 6.28). When using controllers with either of these two firmware versions, we recommend you also use RC-Studio[®] 1.27. A noticeable change is the ability to reference BACnet[®] points directly on worksheets and System Group screens for panels where the ability to initiate BACnet[®] requests is incorporated (MACH1[™], MACH2[™], ETHER-Link[™], and MACH-Global[™]). The firmware now automatically adds these points to the BACset table, at the panel level, and saves the BACset table as part of the panel file. The BACset tool of RC-Toolkit[™] must still be used to map BACnet[®] points to variables and to modify any entries in the BACset table.



On marketing

Upcoming Trade Shows



- ✓ National Facilities Management and Technology Conference/ Exposition - Baltimore Convention Center, Baltimore, MD, March 9-11, 2004.



- ✓ Canadian Mechanicals Exposition - Metro Toronto Convention Centre, Toronto, ON, March 25-27, 2004.



- ✓ ASHRAE, Vancouver Island Chapter Trade Show - Harbour Towers Hotel & Suites, Victoria, BC, April 22, 2004



- ✓ Niagra Summitt - Saddlebrook Resort, Tampa, FL, May 2-4, 2004

MARKETING HIGHLIGHTS



- ✓ Air Conditioning Refrigeration Building Services Exhibition 2004 - Melbourne Exhibition Centre, Melbourne, AUS, May 3-5, 2004



- ✓ School Plant Officials Association of BC, 2004 Conference and Trade Show - Penticton Trade and Conference Centre, Penticton, BC, June 1-4, 2004

Demo Case in Demand



Recent purchasers of the Reliable Controls® Demo Case are extremely pleased with the representation of the Reliable Controls® MACH-System capabilities. Each rugged Pelican case contains an ETHER-Link™ portal, MACH2™ Controller, MACH-Vision™ controller and SMART-Sensor™. The Demo Cases are commissioned before shipping providing for the dynamic features of the unit to be operational as soon as the relevant software is loaded on the PC/Laptop used in conjunction with the case. All necessary cables, software, and panel files are included with each Demo Case.

On line



Web Services Debate

Various organizations in the BACnet[®] community are currently engaged in a debate regarding the definition of standards for the transmission of BACnet[®] information via the Internet. The debate is likely to continue for some time and Reliable Controls[®] is following the debate with great interest.



BACnet HIGHLIGHTS

AHR Expo 2004 Meetings

Roland Laird continues to maintain hands-on involvement in several aspects of the BACnet[®] realm. During the AHR Expo 2004, meetings of the BTL-WG and the BACnet Standards committee were held. The BTL-WG is responsible for developing the tests used by the BTL in certifying products as BACnet[®] compliant. The work of the BACnet[®] standards committee is ongoing in refining the BACnet[®] standard.

Roland and Chris Gleason also attended both the ASHRAE marketing and general meetings. Reliable Controls[®] is committed to providing assistance in the continued development of BACnet[®] in the building automation industry and will be donating some R&D resources to assist in developing the Visual Test Shell used by the BTL. In addition our Web master will be assisting the BMA and BTL in their marketing efforts.

MACH-AIR[™] AND MACH-Zone[™] Controllers Listed:



BACnet is a registered trademark of ASHRAE. ASHRAE does not endorse, approve or test products for compliance with ASHRAE standards. Compliance of listed products to requirements of ASHRAE Standard 135 is the responsibility of the BACnet Manufacturers Association (BMA). BTL is a registered trademark of the BMA.

Movers & shakers

SALES HIGHLIGHTS

*New Reliable Controls®
Authorized Dealers*



Canadian

Aerco Industries

Burnaby, BC

Contact: David Boyer - dboyer@aercoindustires.com

United States

Advanced Building Solutions

Las Vegas, NV

Contact: Tim Potter - tpotter2@aol.com

Advanced Energy Control Corporation

Randolph, WI

Contact: Kevin Haan -

kevinh@advancedenergycontrol.com

Innovative Electronic Control Systems

Lilburn, GA

Contact: David Stanczak - innovelec@bellsouth.com

Pritchett Controls Inc.

Beltsville, MD

Contact: Tim Pritchett - t.pritchett@invensyspritchett.com

Walker White Inc.

Columbia, SC

Contact: Bob White - bwhite@walker-white.com

International

Noga Engineering Solutions

Mayaguez, Puerto Rico

Contact: David Ramirez Castro - david.ramirez@ieee.org

**Sistemas De Automatizacion Y Control Digital S. De R.L.
De C.V.**

Nezahualcoyoti, Mexico

Contact: Manuel Vasquez Barbosa -

saycd@prodigy.net.mx



Advanced Energy Control
Refrigeration Control
and Energy Management Systems

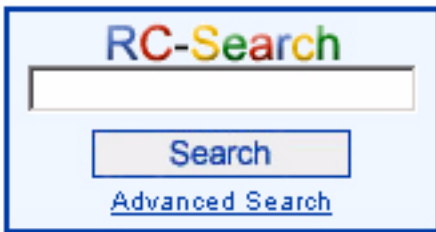


On line

RC-Search Function in Customer and Consultant Log-In Areas

The RC-Search function provides easy access to information contained in the secure areas of our Web site. Enter the Keywords of interest in the RC-Search box available on the 'Home' page of each area and initiate the search to see a list of all the documents that contain the Keywords entered. The list of documents is ranked in order of the number of Keyword occurrences each document contains.

If you would like to obtain access to the secure areas of our Web site, contact your local Dealer to obtain the User Name and Password required for Log-In to these areas.



WEB SITE HIGHLIGHTS



Reliable Controls® donates marketing and development services to BMA and BIG-NA

This year, Kent Gorrie will be donating some of his expertise to the BMA and BIG-NA Web sites. Reliable Controls® is committed to supporting the efforts of the BMA and BIG-NA as these non-profit organizations are essential to the continued development of BACnet® within the building automation industry.

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

Bridging the gap
*between hotel engineering
and hotel management.*

Everyone knows the interface between hotel engineering and hotel management is critical to the long term viability and profitability of hotel operations. Nowhere is that interface more visible than in the energy management control system. Reliable Controls can bridge the chasm between first costs and operational costs over the life of your facility. Let us help lift your operational standards while fitting your profit margins. Contact your local Reliable Controls® Authorized Dealer today.

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Web: www.austec.com.au

BACnet
Building Automation Control Network

BMA MEMBER
Building Automation Manufacturers Association

Palazzo Versace
Marina Beach, Queensland, Australia
www.palazzo-versace.com.au

Visit us at AIHE Update 2003

BACnet is **Powerful!**



We've made it **EASY.**

Just because you want to enjoy the powerful benefits of the BACnet® protocol doesn't mean you need a PhD in computer science to adjust a room temperature setpoint! At Reliable Controls™ we believe in *future-proofing* your building automation investment and empowering you with simple, flexible and economical solutions. That is why our approach to implementing BACnet® is *unique* from any other vendor. We took the power of BACnet® and made it simple and seamless. You didn't need to be fluent with the communication protocols of the past, so why spend time and effort learning the language of BACnet®? *Let the controllers do the talking.* Our MACH-System controllers speak native BACnet® over IP, Ethernet, MS/TP and PTP – the industry standards. And they use BACnet® without complicating or compromising the features and performance of our existing software products. We've engineered our controllers to speak BACnet® fluently, so you don't have to.



...people and technology
you can rely on™