



Automate

Computrols' Publication for the Building Automation Industry

Volume 1, Issue 2014

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Building Automation Industry

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Legal

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Editor's Note

Welcome to the inaugural edition of Automate, the Computrols newsletter designed to bring you the latest information on Computrols' building automation technology. Automate will be published multiple times throughout the year and will provide insight and education on Computrols' technologies, projects, and many other exciting topics.

This edition of Automate showcases the Computrols access control system's integration with destination dispatch elevator systems. We plan to highlight a new project in every issue of Automate. If you have a project that you would like showcased in the next edition of Automate, let us know! You just may see your work in the newsletter. We are also proud to introduce our newly developed binary board. Read more about the new board and other topics in this newsletter.

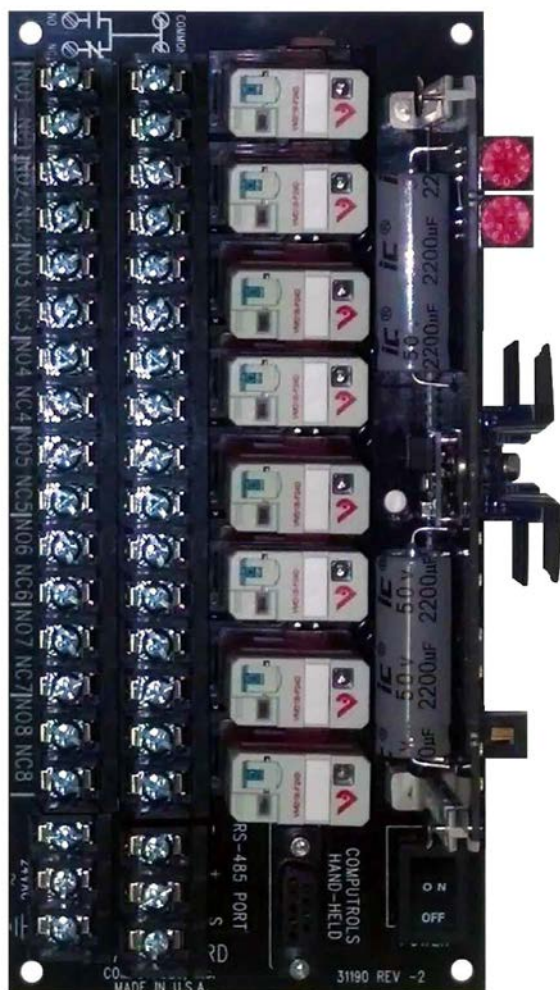
With new technology comes the need for new training. Whether it is the new binary board or recently added software features, education is the key to efficiency. We will start our Continuing Education Program in November. The Computrols Continuing Education Program is open to anybody who wants to learn more about Computrols products. Classes will introduce new products, review existing products, and educate students on the latest CBAS software and CBAS Web. The first class will be November 12th - 14th, 2014, in New Orleans, LA. If you are interested in the CEP, please contact your Computrols sales rep to make arrangements.

If you know anybody that would be interested in receiving this newsletter, please forward it to them. They can subscribe to the newsletter. Our goal is to make this newsletter a useful and informative tool for our partners. Enjoy, and keep an eye out for the next issue of Automate.

Drew Mire

Drew Mire,
Automate Editor

INTRODUCING: COMPUTROLS BINARY BOARD



Computrols recently developed an RS-485 sub controller for binary output purposes. The Binary Board (BB) contains 8 Binary Output points (single pole dry contact) with built-in relays and wire terminals for normally open (NO) or normally closed (NC) applications. Like most of our other controllers, the brain board is easily removable from the terminal board, so no re-wiring is required when replacing a defective BB. It comes with large screw terminals for easy termination. RS-485 address is set using two rotary dials, with a range of 1-99.

The BB was originally intended for use in Access Control Elevator situations, where the card holder swipes their card in the elevator in order to push buttons for the floors. There would be a BB point allotted to each button in each elevator

car. When the card is swiped, the points are commanded "ON" by Interlock and the buttons are enabled.

Moreover, the Binary Board can also be used to add Binary Outputs to an existing 8X, 16X, 32X and 64X, as long as there is an available RS-485 port. The controller communicates on the "OPTO22 on Controller" channel type, so the points on the BB would reside in the database of the Host Controller.

Because of that, the points would seem just like additional points on the Host Controller.

Either way you use the BB, Access Control or HVAC, the points can be configured 3 different ways:

- Binary Output
- Momentary Output
- Analog Output (pulse)

Binary Output:

When commanded ON, the contact stays closed until commanded OFF. Whether wired to NO or NC terminals, you can switch the contacts on the program screen of each point. Switching contacts will make a NO into a NC.

Momentary Output:

When commanded ON, the contact stays closed for the number of seconds entered on the Point Program screen. (Min. .1 to 25 seconds Max.).

Analog Output:

When commanded to a numerical value, the contact stays closed for the number of seconds commanded.

The Computrols Handheld Programmer (HHP) can be used to override the points for field testing purposes.

Since the points of the BB are "on controller," you can also override the points from a HHP connected to the host controller. To do that, go to the 1=Hardware section and scroll/page down to the point, then

press Select and follow on-screen instructions.

The points will remain in the overridden state and HH priority until commanded from CBAS.

There is no configuration done using the HH. All configuration is done in CBAS and downloads to the host controller, then the BB. Please see the following attached datasheets for more on technical specifications.

For pricing please contact sales@computrols.com.

Binary Board

8 Point Binary Output Relay Board

The Computrols binary board is an 8 point binary output relay board that talks **RS-485** to a Computrols X-line controller. The Computrols binary board uses either the OPTO 22 protocol or the Modbus RTU protocol. The 8 binary output points on the controller can be configured to be sustained or momentary outputs using the Computrols handheld.

Product Highlights

8 Point Binary Output

8 Binary Output Points that can be configured as NO/NC. Additionally, each point can be configured to be sustained or momentary.

Large Screw Terminals

No special screwdrivers – simple secure terminations.

Status Indicators

Bright on-board LEDs assist in troubleshooting.

Easy Mounting

Available in snap track or offset mounting. Specify when placing order.

RS 485 Communication

Uses the OPTO 22 protocol

Easily Addressable

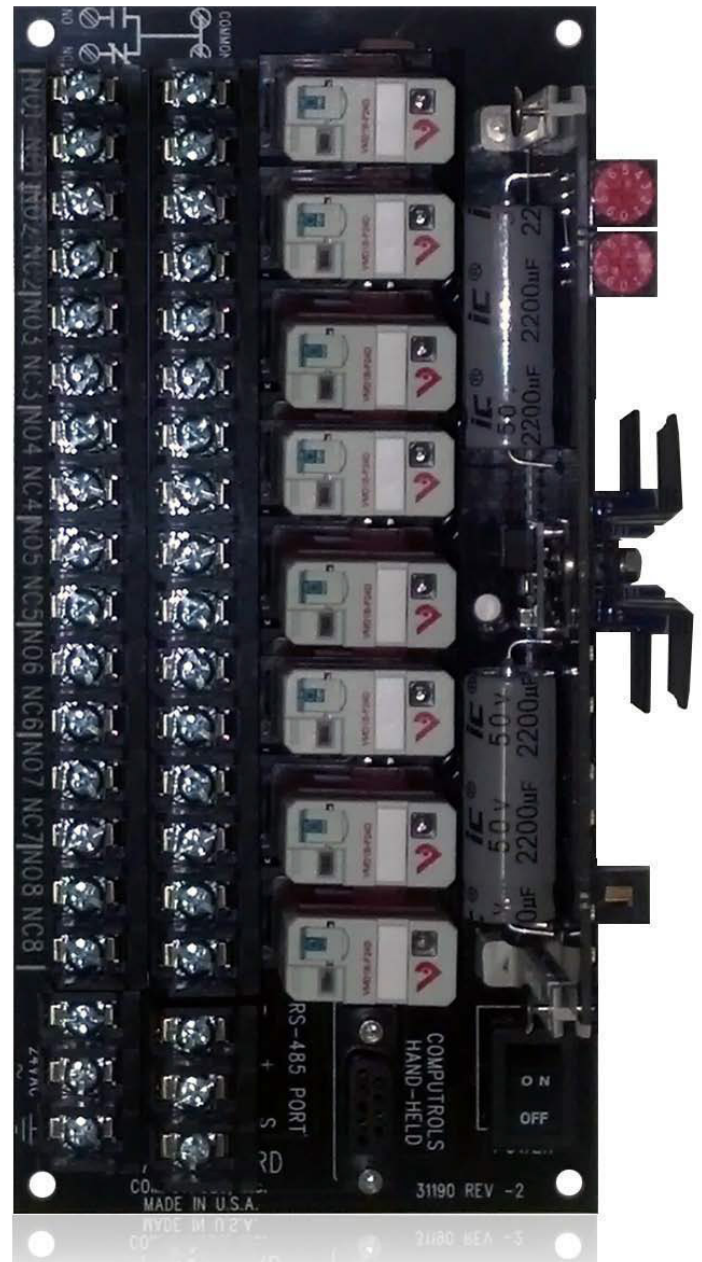
Two decimal rotary switches (0-9) allow simple addressing – no hex, no binary.

Two-Board Design

All of the electronics are on one easily replaceable brain board for quick repairs.

Lifetime Warranty

Our quality speaks for itself.



COMPUTROLS BINARY BOARD



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Hardware Specifications

Dimensions	<ul style="list-style-type: none"> • 8BB Terminal Board: 7.5"x 4" • 8BB: 1.625"x 5.5"x 2" 												
CPU	Powerful 25 MIP throughput central processor allows standalone operation												
Power	<ul style="list-style-type: none"> • 24VAC @ 400mA or 10VA (all outputs on) • Transient voltage protected 												
Software	Computrols' well-known CBAS software provides a powerful and easy to use interface to the 8BB's powerful feature set.												
Connections	<ul style="list-style-type: none"> • Eight independent Form C SPDT relay contacts. 												
Control Functions	<ul style="list-style-type: none"> • Relays can be configured as sustained or momentary. 												
Contact Ratings	<table border="1"> <thead> <tr> <th></th> <th>Resistive</th> <th>Inductive</th> </tr> </thead> <tbody> <tr> <td>Voltage</td> <td>SPDT</td> <td>SPDT</td> </tr> <tr> <td>28V DC</td> <td>10A</td> <td>7.5A</td> </tr> <tr> <td>30V DC</td> <td>10A</td> <td>7A</td> </tr> </tbody> </table>		Resistive	Inductive	Voltage	SPDT	SPDT	28V DC	10A	7.5A	30V DC	10A	7A
	Resistive	Inductive											
Voltage	SPDT	SPDT											
28V DC	10A	7.5A											
30V DC	10A	7A											
Communications	<ul style="list-style-type: none"> • RS485 OPTO 9600 BAUD • Transient voltage protected • Overvoltage and short-circuit protected • Two LED traffic indicators 												
Memory	<ul style="list-style-type: none"> • 256 Bytes Internal Data RAM • 1024 Bytes XRAM • 8k Bytes FLASH; In-System Programmable in 512 byte Sectors 												
Environmental	<ul style="list-style-type: none"> • Operating temperature: 32°–102°F • Storage temperature: -8°–117°F • Humidity: 0–95%, non-condensing 												

Parts and Accessories

Part Number	Description
8BB	8 Point Binary Output Board
HHT	Hand Held Terminal





PROJECT SPOTLIGHT

111 North Canal, Chicago IL

by Drew Miire


The Computrols access control system can now interface with destination dispatch elevator systems. The Computrols access system offers an ethernet interface to both Thyssen Krupp and Motion Control Engineering's destination based systems. The destination system groups people based on desired floor which reduces the number of stops and increases efficiency. Users utilize a touch screen kiosk in the elevator lobby to select their desired floor rather than using an up/down button. Each touch screen kiosk also houses a card reader. The Computrols access system grants or denies access based on user credentials. This cutting edge interface allows passengers to get to their destination quickly and securely.

An extensive lobby renovation project was recently completed at the 111 North Canal building in Chicago, Illinois. As a part of the lobby renovation project, the elevator control system was also being upgraded to Motion Control Engineering's destination dispatch.

The main lobby of the building has turnstiles blocking access to the elevators. Pre-programmed users are assigned a VIP floor in the Computrols software. This is considered the user's default floor. Anytime a card with a default floor is scanned at one of the turnstile readers, the cardholder is granted access through the turnstile, and an elevator cab is assigned to the cardholder simultaneously. The assigned cab number is displayed on a monitor that is mounted on top of the turnstile.

In addition to interfacing to the destination dispatch system, Computrols was asked to retrofit several existing access controlled doors and to provide access controls to multiple doors that were being added as part of the renovation. The fully featured CBAS Web software for access control was chosen to provide a flexible user interface. Computrols was also asked to provide a visitor management solution which utilized QR scanners. Computrols was able to utilize our AC-5 access controller to interface directly to the QR scanners.

Custom software development was implemented in CBAS Web, allowing tenants to generate guest passes via the web interface. The temporary badges are only valid at 2 of the turnstiles where the barcode scanners are installed. The QR scanners are also capable of reading QR codes displayed on mobile or tablet devices. For security purposes if a visitor badge is sent via email it is only valid for single use. Paper badges that are issued at the lobby security desk are only valid for up to five days.

	Drew Miire andrew.miire@computrols.com
	Company: 111 N Canal Contractor
	Floor: 5
	Valid for single use on: Mon, 08 Sep 2014
I00133L00134-C221-14520-41630F0070	

For more information regarding these products, please contact your Computrols sales representative.

UPCOMING EVENTS



Navy Pier / Chicago, IL
September 30th - October 2nd, 2014

**The Construction and Maintenance
Institute Conference for
Criminal Justice Agencies**
Indianapolis, Indiana
October 13th -17th, 2014



Morial Convention Center
New Orleans, LA
October 22nd-24th, 2014

Did you know?

Introducing the **SMTP** Emailer

by George Hingle

If you have upgraded your CBAS version since 2012, may have noticed that we are no longer using Outlook Express or Thunderbird as our email sender for CBAS Email Alarms. First we abandoned Outlook Express because CBAS could no longer connect to it. Then, it was taken out of Windows 7. Initially, Thunderbird worked fine. However, after continued use, we encountered multiple issues. Thus, with the advent of CBAS Version 12, Computrols decided to provide an email program that only sends out emails, and install it with CBAS.

Of course, when you send an email, you must have an email account on a server somewhere. Many of our technicians and dealers found it easiest to acquire an email account online from Google's Gmail, rather than trying to get the client to provide their

own email account from their company's IT department.

We then discovered that since the email was actually coming from another program (CBAS) and coming out so fast that internet service providers at the sites were blocking the outgoing emails assuming they were spam. You could successfully send a test email from the program, but not from CBAS. So we have since added a delay which has corrected the problem. Also, different email providers use different types of authentication and different TCP/IP ports. Those have been also added.

The latest version has all of those features and installs with CBAS version 14. But, if you have an older version and are having trouble getting it to work, please contact Tech Support for a copy. It's very easy to set up. When you first open the program, it goes directly to the Windows Systray. From there, you double-click it and you can start to configure it. The information you will need is: user name, password, SMTP (outgoing) Server name, and type of authentication. When you choose the authentication, the program fills in the appropriate ports for you.

The program has to be running for it to send email.



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