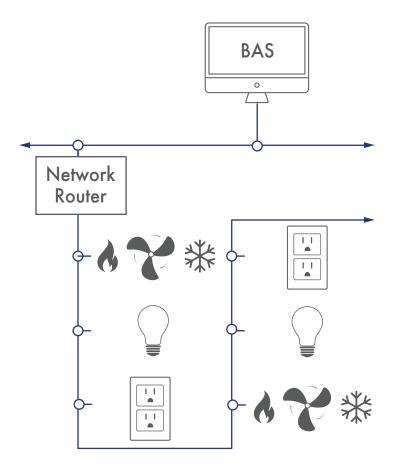


# UNIFIED Explore the Difference

# Unified

- One Network
- One User Interface
- One Point of Accountability
- Wide Open Integration



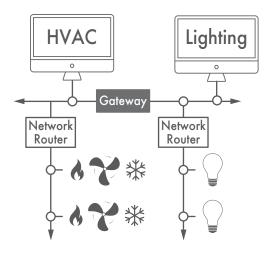
#### UNIFIED CONTROLS MAXIMIZE ENERGY SAVINGS AND RELIABILITY

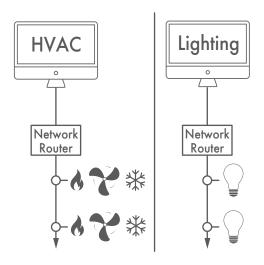
Blue Ridge Technologies' Unified control solutions provide maximum energy savings, and increased reliability, at a fraction of the cost of traditional systems.

By combining existing BACnet and other open protocol networks, along with our innovative modular designs, Blue Ridge has created a networkable solution that brings contemporary and legacy control systems into a Unified building automation platform. This approach leverages the system you already own to increase the energy and operational efficiency of your facility, while utilizing the same trusted local service provider you use today.

# Gateway

- Separate Networks
- Separate User Interface
- Limited Integration





# Stand Alone

- Separate Networks
- Separate User Interface
- No Integration

Unified Control facilitates more energy savings by eliminating the complexities of gateway systems, and the limitations of stand-alone controls.

For a complete Building Automation System (BAS), Unified Control is the best solution for your facility.

# CONCLUSION

# By Design

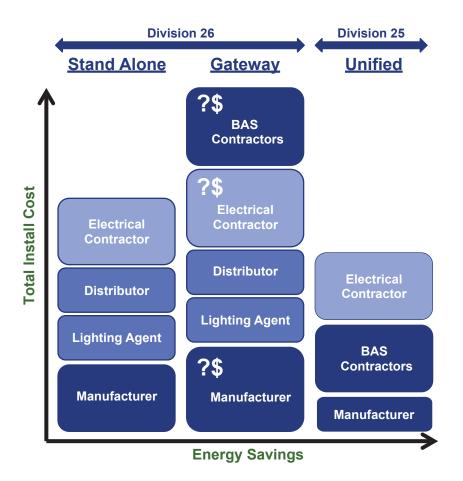
#### MAKE THE SWITCH TO A BETTER WAY

Utilizing traditional design and delivery methods makes integrating lighting control with Building Automation Systems (BAS) needlessly more expensive and risky. The Unified Control model achieves better results by empowering the right professionals to perform work within their area of expertise.

Simply stated: The BAS Controls Contractor furnishes the lighting control, and the Electrical Contractor installs the lighting control. This proven and effective approach eliminates integration uncertainty and provides a single point of responsibility for the system.

#### IMPORTANT DIFFERENCES

- Guaranteed Interoperability
- Guaranteed Sequences of Op
   Eliminates Scope Conflicts
- Local Trusted Service Provider Free Firmware Upgrades
- Reduces Risk Premiums



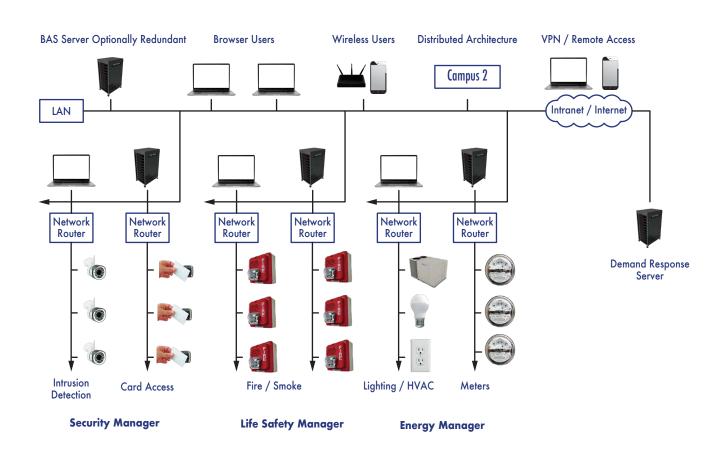
# **BENEFITS**

Unified Control leverages the BAS infrastructure and the connectivity advancements already within the building enterprise.

- One Network
- One User Interface
- One Point of Accountability
- Wide Open Integration
- ✓ Web based Single user interface
- Profiles for multiple users

- Remote access via IP
- Reduce redundant hardware
- Leverages Existing Network Infrastructure
- Multi Protocol Support
- Share and trend all sensor information
- Maximize Energy Savings

#### UTILIZES THE BUILDING AUTOMATION SYSTEM



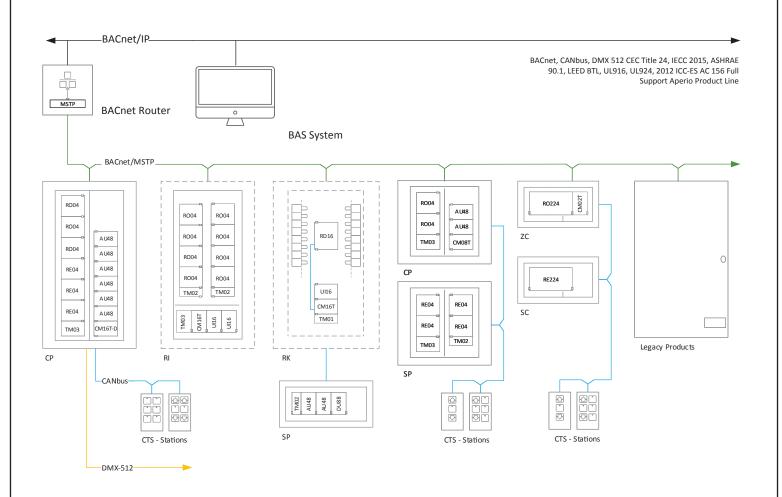


Our platform is standards-based, open lighting control delivered as a unified solution through the building automation system.

Our platform enables the design of right-sized solutions across three dimensions:

- Application: The platform supplies powerful authoring tools to allow for running as many applications as your needs require.
- I/O: Acquire only the I/O you need to run your applications, with the ability to add more later if your needs grow.
- Packaging: Distribute your I/O with right-sized enclosures while allowing for further growth solutions.

Being able to easily scale one's needs along each of these dimensions delivers an easy to confiure-and-maintain solution, unsaddled with excess while affording for effortless future expansion.



#### **Control Panel**

The Control Panel (CP) utilizes our BACnet native platform, modular electronics suite, and DIN rail-based enclosure packaging to offer maximum flexibility in design and implementation of your lighting control application. CP is suited for new or existing building applications. CP scales from a single zone to an entire floor or large public area. CP communication type, size, and I/O capacity are fully configurable based on your specific project requirements.

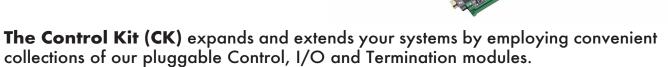
# **Retrofit Interior**

**Retrofit Interiors (RI)** utilize our native BACnet platform, modular electronics suite, and DIN railbased packaging on a single back plate to replace existing relay panel electronics and relays. RI retains the original line voltage wire, conduit, and enclosure reducing labor as well as material cost. RI is compatible with most low voltage switches, occupancy sensors, and light level sensors.

# **Retrofit Kit**

**Retrofit Kits (RK)** utilize our BACnet native Control and I/O Modules to replace multiple manufacturers lighting controls with flexible intelligence to exceed today's demanding application requirements. RK is designed around our universal relay driver modules RD16 and RD32 to leverage the existing infrastructure by retaining the relays, line voltage wire, and conduit to reduce replacement costs.

- Multi Manufacturer Relay Compatibility
- Modules can be combined via pluggable CANbus or remotely located
- Termination Modules and DIN Rail included
- I/O Expansion with Control Kits (CK)



- Termination Modules and DIN Rail included
- Approved for use in UL508A Industrial Control Panels
- Designed for use in existing RP and CP Low Voltage Bays
- Provides Retrofit Kit I/O Expansion for Dimming and Switch Inputs

# **Zone Control**

**Zone Controls (ZC)** utilize our native BACnet platform, modular electronics suite, and DIN rail-based enclosure packaging to offer a highly distributed lighting control soltion. ZC is suited for new or existing buildings, is compatible with all low voltage switches, occupancy sensors, and light level sensors.

**Satellite Controls (SC)** utilizes our modular electronics suite, and DIN rail-based enclosure packaging to expand I/O capacities of Zone Controls in highly distributed lighting control applications. SC is suited for new or existing buildings, is compatible with all low voltage switches, occupancy sensors, and light level sensors.



#### **Control Module**

CM is a BACnet Application Specific Controller that contains the control application engine, capacitive touch station (CTS) support, and network communications. CM is available in multiple configurations. Configuration is determined by I/O capacity requirements, primary network communication type, and optional protocol support. CM is a standard option for all control products. CM is combined with other modules via a pluggable CANbus to address specific application requirements.

- BACnet Communication
- Real-Time Clock with Battery Backup
- Battery Life of 10 Years
- Rotary Dial Addressing
- Remote Configuration
- Time Sync
- Field Replaceable Firmware
- CANbus Communication





# IO Software and Firmware

**Essentials software** is a free tool to configure, checkout, and start up all M3 products. For the latest software, firmware, and support, please visit us at www.brtint.com

#### **TM01**

**TM01** is a low voltage power supply and physical termination module. TM01 is a standard option for all control products. TM01 is combined with other modules via a pluggable CANbus to address specific application requirements. TM01 provides 24VDC power and terminals for CANbus access and extension in remote mounting application.

- Standard RP Option or Remote Mounting
- DIN Rail Mounted
- Provides Physical Termination Point for CANbus Network and Expander module power



#### **TM02**

**TM02** is a physical termination module. TM02 is a standard option for all control products. TM02 is combined with other modules via a pluggable CANbus to address specific application requirements. TM02 provides screw terminals for CANbus access and extension in remote mounting applications.

- Standard RP Option or Remote Mounting
- DIN Rail Mounted
- Provides Physical Termination Point for CANbus Network

#### **TM03**

**TM03** is a 120/277V line voltage switching power supply and physical termination module. TM03 is a standard option for Panel products. TM03 is combined with other modules via a pluggable CANbus to address specific application requirements. TM03 provides 24VDC power and screw terminals for CANbus access and extension in remote mounting applications.

- Standard Panel Option
- DIN Rail Mounted
- Resides on CANbus Network
- Class 1 Power Supply
- Provides Physical Termination Point for CANbus Network and Expander module power

#### **RO04**

**RO04** is a Line Voltage Relay Output module with built in Load Status that can control up to four independent circuits. RO04 is a standard I/O module option for all panel products. RO04 is combined with other I/O modules via a pluggable CANbus to address specific application requirements

- Standard Panel Option
- DIN Rail Mounted
- Resides on CANbus Network
- 4 Relay Outputs
- Rotary Dial Addressing



# **RE04**

**REO4** is a Line Voltage Relay Output module with built in Load Status, and UL924 Emergency Power Sequence. REO4 can control up to four independent emergency 120VAC/277VAC 20A single phase circuits. REO4 is a standard I/O module option for all Panel products. REO4 is combined with other I/O modules via a pluggable CANbus to address specific application requirements. TM03 Termination Module is required for UL924 Sequences. See page 2 for emergency sequence and testing procedure.

- Factory or Remote Mounting
- DIN Rail Mounted
- Resides on CANbus Network
- 4 Relay Outputs w/UL924
- Rotary Dial Addressing
- Remote Configuration

# **RD32/RD16**

**RD16** is a Universal Relay Driver module that includes both 24VAC/VDC Relay Output Drivers and Low Voltage Status Inputs and is used to drive and monitor multiple OEM lighting control relays. RD16 is a standard I/O module option for Kits. RD16 is combined with other I/O modules via a pluggable CANbus to address specific application requirements. Remote mounting applications require a Termination Module (TM). RD16 requires external 24VAC/24VDC sub buss power.

- Standard RP Option or Remote Mounting
- DIN Rail Mounted
- Resides on CANbus Network
- 16 Relay Drivers and 16 Load Status Inputs per module
- Multi manufacturer relay compatibility

**RD32** is a Relay Driver Module designed to be compatible with all legacy products that utilize LTR, RR7, and RR9 Relay Platforms via a 16 or 20 Pin ribbon cable con-nection. RD32 has an integral 24VAC to 24VDC power supply. RD32 is combined with other I/O Modules via the pluggable CANbus to address specific application requirements.

- Includes Retrofit Bracket for replacement mounting of legacy Controllers
- DIN Rail Mounted
- Resides on CANbus Network
- 32 Relay Drivers per module
- Relay Status is supported in Legacy Retrofit Kits
- Integral 24VAC to 24VDC Power Supply, 500mA Capacity



#### **UI16**

**UI16** is a Universal Input module for sensors and low voltage switches. All inputs and types include a corresponding BACnet point. UI16 is a standard I/O module option for all control products. UI16 is combined with other I/O modules via a pluggable CANbus to address specific application requirements. Remote mounting applications require a Termination Module (TM). UI16 requires external 24VDC sub buss power. Digital Input option is wet type and requires 24VDC.

- Standard RP Option or Remote Mounting
- DIN Rail Mounted
- Resides on CANbus Network
- 16 Universal Inputs Configurable
- Digital Input (DI): 24VDC
- Analog Input (AI): 0-5VDC, 0-10VDC, or 4-20mA



#### **A008**

AOO8 is a 0-10V Analog Output module used for 0-10VDC dimming applications. AO08 is a standard I/O Module option for all control products. AO08 is combined with other I/O modules via a pluggable CANbus to address specific application requirements. Remote mounting applications require a Termination Module (TM).

- Standard Panel and Kit Option
- DIN Rail Mounted
- Resides on CANbus Network
- 8 Analog Outputs
- Rotary Dial Addressing
- Remote Configuration



# **AU48/DU88**

AU48 is a combination module that includes both Analog Outputs for 10VDC dimming and Universal Inputs for sensors and low voltage switches. All inputs and types include a corresponding BACnet point. AU48 is a standard I/O module option for all control products. AU48 is combined with other I/O modules via a pluggable CANbus to ad-

dress specific application requirements. Remote mounting applications require a Termination Module (TM). AU48 requires external 24VDC sub buss power. Digital Input option is wet type and requires 24VDC.

- Factory or Remote Mounting
- DIN Rail Mounted
- Resides on CANbus Network
- 4 Analog Outputs, 8 Universal Inputs
- Rotary Dial Addressing
- Remote Configuration

DU88 is a combination module that includes both Digital Outputs for on/off control of low voltage devices and Universal Inputs for sensors and low voltage switches. All inputs and types include a corresponding BACnet point. DU88 is a standard I/O module option for all control products. DU88 is combined with other I/O modules via a pluggable CANbus to address specific application requirements. Remote mounting applications require a Termination Module (TM). DU88 requires external 24VDC sub buss power. Digital Input option is wet type and requires 24VDC.

Digital Outputs require external power and are rated for 24VAC/24VDC 1A each.

- Factory or Remote Mounting
- DIN Rail Mounted
- Resides on CANbus Network
- 8 Digital Outputs, 8 Universal Inputs
- Rotary Dial Addressing
- Remote Configuration











#### **CAPACITIVE TOUCH STATIONS**

- Addressable CANbus Stations
- On/Off, Raise/Lower, and Preset
- Decora Style Opening
- LED and Audible chirp for status Indication
- Four Color Options



#### Coman place mage recimened as a communication as a

**SWITCHES** 

- Low Voltage Override Switches
- Single and Dual Button
- Decora Style Opening
- Available in White and Ivory

#### **OCCUPANCY SENSORS**

- Low and Line Voltage Models
- Passive Infrared
- Dual Technology utilizing High frequency Doppler (HFD)
- Ceiling, Wall and Corner Mount Sensors
- Multiple Mounting and Lens Options

#### **LIGHT SENSORS**

- 0-10v Photodiode Light Level Sensor
- Foot-Candle and Lux Values
- Indoor, Outdoor & Skylight Models
- Multiple Ranges



#### STOP BY



Blue Ridge Technologies 1800 Sandy Plains Industrial Parkway Suite 216 Marietta, GA 30066

#### WE'RE HERE TO HELP



Toll-free: +1 (800) 241-9173 Main Phone: +1 (770) 790-4880 Main Fax: +1 (770) 790-4883

#### **CONTACT US**



Sales: Sales@BRTint.com

Customer Service: CustomerService@BRTint.com Technical Support: TechSupport@BRTint.com

#### HOURS OF OPERATION



Monday - Friday: 8:00 AM to 5:00 PM (Eastern)

#### LEARN MORE



www.brtint.com

# THE BLUE RIDGE DIFFERENCE AT WORK

#### **Sports Facilities**

San Antonio Alamodome
Autzen Stadium (Oregon Ducks)
Bank of America Stadium (Panthers)
Empower Field at Mile High (Broncos)
NRG Stadium (Texans)
Petco Park (Padres)
Rocket Mortgage Fieldhouse (Cavs)

#### Healthcare

Aetna
Intermountain Healthcare
Kaiser Permanente
Merk
Palo Alto Medical Foundation
Pfizer
Sutter Health
UC David Medical Center

#### International

5th Avenue Place
Carrier Commercial Singapore
Cathay Pacific Headquarters (Hong Kong)
Centro Comercial Las Americas (Mexico City)
Hewlett-Packard Mexico (Mexico City)
Johnson Controls Australia (Sydney)
Incheon International Airport (Korea)
Korea City Air Terminal (Korea)
Motorola (Chihuahua, Mexico)
Sinclair Center (Vancouver, Canada)
Tribunal de Contas da Uniao (Mexico City)

#### **Federal and State Government**

United States Department of Energy
Eglin Air Force Base
Federal Courthouses
Federal Reserve Bank
Joint Base Lewis-McChord
Navy Pier Chicago
Oregon Department of Public Safety
United States Department of State
Connecticut State of Department
Tennessee State of Department
United States Postal Service
Washington State Department of Transportation

#### Retail

5th Avenue Place
Bloomingdale's
Broadway Plaza - Walnut Creek
Cumberland Diamond Exchange
Fashion District Philadelphia
Scottsdale Fashion Square
Fashion Show Las Vegas
The Greenbriar
Lidl US
Macy's
Marriott Hotels
Tysons Corner Center
Whalers Village

#### **Airports**

Albany International Airport
Baltimore Washington Thurgood Marshall
International Airport (BWI)
A.B Won Pat Guam International Airport
John F. Kennedy International Airport
John Wayne Santa Ana Airport (SNA)
Kahului Airport
McCarran Rent-A-Car Center
Ontario International Airport (ONT)
Greater Rochester International Airport (ROC)
Salt Lake City International Airport (SLC)
Tampa International Airport

#### Corporate

AT&T
Bechtel
BF Goodrich
Blue Cross Blue Shield
Boeing
Cisco
Citrix
DeBartolo Development
DuPont
FedEx
Goodyear
HP

Hr Hines IBM Land O' Lakes Inc. Levi's

Levi's
Lockheed Martin
Nestle
Northrop Grumman
Starbucks
USAA
Union Carbide Corporation

UPS Verizon Warner Bros.

#### Municipal

Camden County Courthouse
Chatham Library
Los Angeles Police Department - Headquarters
Culver City-City Hall
Hennepin County Minnesota
Jefferson County Courthouse
King County Library System
Oakland City Center
Orlando City Hall
Tacoma Union Station
Turlock Irrigation District Water & Power
United States District Court Western District of
Washington
Vacaville Police Department

#### Schools

Irma C. Austin Middle School Bellevue School District Carmel High School Central High School Claughton Middle School Clearwater High School **Dekaney High School** Deuitt Middle School Elk Grove Unified Franconia Elementary School **Grand Point Elementary School** Lakewood Ranch High School Meadville Area Senior High School Palo Alto Unified School District St. Paul Public Schools Salyers Elementary School Spring High School Sugar Pine Elementary School Toledo Public Schools Wells Middle School Westfield High School Winship Elementary School

#### **Colleges and Universities**

The Art Institute of Atlanta **Baylor College of Medicine Boise State University** Clackamas Community College Clemson University Georgetown University George Washington University Harvard Law School Long Beach City College Morehouse School of Medicine Northwestern University Orange Coast College Pepperdine University Portland State University Queens College, New York Roanoke College Rockefeller University Stanford University The University of Alabama at Birmingham University of California, Irvine University of California, LA University of California, Merced University of Florida University of Georgia University of Houston Indiana University Bloomington University of Iowa University of Minnesota University of Mississippi University of New Orleans University of Northern Iowa University of Oregon University of South Carolina University of West Georgia

Webster University







**VOL 4.00** 

