

ETC
ARCHITECTURAL LIGHTING
PRODUCT GUIDE





SMARTLINK[®] ARCHITECTURAL CONTROL

Architectural lighting control for any budget!

SmartLink is a high-quality, low-cost solution for lighting control applications such as restaurants, retail stores, schools, and houses of worship. Any venue can attain quality lighting control using SmartLink.

Recall fundamental lighting looks with just one touch! SmartLink stations are pushbutton devices that allow access to presets and sequences in Unison[®] systems, SmartPack[®] dimming panels, and SmartSwitch[™] relay panels.

Plug-and-play architectural lighting control! SmartLink is ready to go, out of the box. Low installation cost. No programming or commissioning. No DMX wiring required. No software, computer or external devices necessary.

Smart savings. SmartLink's system functionality is *free* in ETC's SmartSwitch or SmartPack and is a low-cost option in Unison systems.



SMARTLINK® CONTROL

Fuss-free control for your lighting system. No need for software: you can connect ETC's Unison®, SmartPack®, SmartSwitch™ and more – and share preset and sequence control between them. When you add SmartLink Station Power Modules and SmartLink stations, you can remotely command those presets and sequences and easily address which presets a station activates.



SmartLink's LinkConnect network lets you plan your lighting control the way you want. Based on the Echelon® LinkPower™ protocol, LinkConnect delivers data and power to the stations. The two-wire topology-free system gives you the freedom to put stations where needed, without worrying about wiring. With up to 16 stations and a 500-meter network limit per system, SmartLink has your lighting needs covered.

Don't let lighting controls detract from your venue's beauty. ETC offers button control stations in two sizes and a variety of colors, while providing easy access to lighting scenes. We also offer the functional and stylish SmartLink TimeClock, giving you access to all your presets and time-of-day control, from a single location. You choose what fits your location's aesthetics and needs.

SMARTLINK® BUTTON STATIONS

Light touch. A lot of power. Available in convenient five- and ten-button configurations, SmartLink stations provide direct access to lighting presets and sequences. With **Plug-and-Play** addressing, you don't need to program the stations, but you can effortlessly change which presets they access. Using the two-wire topology-free **LinkConnect** network, up to 16 button stations can be employed in a system. SmartLink stations are available in neutral colors to complement all interiors: cream, ivory, black, gray and signal white.



Features

Plug-and-Play

LinkConnect

SMARTLINK TIMECLOCK

The new SmartLink TimeClock brings low-cost, easy-to-use time-of-day control to ETC Unison®, Sensor®, and SmartPack® dimming, as well as to SmartSwitch™ relay systems.

Green light. When energy consumption is a concern, SmartLink TimeClock is a smart choice. Meeting ASHRAE-90.1 and Title 24 standards, TimeClock maximizes the energy efficiency of your lighting system.

No external power required. SmartLink TimeClock connects to the system using the two-wire topology-free **LinkConnect** network.

No experience required. Anyone can program the SmartLink TimeClock for set-it-and-forget-it operation. The TimeClock features a large, backlit display and a simple six-button programming interface. Automatically activate lighting presets and sequences using real-time or astronomical events, or turn them on manually via hold or override functions. The TimeClock supports event-recurrence modes like 'everyday,' 'weekday,' 'weekend,' and 'day of the week.' It also offers fully configurable Daylight Saving Time settings.

Give notice. The system's built-in **FlickWarn** feature gives occupants a visual signal that the light settings in their environment are about to change. Designate any preset to quickly turn off and turn back on, based on a timed-event schedule.

The SmartLink TimeClock follows the design of other SmartLink stations. The attractive two-gang device has a coordinating overlay and plastic faceplate available in cream, ivory, black, gray and signal white.



Features

LinkConnect

FlickWarn



UNISON[®] DIMMING WITH SMARTLINK[®] CONTROL

The newest member of ETC's SmartLink family of plug-and-play lighting control and dimming products is the easy-to-use SmartLink Architectural Control Processor (ACP) in the new Unison DRd dimming enclosure. For the first time, small- to mid-sized architectural venues can seize the advantages of *modularity* – both in dimming and control.

Building on the best features of the original, ETC has redesigned the Unison dimming enclosure, adding substantial capabilities to maximize its already considerable power handling. The new Unison DRd has more power density than other dimming systems, while packing even more features into the enclosure.

The right stuff. Combined, the SmartLink and Unison DRd bring affordable control to a high-quality, modular dimming system, giving you everything you need to get the job done.

UNISON® DRd

Emulating ETC's acclaimed Sensor® dimming products, the new Unison DRd offers a strong internal power bus, high short-circuit current protection, and a greater dimming resolution.

Reliability 24/7/365. Designed with *continuous* operation in mind, the dimming, control, and station power options are divided into conveniently modular components, giving your enclosure the strongest service and support options ever.

Stay in control. With DRd's new **PowerSupport** choices, you can select the level of processor backup power during outages. The **RideThru** power feature keeps the processor powered for at least ten seconds – ideal if a generator is on site. The **BatteryPack**, which keeps the processor energized for at least 90 minutes, fits on the bottom of the rack, and can be installed in the field.

No jitters, no flickering. Unison DRd's dimming engine monitors and stabilizes incoming line voltage with minimum and maximum settings. The dimming engine offers more than 65,000 steps of dimming resolution, guaranteeing smooth fades all the time. And Unison's DRd accepts 16-bit DMX values for smoother input.

DRd has you covered as no other system can. When power spikes or surges happen, our **HighFault** protection provides a short-circuit current rating starting at 22,000 amps. The main breaker auxiliary cabinet boosts the short-circuit current rating to 100,000 amps. Without requiring a processor or any configuring, a clearly marked, convenient **All-On** switch behind the unit's locking door turns all loads on to full. The DRd also features **QuickBoot**, coming online in seven seconds, and a UL924-listed **Bypass Input** for even faster emergency lighting use.

ETC Dimmer Doubling™: *Twice the control, half the dimmers.* Conserve precious space in dimmer rooms. ETC's exclusive Dimmer Doubling technology allows two Source Four® lighting fixtures to operate independently, as if they were connected to separate dimmers.

Fluorescent dimming (and way more). When it comes to fluorescent dimming, Unison DRd can handle it all: two- and three-wire dimming ballasts with standard modules, DALI Ballasts with the DALI Option Board, and 0-10V ballasts with the FLO Option Board. And DRd doesn't stop at fluorescent control: we do reverse-phase dimming (trailing edge) for electronic low-voltage transformers, and a full range of other loads.



Features

RideThru

BatteryPack

HighFault

All-On

QuickBoot

Bypass Input

Dimmer Doubling



Features

LinkConnect

Snapshot

Point of Control Interface

QuickLoad

Secure-it User Access control

SMARTLINK[®] ARCHITECTURAL CONTROL PROCESSOR (ACP)

This agile processor system is designed to be ready for action in seconds. When installed in Unison[®] DRd enclosures, the SmartLink ACP works seamlessly with the DRd to provide smooth lighting fades for up to 48 channels. The ACP offers 64 presets and a sequence, and can support 16 SmartLink control stations when you add a **LinkConnect** Station Power Module. The SmartLink ACP also accepts a DMX-512A input for control by other devices. The combination of DMX and LinkConnect allow you to **Snapshot** a lighting scene for use later as one of the system presets, by simply pressing and holding a button.

Fast configuring. Smart feedback. The **Point of Control Interface** is an easy-to-read LCD screen that shows all pertinent system information. The interface allows graphics and text, with views of system functions including preset (and sequence) levels. The numeric keypad lets you quickly enter data into the processor itself, and the touchwheel provides an intuitive rotate-and-select user interface for navigation.



The SmartLink ACP features a **QuickLoad** SD card slot, which can be used to store the system data for later access, even while the system is in use. For added security, the QuickLoad slot is hidden from normal view behind a locking metal door. The ACP's **Secure-it User Access control** keeps data protected, using multiple levels of user access at the face panel.

UNISON[®] MODULES



Unison Modules are hard at work in venues across the globe. They come in voltages for every need: 120V, 230V, 240V and 277V. Designed specifically for use in Unison DRd Series enclosures, these modules are heavy-duty, high-grade commercial dimmers. Each module uses fully-rated magnetic breakers and is UL-Listed for continuous duty at five, ten, 15 or 20 amp capacities.

Unison modules handle dimming silently, across a variety of loads. Unison lets you decide what fits your load requirements: Universal modules are available for incandescent, magnetic low-voltage, two- and four-wire fluorescent, neon, cold-cathode, or switched loads, or in specialized modules, such as, three-wire fluorescent, relay, or constant current. Reverse-phase (trailing edge) dimming of electronic transformer loads is available with the electronic low-voltage dimming module series, and it works on a module-by-module basis, in line with forward-phase (leading edge) dimming.

SMARTLINK[®] LINKCONNECT STATION POWER MODULES

The LinkConnect Station Power module series provides the power for all of your SmartLink stations. Based on Echelon's LonTalk[®] protocol with LinkPower, LinkConnect allows you to communicate over a two-wire, topology-free data bus – simplifying system wiring. The Station Power Module sends power, along with communication, down the same pair of wires.

Add button control anywhere in your system. Available as optional modules for DRd dimming enclosures, the SmartLink Station Power Module provides support for 16 SmartLink stations. Wall mount and 19" equipment rack versions of the LinkConnect Station Power module are also available.



Features

LinkConnect



SMART SOLUTIONS™ IN DIMMING AND SWITCHING

Get Smart! Keeping the requirements of smaller venues in mind, ETC drew on its history of producing dependable equipment for larger-scale entertainment- and architectural-lighting applications, to develop a line of budget-friendly compact equipment. ETC's SmartPack® Wall Mount dimming panel and SmartSwitch™ relay panel bring quality dimming and switching control within the reach of any venue or space: from restaurants, schools and houses of worship to small TV studios, multifunction rooms, and more.

SmartPack Wall Mount and SmartSwitch are designed to work together, and come standard with SmartLink control. When used with the optional internal LinkConnect Station Power Supply, the system allows up to four SmartLink Stations to be connected for remote operation of presets and sequences, while external LinkConnect Station Power Supplies allow up to 16 stations.

Smart Solutions offer proven ETC technology in a super-compact format, plus ETC's acclaimed service at a smart price.

SMARTPACK® WALL MOUNT WITH SMARTLINK®

SmartPack Wall Mount is a practical choice for space-starved venues that need high-quality permanent dimming, but with a small footprint and small price tag. Available with either six 2400-watt dimmers or twelve 1200-watt dimmers with fully rated magnetic breakers, Wall Mount is the user-friendly lighting-control solution for restaurants, clubs, school auditoriums and houses of worship. The SmartPack Wall Mount has 32 presets built-in, and can run the presets in sequence automatically. SmartPack comes with SmartLink control built-in. By simply adding a low-cost **LinkConnect** Station Power Supply, you can access the presets and sequence from ETC's button stations or TimeClock. The SmartPack can also be controlled using any DMX512A (RDM compatible) input, such as a lighting control console.



Features

LinkConnect

SMARTSWITCH™ WITH SMARTLINK

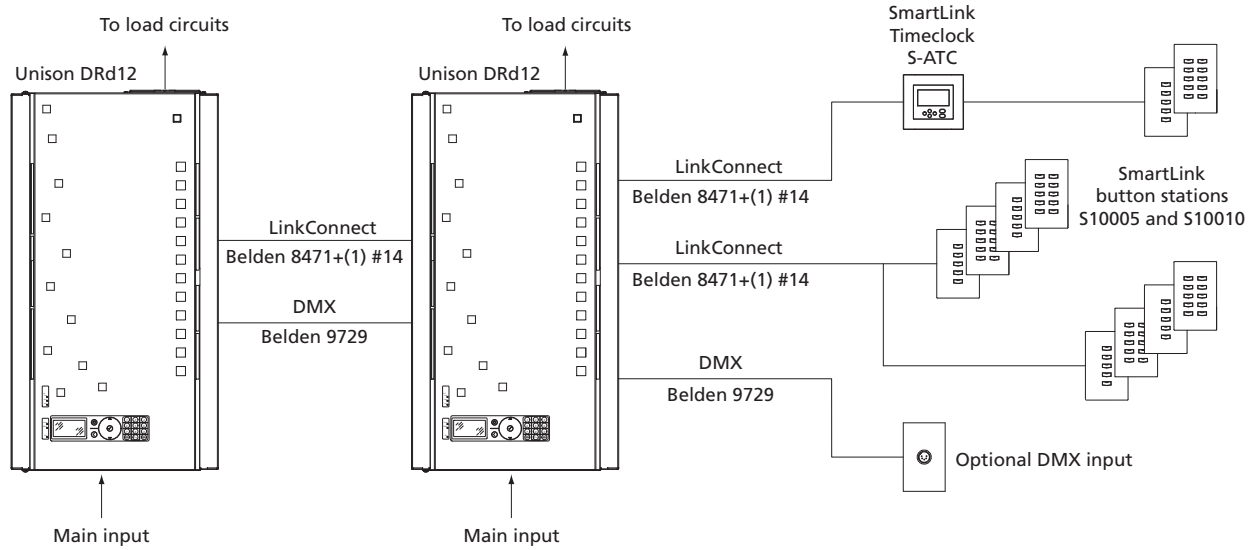
ETC's SmartSwitch is the cost-conscious architectural control solution when you need no-nonsense "on-off" relay functionality for any light source. It controls your relays via SmartLink control, DMX, or in stand-alone operation with 32 presets and a sequence. Holding up to 48 relays, this compact panel brings the fundamentals of 120 to 277 volt switching to basic applications like schools, restaurants, houses of worship, and office buildings. Flexible and adaptable, SmartSwitch handles a wide variety of load types and will grow with you: if you need more functionality, just add more relays. Simply add a **LinkConnect** Station Power Supply, and you can control SmartSwitch using ETC's button stations or TimeClock.



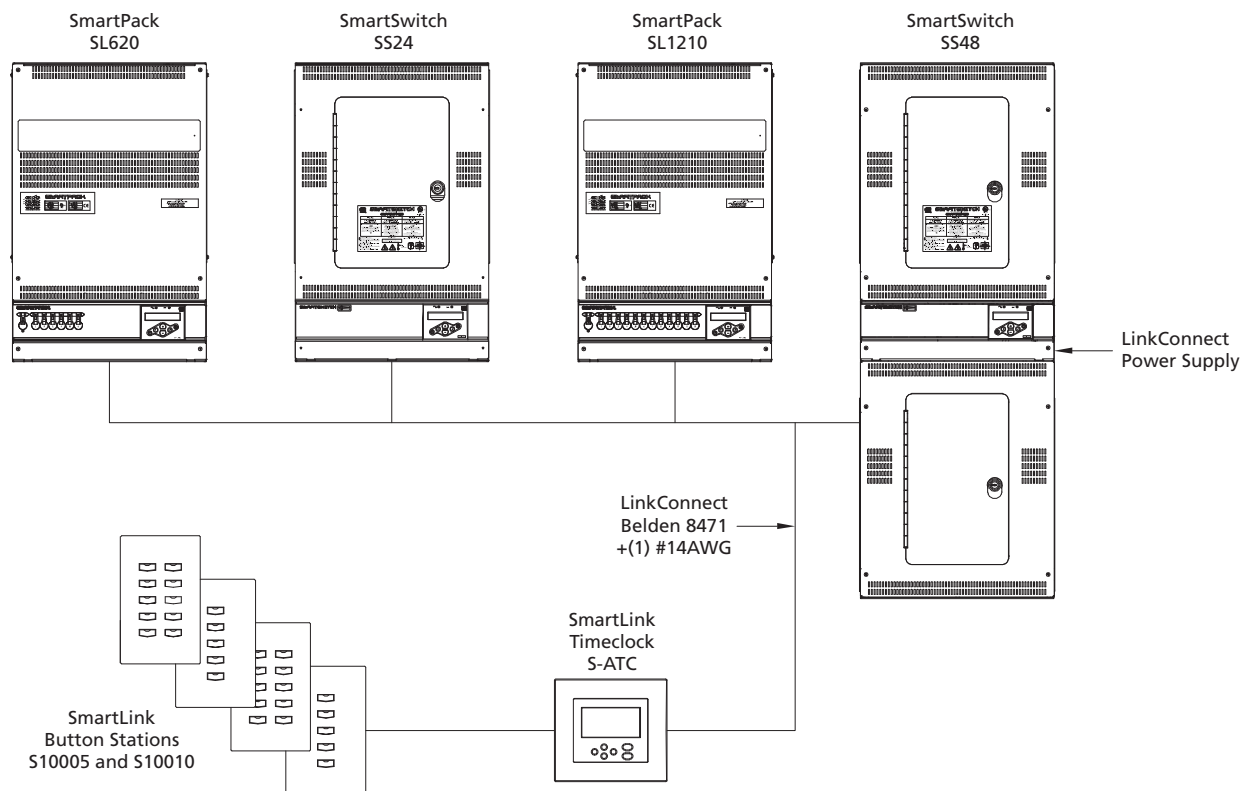
Features

LinkConnect

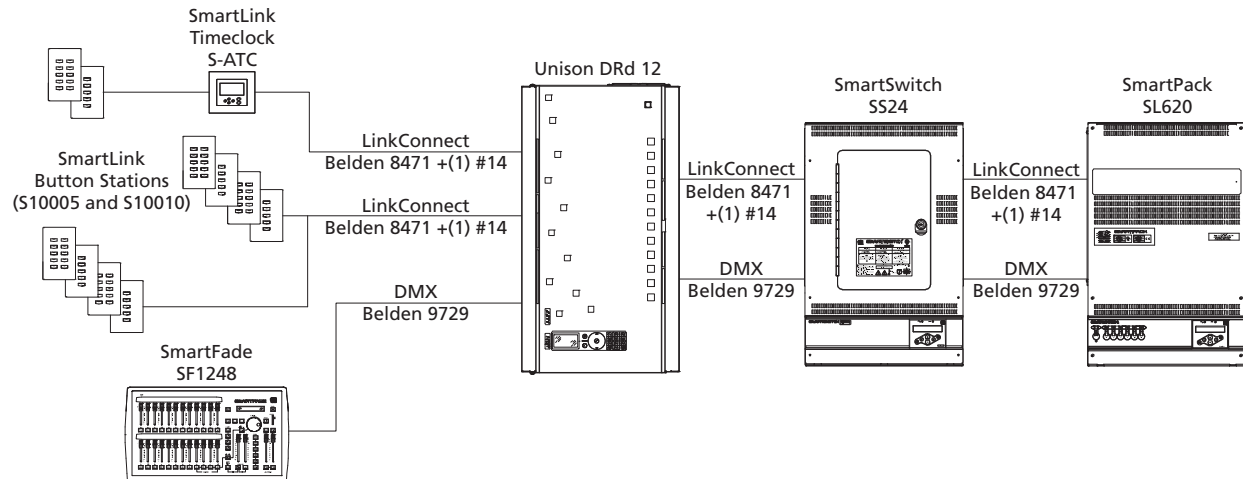
SMARTLINK® WITH UNISON® DRd SYSTEM



SMARTLINK WITH SMARTPACK® AND SMARTSWITCH® SYSTEM



SMARTLINK® INTEGRATED SYSTEM



UNISON® DIMMING

Model	Description
DRd-6	Unison DRd 6-Module Rack Enclosure
DRd-12	Unison DRd 12-Module Rack Enclosure
S-ACP	SmartLink Architectural Control Processor
S-SPM	Paradigm LinkConnect Station Power Module
S-REP-W	SmartLink Wall-Mount Station Power Module
S-REP-RM	SmartLink Rack-Mount Station Power Module
D15	Dual 1.8KW (120V) Dimmer Module
D15E	Dual 1.8KW (120V) High Risetime Dimmer Module
D15F	Single 1.8KW (120V) 3-Wire Dimmer Module
R15	Dual 1.8KW (120V) Relay Module
CC15	Dual 1.8KW (120V) Constant-Current Module
D20	Dual 2.4KW (120V) Dimmer Module
D20E	Dual 2.4KW (120V) High Risetime Dimmer Module
D20F	Single 2.4KW (120V) 3-Wire Dimmer Module
R20	Dual 2.4KW (120V) Relay Module
CC20	Dual 2.4KW (120V) Constant-Current Module
ELV10	Dual 1.2KW (120V) Reverse-Phase Dimmer Module
AD15	Dual 4KW (277V) Dimmer Module
AD15F	Single 4KW (277V) 3-Wire Dimmer Module
AR15	Dual 4KW (277V) Relay Module
ACC15	Dual 4KW (277V) Constant-Current Module
AD20	Dual 5KW (277V) Dimmer Module
AD20F	Single 5KW (277V) 3-Wire Dimmer Module
AR20	Dual 5KW (277V) Relay Module
ACC20	Dual 5KW (277V) Constant-Current Module
AELV5	Dual 1.4KW (277V) Reverse-Phase Dimmer Module

SMARTLINK, SMARTPACK® AND SMARTSWITCH®

Model	Description
S10005	SmartLink 5-Button Station
S10010	SmartLink 10-Button Station
SL-ATC	SmartLink Astronomical TimeClock
SL620W	6x20A SmartPack Wall-Mount
SL1210W	12x10A SmartPack Wall-Mount
SS12	12-Circuit SmartSwitch Relay panel
SS24	24-Circuit SmartSwitch Relay panel
SS48	48-Circuit SmartSwitch Relay panel



SMART SOLUTIONS™

SmartLink®, SmartPack® and SmartSwitch™ are just three components of ETC's popular Smart Solutions family of affordable, compact lighting control gear.

Set up anywhere and light like a pro. Smart Solutions products bring ETC quality control within the reach of smaller-scale venues like schools, restaurants, houses of worship, performance spaces within larger facilities, and more.

Little consoles with big console attitude. ETC's award-winning **SmartFade®** and **SmartFade ML** boards are lightweight, portable and packed with useful features for entertainment lighting control.

Need to distribute your dimmers throughout your venue? With ETC's **SmartBar®** or **SmartModule™**, you can place your dimmers wherever you need to – near your fixtures, on the floor in the truss, under a set – for maximum lighting control convenience. **SmartStand™** is the perfect complement to your SmartBars. The crank-up stands can easily be loaded with a dimmer bar and fixtures, letting you work wherever you need to for short-term lighting setups.



PARADIGM™ LIGHTING CONTROL

Still looking for more control? If your application requires even more lighting functionality and sophistication, ETC has a new Paradigm for you...

Dramatic lighting, dramatic efficiencies. A new Paradigm for control. Designed as a new way of thinking about building control, ETC's visionary Unison® Paradigm system goes where none has gone before – fully fusing architectural lighting-control advances with entertainment-lighting control technology. ETC brings our award-winning expertise in both areas together to give you the best of both worlds.

From restaurants to hotels, casinos, schools and centers of higher learning, museums, houses of worship, office buildings, conference and convention centers – Paradigm scales to all, offering solutions tailored to the lighting needs of each.



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