

ETC
ARCHITECTURAL LIGHTING
PRODUCT GUIDE





PARADIGM™

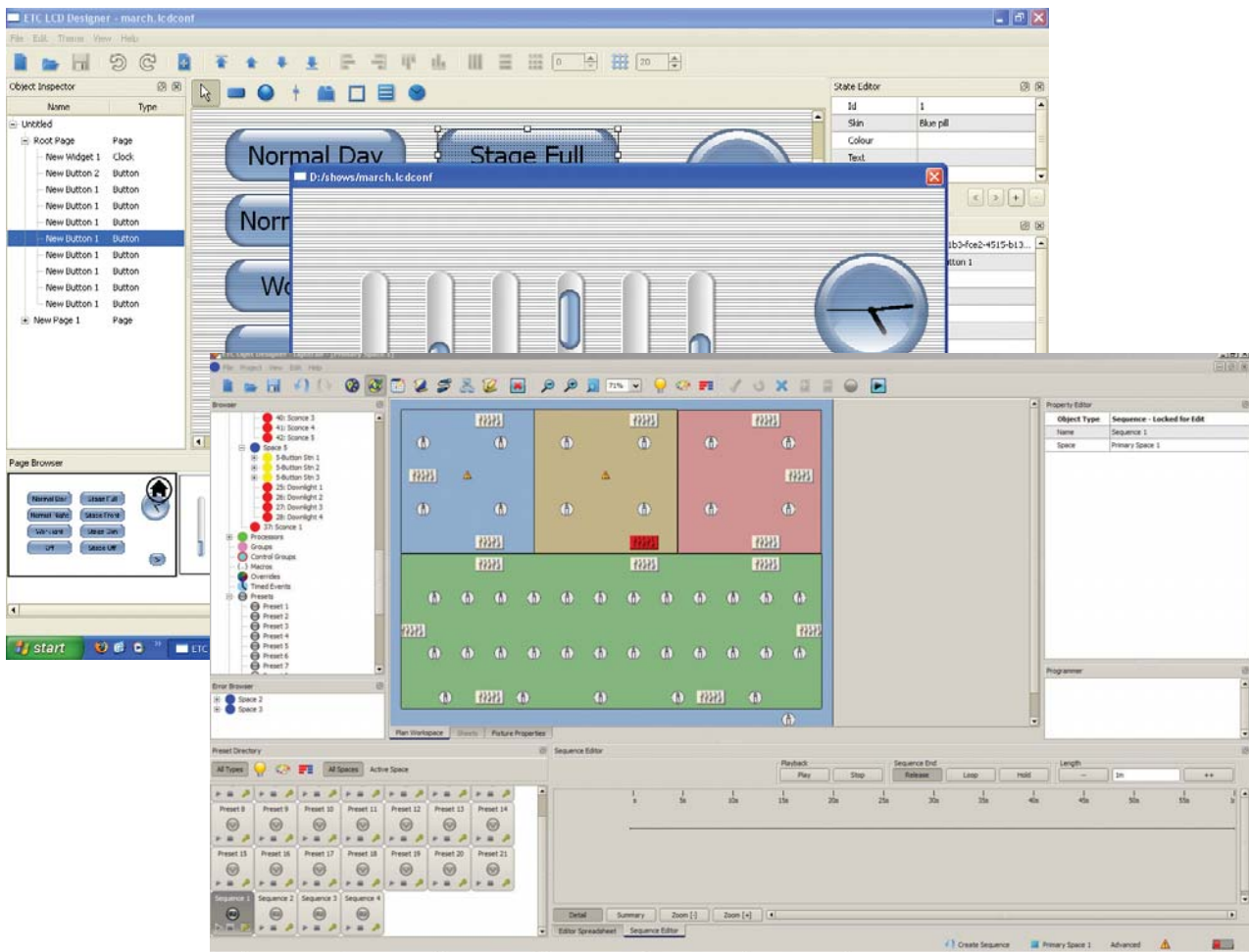
DRAMATIC LIGHTING, DRAMATIC EFFICIENCIES.
A NEW PARADIGM FOR CONTROL.

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.

Paradigm delivers a new level of comprehensive control – sophisticated facility-lighting and building systems integration. And it does so with unprecedented flexibility and simplicity: a green-minded energy-management system that capitalizes on daylight-harvesting, occupancy sensing and time schedules for maximum electricity and budget savings, combined with a deep library of lighting fixtures (LED's, moving lights, and more) for dynamic effects, plus the power to speak fluently to different devices from different manufacturers over the same control system.

The Unison Paradigm family of products includes powerful software, elegant touchscreens, wall stations, modular control electronics, dimming and control enclosures, and accessories to offer the most customizable and people-friendly control systems available.

Paradigm addresses the whole space – bringing the beauty of well-controlled light in line with today's environmental concerns and real-life needs. Restaurants, hotels, casinos, schools and centers of higher learning, museums, houses of worship, office buildings, and conference centers – Paradigm scales to all.



UNISON® PARADIGM™ SOFTWARE

Big soul. Big power. The biggest computer brain with powerful processing power is nothing without a soul – powerful software. Amid a score of hardware innovations, the single most important part of ETC's Paradigm system is our potent LightDesigner™ software. We created an entire operating system ready to run your unique applications.

For years, an architectural lighting control system had been viewed as a static 'press-a-button, lights-come-on' set of functions. If you wanted real-time control or to design on the fly, you had to turn to an entertainment control console. With Paradigm LightDesigner, you can press a button and let the system manage lighting states for you automatically, or you can use it as if it were a console, programming dynamic lighting events. Not static or dynamic, but static *and* dynamic – LightDesigner has all the tools you need to truly design lighting both ways.

We also know it's all about people. Everyday people need to be comfortable using a lighting control system. ETC pays special attention to that need, offering a comprehensive interface design tool, ControlDesigner™, allowing you to assemble endless combinations of graphics, even your own creations, into a complete, touch-driven environment, unique to your facility.

LIGHTDESIGNER™

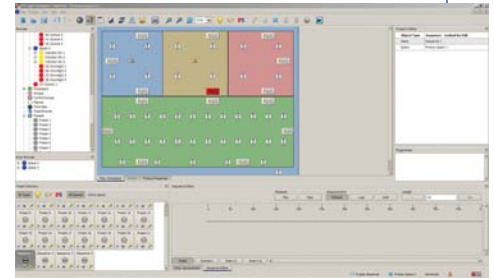
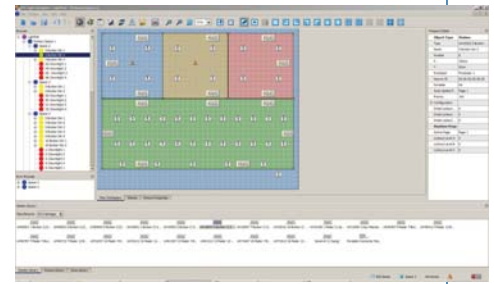
ETC'S NEW SOFTWARE FOR LIGHTING AND BUILDING CONTROL SYSTEMS

LightDesigner represents a true shift in how lighting control and dimming systems are programmed, with built-in tools for managing the data of a project, freeing the design team to create lighting environments. LightDesigner allows a designer and a technician to use real-world terms and information as they collaborate on effective lighting control scenarios, including energy management, day-to-day operations, user interfaces, special events, and special effects. LightDesigner works the way you want it to, with effective pre-programming and simulation capabilities that allow you to visualize and test out changes to the lighting design, as well as access powerful, real-time live control and live editing of your Unison® Paradigm™ Control System.

Green light. LightDesigner's **EnergyManager** suite of features helps you harness maximum energy savings by using daylight harvesting (**DaylightManager**), occupancy sensing (**OccupancyManager**), and time-based controls (**TimeManager**) simultaneously. By managing the relationship of your artificial lighting to incoming natural light, as well as to changes in daily schedules and the presence of people, you save on resources and money. You can even provide occupants with a **FlickWarn** when the lights are about to change, giving them a chance to respond.

The art of lighting – made easier. LightDesigner is all about making your lighting system's configuration and design process faster and easier. With **SpaceManager** you can import a plan or picture of your project to assist in your control layout. Extensive drawing tools help you create and edit spaces, as well as easily define and manipulate otherwise complex 'combine' situations. The ready-to-use built-in effects in LightDesigner's **EasyFX** function brings out the artistry of the lighting system, designing and creating dramatic looks with LEDs, moving lights, and zones. **FixtureManager's** deep library of multi-attribute fixtures gives you drag-and-drop access to the LEDs, moving lights, and other devices you want to use (including those from many different manufacturers). LightDesigner's **LiveControl** function allows you to design on the fly. Meanwhile, **LiveEdit** allows you to change your system's functions, know that it is shared and backed up with the entire system and save changes without hesitation. The **SpeedMacro** feature makes creating conditional-logic macros as simple as possible, offering reusable custom functionality with user-defined parameters to execute the design.

Plays well with others. **EasyNet** accesses ETC's state-of-the-art Net3™ networking capability, with graphical views of your system, plus wizards to guide you through network parameters. **StationManager** gives you the power to handle a variety of ETC button and fader stations, as well as sensors, and other devices. Import or create new station types, edit functionality, including LonMARK® compatible products from hundreds of partners. **Pharos-Launch** allows you to pull information about triggers and timelines from a Pharos™ playback-controller configuration into LightDesigner.



Features

- EnergyManager
- DaylightManager
- OccupancyManager
- TimeManager
- FlickWarn
- SpaceManager
- EasyFX
- FixtureManager
- LiveControl
- LiveEdit
- SpeedMacro
- EasyNet
- Station Manager
- Pharos™-Launch

CONTROLDESIGNER™

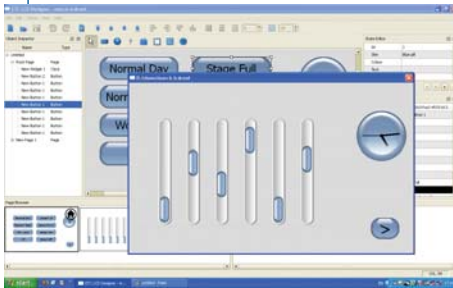
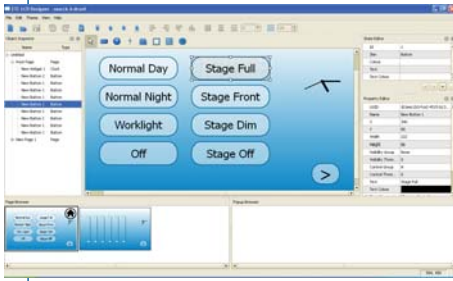
The face of the system – the look of your lighting controls. Companion to LightDesigner, ControlDesigner software gives you the tools to create the look of your Touchscreen pages and other user interfaces, previsualizing your control interface. *Free* for download from ETC's Web site www.etcconnect.com, ControlDesigner lets you choose from built-in graphics or build your own as you develop unique interfaces ahead of time and load them when you are ready. Change the look of the graphics by selecting from a variety of convenient ready-made themes, or easily design your own.

ControlDesigner's **DesignView** function allows you to create and edit control pages using extensive design tools. You can add buttons, faders and other controls using drag-and-drop convenience. Create custom pages, including pop-up windows, background images, animated clocks, transparent buttons, and navigation controls, with ease. Define exactly how you want each page to be displayed, and when you change pages, designate animated page transitions. You can even add pages to create and edit timed events within your system. And for peace of mind about the integrity of your system, lock it all down with ControlDesigner's **Secure-It Touch** feature, allowing you to add a numeric keypad with multiple access account codes to any page, hiding any function you designate. Graphics are not the only way to communicate information. ControlDesigner allows you to add and edit the sound effects associated with each control, including audible confirmation when a button is pressed or released.

ThemeBuilder offers you the choice of built-in graphic themes, from the Paradigm™ library itself or from ETC's award-winning Eos® and Congo™ lighting control systems. Change only the color or swap the entire graphic and audio style of your pages with just a few clicks. You can also use the tool to design your own theme, simply by importing graphics made with your third-party software.

Ensure each page has the look and controls you need, when you need them.

ControlView lets you visualize and test each screen and action before uploading the design to the Touchscreens. LightDesigner takes care of the rest, connecting your design to the Paradigm control system.



Features

[DesignView](#)

[Secure-It Touch](#)

[ThemeBuilder](#)

[ControlView](#)

UNISON® CORE TECHNOLOGIES

NETWORKING

ETC embraces open standards in networking, believing that all of your lighting system's components should be interoperable.

The following icons represent technologies we employ throughout the Paradigm™ system. Products that have matching icons can be connected using the depicted technologies.



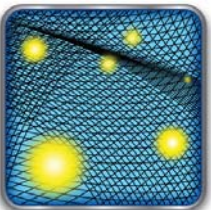
LINKCONNECT

Get connected to stations with LinkConnect. Using Echelon's LonTalk® protocol with LinkPower, the two-wire topology-free LinkConnect network gives you the freedom to put control stations wherever needed, without worrying about how they are wired. With up to 1200 stations and a 30,000-meter network limit per system, LinkConnect has your control needs covered.



NETCONNECT

Go high speed with NetConnect. ETC's Net3™ suite, powered by the open ACN Standard, gives you the bandwidth you need to create any size system. NetConnect is based on industry-standard Ethernet protocols: ESTA BSR E1.17 Architecture for Control Networks (ACN), ESTA BSR E1.31 Streaming ACN (sACN) and TCP/IP. Providing not only data but *power* for many devices, NetConnect uses 802.3af-compliant Power over Ethernet, without the need for external power supplies. You can design your network using the self-contained ERn Ethernet Switch or off-the-shelf products from the IT industry.



MESHCONNECT

Stay connected, wirelessly. ETC's MeshConnect wireless network allows you to move throughout your facility using your Touchscreen for lighting-control operation, set-up and configuration, with uninterrupted coverage. Based on a new concept in wireless connectivity, a "mesh" of Paradigm Access Points placed in pre-planned locations allows the device to choose which point to connect to for the strongest signal, even as you move from area to area. The more Paradigm Access Points in the system, the greater the wireless reception and coverage throughout the facility.

DATA TRANSFER

ETC gives you a choice of flash-memory devices when you transfer your lighting system data from your computer.



QUICKLOAD

Save, store, and load with QuickLoad. QuickLoad uses the Secure Digital (SD) flash-memory media format to upload, save and exchange information between a user's computer and the system. The QuickLoad card slot can be used to store the lighting-control system data for later access, even while the system is in use. For added security, all QuickLoad slots are hidden from normal view, usually behind a locking metal door.



USBCONNECT

Save, transport, and load faster with USBConnect. You can use standard USB flash-memory drives to save a system configuration from your computer and load the data into Paradigm-class products (Processor, Touchscreen) without the need for any cables or special ports. The USBConnect port is dedicated to transferring data quickly and is hidden from normal view, just like QuickLoad.



UNISON® PARADIGM™ TOUCHSCREENS

Paradigm's elegant and compact Touchscreen controls complement your interior design – customized to your décor and color scheme – while putting lighting and building control at your fingertips.

Available in wall-mount or handheld versions, Paradigm Touchscreens use high-resolution, widescreen, color liquid-crystal displays (LCD) that are bright and easy to read. The touch-sensitive panels provide audible and visual feedback. Designed to your specifications with **ControlDesigner™** software, the Touchscreen's clear and intuitive graphics guide you quickly through your lighting and control options. Adapt your Touchscreen's unique look, choosing from control elements such as buttons, faders, animation, pop-up windows, transparent pages, and **Secure-it Touch** electronic Lock out.

The Paradigm Touchscreens connect to the Paradigm control system two ways. For operation on the same station bus as our other stations, use the **LinkConnect** network. Or, if you choose to have an Ethernet network for your lighting controls, use the high-speed **NetConnect** option. If you need to upload or download your system configuration at the Touchscreen, you have two options: the **QuickLoad** slot using Secure Digital media, or the **USBConnect** port using a USB Flash Memory Drive.

WALL-MOUNT PARADIGM™ TOUCHSCREEN

Unison's Wall-Mount Paradigm Touchscreen is designed for complete control of lighting environments in permanently-installed locations.

More than just great looking, the Touchscreen's **DuraFrame** design is built to withstand the daily rigors of even the busiest commercial environments. The Touchscreen frame is available in standard painted finishes (cream, ivory, gray, black and signal white), as well as custom paints or anodized finishes. The Touchscreen uses an innovative, color-matched overlay with anti-scratch and anti-glare properties, reducing fingerprints and protecting the screen from damage. The overlay can also be printed with custom colors or graphics, another way to complement your interior. Wall-Mount's ingenious **Fastener-Free** design means secure, tool-free installation, even with irregular wall conditions and repeated use.

The Touchscreen's **Ready-When-You-Are** function uses proximity sensors to detect movement toward the screen, waking it up. This green feature keeps the Touchscreen in power-saving mode until needed. Ambient-light sensors inside the Touchscreen sense light levels in the immediate area and adjust the screen to optimum brightness.



Features

- DuraFrame
- Fastener-Free
- Ready-When-You-Are
- LinkConnect
- NetConnect
- QuickLoad
- USBConnect

HANDHELD PARADIGM TOUCHSCREEN

Unison® Handheld Paradigm Touchscreen is an elegant portable control device that can be used wired or wirelessly.

The Handheld Paradigm Touchscreen allows flexible control of your system wherever it is convenient for you to work. The Handheld's tough **DuraShell** aluminum frame stands up to the abuse of busy commercial environments. Available in five standard paint finishes with matching overlay frames, the Handheld can also be customized as needed.

The Handheld features **Ready-When-You-Are** technologies including tilt sensors that detect the unit's orientation and keep your views readable and right-side up.

In wired mode, the Handheld Touchscreen communicates to the system via a flexible LinkConnect cable, which also powers the Handheld. The **LinkConnect** tether attaches to the Handheld and the LinkConnect Portable Jack or Tabletop Dock, for use wherever you need control for long periods of time.

Used wirelessly, the Handheld Touchscreen employs ETC's innovative **MeshConnect** wireless technology to communicate with the Paradigm's Tabletop Touchscreen Dock or Paradigm Access Point Accessories. The Handheld runs on lithium-ion batteries for several hours of continuous wireless use (a Tabletop Dock or LinkConnect jack refreshes the batteries).



Features

- DuraShell
- Ready-When-You-Are
- LinkConnect
- MeshConnect
- QuickLoad
- USBConnect

PARADIGM™ TOUCHSCREEN ACCESSORIES

TABLETOP TOUCHSCREEN DOCK

Put your Touchscreen controls wherever you need to access them most – on a conference table, at a podium or on any other work surface – with the Tabletop Touchscreen Dock. The Tabletop Dock connects to the Paradigm control system using **LinkConnect** or **NetConnect** wiring networks. This stylish base station for the Handheld Touchscreen provides a secure docking point and can be tilted to a range of angles for operation and viewing, as well as lie flat for low-profile uses. The Dock can also be used for charging the Handheld's battery. When your Handheld Touchscreen is undocked, the Table-Top Dock provides powerful **MeshConnect** connectivity to the Handheld or acts as a LinkConnect plug-port.



Features

- LinkConnect
- NetConnect
- MeshConnect



Features

- MeshConnect
- LinkConnect
- NetConnect

HANDHELD TOUCHSCREEN MESHCONNECT ACCESS POINT

Stay connected. Touchscreen's optional **MeshConnect** Access Points allow you to move throughout your facility, using your Touchscreen for lighting control, setup and configuration, with uninterrupted wireless coverage. Each Access Point is designed to be discreetly flush or surface mounted wherever the Handheld Touchscreens will be used. The unit provides a coverage radius of 100 feet (30 meters), and connects to the Paradigm control system over **LinkConnect**. Use multiple Access Points in the system to provide greater wireless coverage throughout a facility.

PARADIGM™ TOUCHSCREEN ACCESSORIES

HANDHELD TOUCHSCREEN LINKCONNECT JACK

Plug in. The optional Handheld Touchscreen **LinkConnect** Jack offers easy and reliable connectivity and recharging power to the Handheld Touchscreen, or can be used with the Tabletop Dock. Simply locate a jack within 30 feet (nine meters) of where you plan to use a Handheld Touchscreen or Dock and connect to the Paradigm control system using LinkConnect.



Features

LinkConnect

HANDHELD TOUCHSCREEN TOUGHCASE

Overprotective is a good thing. The optional Paradigm Handheld ToughCase is meant to stand up to the daily duress that a portable device takes. As a shock-absorbent buffer around the Handheld Touchscreen, the ToughCase allows you to use **MeshConnect** or **LinkConnect** to work effectively in demanding environments. The ToughCase has openings to connect or charge the Handheld without removing the case.

WALL-MOUNT TOUCHSCREEN LOCKING COVER

Part of Paradigm's **Secure-It** series, the Wall-Mount Touchscreen Locking Cover lets you decide who has access to your lighting and building controls, locking out any unwanted actions, while protecting the Touchscreen from external damage. Complete with a tinted Lexan® window, aluminum frame and keyed locking cylinder, the locking cover is available in standard finishes to complement your Wall-Mount Touchscreen or may be customized to meet your interior design needs.





PARADIGM™ ARCHITECTURAL CONTROL PROCESSOR

Built from the ground up with performance, reliability and ease of use in mind, the powerful Paradigm Architectural Control Processor module contains state-of-the-art electronics and is packed with input and output ports. The familiar and easy-to-navigate interface has a large graphic and text display.

Designed to keep the lights on in your facility – even in critical emergency situations – the Paradigm processor uses a robust embedded-software platform, scalable internal solid-state storage, and a design that allows modules to be swapped out quickly and easily in the field. The Paradigm processor uses solid-state components, with no fans, disk drives, or moving parts, for die-hard 24/7/365 operation.

The Paradigm Processor works with Unison® Dimming enclosures (DRd) or Control enclosures (ERn) for the most powerful architectural control ETC offers (and more than you'll expect).

PARADIGM™ ARCHITECTURAL CONTROL PROCESSOR



The Paradigm Architectural Control Processor is designed for easy interaction and rapid response. Six times more powerful than previous architectural processors, the Paradigm ACP's built-in memory and processing power works with vast amounts of lighting control data and is fast enough to process 1024 simultaneous fades over any of its native protocols.

The **Point of Control Interface** features a large, back-lit LCD-screen display showing all system vitals. The Interface features clear graphics and text, views of system functions – including preset (and sequence) levels – a timed-event calendar, and more. An alphanumeric keypad allows fast data entry. The touchwheel provides a familiar rotate-and-select navigation. With the **LocalAccess** function, work right at the processor facepanel to create and edit timed events – even enter descriptive labels. Plus, access the presets and sequences already programmed in the system and change them to suit your new needs, without using any software. Or, you can use your Internet browser to view and edit elements of the system using **LightDesigner Access**, Paradigm's built-in Web interface. The ACP's **Secure-It User Accounts** control supports multiple levels of secure access at the facepanel so that only authorized users may work with the system.

Get Connected. The Paradigm processor is the center of your lighting control infrastructure. The ACP allows full Ethernet network control using **NetConnect**, featuring ETC's Net3™, powered by ACN, and native networking ports. The Paradigm Architectural Control Processor gives you the integration options you need, including two fully configurable DMX512A ports, which can be set as inputs or outputs, a bi-directional RS-232 serial port, along with four dry-contact inputs and four relay outputs. When used with optional **LinkConnect** Station Power Modules, the Paradigm ACP can communicate with and power Unison® Heritage™ and Paradigm control stations.

Getting configuration data into the Paradigm processor is easy. The ACP offers direct connection to the lighting network through an Ethernet network port on the front panel, allowing you to connect your computer to exchange configurations and to control or edit your system live, using LightDesigner. If you need to simply upload or download your system configuration, you have two options: the **QuickLoad** slot using Secure Digital media or the **USBConnect** port using a USB Flash Memory Drive.

Features

- Point of Control Interface
- LocalAccess
- LightDesigner Access
- Secure-It User Accounts
- NetConnect
- LinkConnect
- QuickLoad
- USBConnect



UNISON® HERITAGE™ CONTROL STATIONS

ETC's Unison Heritage Control Stations are used in lighting systems worldwide, from smaller-scale venues like schools, restaurants and houses of worship to large-scale networked convention centers and theme parks. Elegant and clean-lined, Unison Heritage controls are designed to complement – not to compete with – the aesthetics of any interior environment, while being easy to install using LinkConnect. Artful but durable, the Heritage stations are engineered to stand up to the daily abuse of busy public areas.

The Unison Heritage series of button and button/fader control stations can be customized to suit any décor and application – available in a wide range of sizes, color and configurations. Choose from pre-configured button/fader combinations or put stations together to create endless combinations of controls. Heritage faceplates use our **Fastener-Free** attachment system and may also be made to order – from custom legends in the font and color you choose to a unique look using materials you specify.

UNISON® HERITAGE™ CONTROLS

Unison Heritage Stations are available in a wide selection of button and button/fader combinations. The button stations are available with one to ten buttons, in single and half-gang configurations. The button/fader stations can come with one to sixteen faders and seven or twelve buttons. Control your lights in *real time*: Heritage fader stations offer hands-on responsive control. You slide a fader; the lights dim *in unison*.

Not all system interaction is with people: a variety of Heritage *interface* stations (DMX in and out, network, AV serial, contact-closure, and more) are available when interaction with other building systems or peripheral equipment is required. Our interface stations are designed to look as good as your wall stations.

Green light. Red light. And way beyond. Heritage stations give you visual feedback at the wall station. With ETC's **ColorCondition** feature, Unison Heritage Stations indicate their status – bright or dim, on, flashing or off – *in any of 16 standard colors*. Red, green and blue LEDs at each button and fader allow you to individualize the appearance of control functions and use colors as signals of system status.

Read clearly. Combining an indelible laser-marking method and the latest in plastics, Unison Heritage Stations **Forever Legend System** offers easy-to-read standard or custom legends, labeling specific control functions. Or, if you prefer, specify custom engraving and paint fill colors.

Maximum security. Prevent unauthorized use of your lighting control system in public spaces with Heritage Stations' matching **Secure-It Locking Covers**. *You* have easy access when you want to make changes; others don't. Likewise with **Secure-it Keyswitch Stations** – you specify combinations of buttons or faders with a local, momentary or maintained keylock in a single-gang faceplate, or choose button stations with key-only access. Secure-It technologies provide you with multiple levels of control protection.

Stay seated. Control your lighting system from a distance with **RemoteDirect**. Using a RemoteDirect handheld transmitter, you can trigger control functions from up to 35 feet away. Each Heritage button and button/fader station contains an infrared receiver for remote control. The Remote Direct IR transmitter can be programmed to mimic the functions of the buttons on a station or to activate separate functions, as needed.



Features

- ColorCondition
- Forever Legend System
- Secure-It Locking Covers
- Secure-It Keyswitch Stations
- RemoteDirect
- LinkConnect

UNISON HERITAGE CONSOLETTA STATION

Off the wall! The wall is not always the most convenient location for lighting controls. Sometimes you want your controls to be right where you are. The Unison Heritage Consolette Station – like a miniature lighting control console – gives you that mobility and flexibility, allowing you local control from a podium, a boardroom table, or other temporary position. By installing LinkConnect Portable jacks at prime locations, you can take a Consolette Station from room to room. Plus, program it to provide different settings for each connection point.

Choose any of our button or fader/button stations for use in this portable, table-top enclosure, complete with a 30-foot (nine-meter) cable for connection to a **LinkConnect** Portable jack.



Features

- ColorCondition
- Forever Legend System
- Secure-It Keyswitch Stations
- RemoteDirect
- LinkConnect



UNISON® DRd DIMMING ENCLOSURES WITH PARADIGM™ CONTROL

Great combination. When you select Unison Paradigm Control in the DRd enclosure, you get the best of two worlds – unparalleled lighting control, with full-featured dimming.

ETC's Unison DRd Series Enclosures are the workhorses behind the scenes, supporting a networkable Paradigm processor and a variety of dimming, switching and option modules. These dimming enclosures are trusted for their reliability and versatility. Now the DRd Series is even more powerful – redesigned to build on all of the great features of the original dimming enclosures, while adding significant new capabilities and power. Offering more power density than other architectural dimming enclosures, the new DRd is the same size and shape as ETC's classic enclosure, but packs more features into the same space-saving unit.

Aligning even more with ETC's bestselling Sensor®+ dimming products, the Unison DRd series enclosures offer a stronger internal power bus, higher short-circuit current protection, and higher dimming resolution. Designed with long-term round-the-clock operation in mind, Unison DRd's dimming, control, and station power components are now modular, making service and support easier than ever. With new PowerSupport options, you choose the level of backup for the control processor.

UNISON® DRd

Scaled to the power you need. Unison DRd is available in 6- and 12-module enclosures for up to 24 dimmers and can be cross-bussed from the same main power input, combining enclosures for up to 48 dimmers from a single feed, while only needing one control processor for both enclosures. The Unison DRd supports a Paradigm Architectural Processor and an optional **LinkConnect** Station Power Module, giving you the flexibility to have a complete control and dimming solution in one location. The enclosure supports **NetConnect** Ethernet networking, featuring ETC's Net3™, powered by ACN, along with DMX512A, RS-232 serial, and contact-closure interfaces when used with a Paradigm ACP.

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. Another PowerSupport option is 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 flickering, no jitters. 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. And when the system is used for temporary lighting – such as during construction – you can use the breakers or the All-On switch to control the lights. The DRd also features **QuickBoot**, coming online in seven seconds, and the UL924-Listed **Bypass Input** for even faster emergency lighting use.

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

LinkConnect

NetConnect

RideThru

BatteryPack

HighFault

All-On

QuickBoot

Bypass Input

Dimmer Doubling



UNISON® MODULES

Unison Modules are hard at work in venues across the globe. They are available 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.



Features

LinkConnect

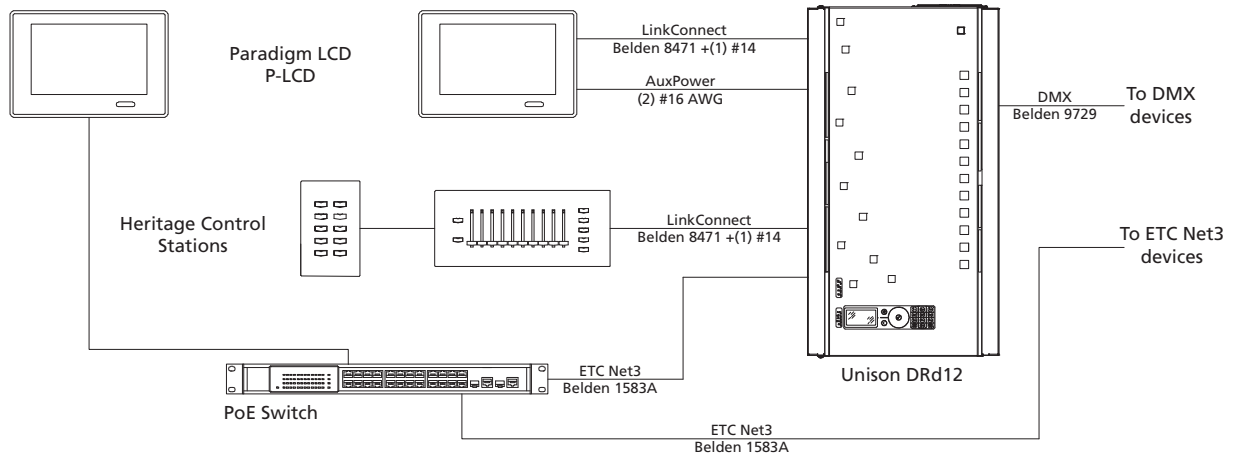
LINKCONNECT STATION POWER MODULES

The LinkConnect Paradigm™ Station Power Module series provides the power for all of your Unison Heritage™ and Paradigm 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. And the LinkConnect Station Power Module sends power, along with communication, down the same pair of wires.

Available as optional modules for dimming and control enclosures, the LinkConnect Station Power Module provides support for 32 Heritage stations. Paradigm Touchscreens, and many interface stations require more power, so the Paradigm Station Power Module also supplies 24VDC when you add two additional low-voltage power conductors. When you need more stations or need to cover more distance, you can add Paradigm Repeater or Dual Repeater Station Power Modules to your system. The Repeater adds power for 30 more stations and 1640 feet (500 meters) of additional wire length. The Dual Repeater provides the maximum station capacity and distance from one location by powering 62 stations over three separate 1640-foot (500-meter) wire runs.

Add control anywhere in your system. Wall-mount and 19" equipment rack-mount versions of the Station Power Modules are available.

SMALL SYSTEM RISER



PARADIGM LCD

Model	Description
P-LCD	Paradigm Wall-Mount Touchscreen LCD
P-LCD-P	Paradigm Portable Touchscreen LCD
P-LCD-RM	Paradigm Rack-Mount Touchscreen LCD
P-LCD-FBB	Paradigm Flush-Mount Touchscreen Back Box
P-LCD-SBB	Paradigm Surface-Mount Touchscreen Back Box

PARADIGM LCD ACCESSORIES

Model	Description
P-LCD-LC	Paradigm Touchscreen LCD Locking Cover
P-LCD-RAS	Paradigm Radio Access Point
P-LCD-DOCK	Paradigm Portable Touchscreen Docking Station
P-LCD-PCASE	Paradigm Portable Protective Case

PARADIGM ACP

Model	Description
P-ACP	Paradigm Architectural Control Processor
P-SPM	Paradigm LinkConnect Station Power Module
P-REP	Paradigm LinkConnect Repeater Module
P-DREP	Paradigm LinkConnect Dual Repeater Module
P-REP-W	Paradigm Wall-Mount LinkConnect Repeater Module
P-REP-RM	Paradigm Rack-Mount LinkConnect Repeater Module
P-DREP-W	Paradigm Wall-Mount LinkConnect Dual Repeater Module
P-DREP-RM	Paradigm Rack-Mount LinkConnect Dual Repeater Module

BUTTON STATIONS

Model	Description
UH00001	1/2-Gang, 1-Button Station
UH00002	1/2-Gang, 2-Button Station
UH00005	1/2-Gang, 5-Button Station
UH10001	1-Gang, 1-Button Station
UH10002	1-Gang, 2-Button Station
UH10005	1-Gang, 5-Button Station
UH10007	1-Gang, 7-Button Station
UH10010	1-Gang, 10-Button Station

KEYSWITCH STATIONS

Model	Description
UH11K00	1-Gang, 1-Maintained Keyswitch Station
UH11K01	1-Gang, 1-Button Station, 1-Maintained Keyswitch Station
UH11K02	1-Gang, 2-Button Station, 1-Maintained Keyswitch Station
UH11K05	1-Gang, 5-Button Station, 1-Maintained Keyswitch Station
UH12K00	1-Gang, 1-Momentary Keyswitch Station
UH12K01	1-Gang, 1-Button Station, 1-Momentary Keyswitch Station
UH12K02	1-Gang, 2-Button Station, 1-Momentary Keyswitch Station
UH12K05	1-Gang, 5-Button Station, 1-Momentary Keyswitch Station

FADER STATIONS

Model	Description
UH10100	1-Gang, 1-Fader Station
UH10101	1-Gang, 1-Fader, 1-Button Station
UH10102	1-Gang, 1-Fader, 2-Button Station
UH10105	1-Gang, 1-Fader, 5-Button Station
UH30407	3-Gang, 4-Fader, 7-Button Station
UH30412	3-Gang, 4-Fader, 12-Button Station
UH40707	4-Gang, 7-Fader, 7-Button Station
UH40712	4-Gang, 7-Fader, 12-Button Station
UH51007	5-Gang, 10-Fader, 7-Button Station
UH51012	5-Gang, 10-Fader, 12-Button Station
UH61307	6-Gang, 13-Fader, 7-Button Station
UH61312	6-Gang, 13-Fader, 12-Button Station
UH71607	7-Gang, 16-Fader, 7-Button Station
UH71612	7-Gang, 16-Fader, 12-Button Station

DRd

Model	Description
DRd-6	Unison DRd 6-Module Rack Enclosure
DRd-12	Unison DRd 12-Module Rack Enclosure
DRd-DALI	Unison DRd DALI Option
DRd-FLO	Unison DRd 4-Wire Fluorescent Option
URTO	Unison RideThru Option
UBPO	Unison Battery Pack Option

AUXILIARY RACK

Model	Description
AX6-MCB-1-150	150A, 1-Phase Main Breaker
AX6-MCB-3-100	300A, 3-Phase Main Breaker
AX12-MCB-1-300	300A, 1-Phase Main Breaker
AX12-MCB-3-200	200A, 3-Phase Main Breaker
AX12X-MCB-1-400	400A, 1-Phase Main Breaker
AX12X-MCB-3-400	400A, 3-Phase Main Breaker
AX12X-ML-1-600	600A, 1-Phase Main Lug
AX12X-ML-3-400	400A, 3-Phase Main Lug

120VAC MODULES

Model	Description
D15	Dual 1.8KW Dimmer Module
D15E	Dual 1.8KW High Risetime Dimmer Module
D15F	Single 1.8KW 3-Wire Dimmer Module
R15	Dual 1.8KW Relay Module
CC15	Dual 1.8KW Constant-Current Module
D20	Dual 2.4KW Dimmer Module
D20E	Dual 2.4KW High Risetime Dimmer Module
D20F	Single 2.4KW 3-Wire Dimmer Module
R20	Dual 2.4KW Relay Module
CC20	Dual 2.4KW Constant-Current Module
ELV10	Dual 1.2KW Reverse-Phase Dimmer Module

277VAC MODULES

Model	Description
AD15	Dual 4KW Dimmer Module
AD15F	Single 4KW 3-Wire Dimmer Module
AR15	Dual 4KW Relay Module
ACC15	Dual 4KW Constant-Current Module
AD20	Dual 5KW Dimmer Module
AD20F	Single 5KW 3-Wire Dimmer Module
AR20	Dual 5KW Relay Module
ACC20	Dual 5KW Constant-Current Module
AELV5	Dual 1.4KW Reverse-Phase Dimmer Module



UNISON[®] CONTROL ENCLOSURE

MISSION-CRITICAL FUNCTIONALITY AND POWER. ULTIMATE CONVENIENCE.

The most sophisticated buildings require the most sophisticated lighting control solutions. For large-scale, multifunction, multi-partitioned venues where the stakes for system reliability are high, ETC offers the most comprehensive architectural control available: Paradigm™ control in an ERn enclosure. Convention centers, houses of worship, resorts, casinos, cruise ships, and theme parks need ERn.

Modularity across the system. With the ERn enclosure, you choose the features you need for your facility's unique lighting and building control: processing, station support, power options, and networking. *The safest system:* By isolating each of these core components as a module, we optimize the system's longevity and performance.

Plus, *radically compact:* No other high-performance lighting control system comes in such a space-conscious enclosure, with such a small footprint. Convenient in size but a powerhouse in functionality, ERn packs in an optional network switch for full connectivity, redundant power supply and other backup power options – all without external equipment. (No hidden 'protocol convertors' or other black boxes required!) The ERn is available in two sizes – ERn2 and ERn4 – to meet the needs of your lighting and building-control system now and in the future.

UNISON® ER_n

The Unison ER_n Control Enclosure was designed to perform one important task: support all of the capabilities of the Paradigm™ Lighting Control System. ER_n is the center of a network infrastructure, with no need for external gear. Power and data over one wire means technical elegance, saving you labor costs, time and space. The optional Ethernet Switch Module for ER_n provides five ports for 10/100 networking with four ports supplying 802.13AF-compliant Power over Ethernet, making it the definition of a **NetConnect** system. And, like most infrastructure equipment, the ER_n series is available in a 19" equipment rack version, designed to blend in with other equipment.

You're protected. What happens if the power goes out? *Peace of mind.* ER_n's **PowerSupport** technology includes **RideThru** functionality, powering your processor for at least ten seconds in the event of electrical-grid disruption. This optional power pack is maintenance free and lives inside the enclosure. For further backup during a greater power event, you're covered by the optional **BatteryPack**. Engineered for easy maintenance, the BatteryPack installs on the bottom of the enclosure and keeps the processor energized for at least 90 minutes. And if that's not enough – you can even specify an optional **Redundant Power Supply** to take over without any interruption in service.

ER_n2

The ER_n2 is engineered for compactness. At just 15" x 9" x 10", ER_n2 fits wherever you need it to. No other enclosure is so small. The ER_n2 supports one Paradigm processor and one Station Power Module, plus optional Redundant Power Supply or optional five-port Ethernet Switch with four ports of PoE [Power over Ethernet].

ER_n4

Planning on expanding the lighting control system in the future – adding more moving lights, LED displays, building-automation devices, or control stations? Start with the ER_n4 enclosure, designed with room to expand. For higher-density control, the ER_n4 supports two Paradigm processors and two Station Power Modules – an optional internal Repeater and Dual Repeater – capable of powering 62 stations and providing three 500-meter runs from one location. To cover even greater control distances, long station bus runs can be executed using mid-span repeaters. Like ER_n2, ER_n4 offers optional Redundant Power Supply and optional 5-port Ethernet Switch with four ports of PoE [Power over Ethernet].



Features

- RideThru
- BatteryPack
- NetConnect
- LinkConnect

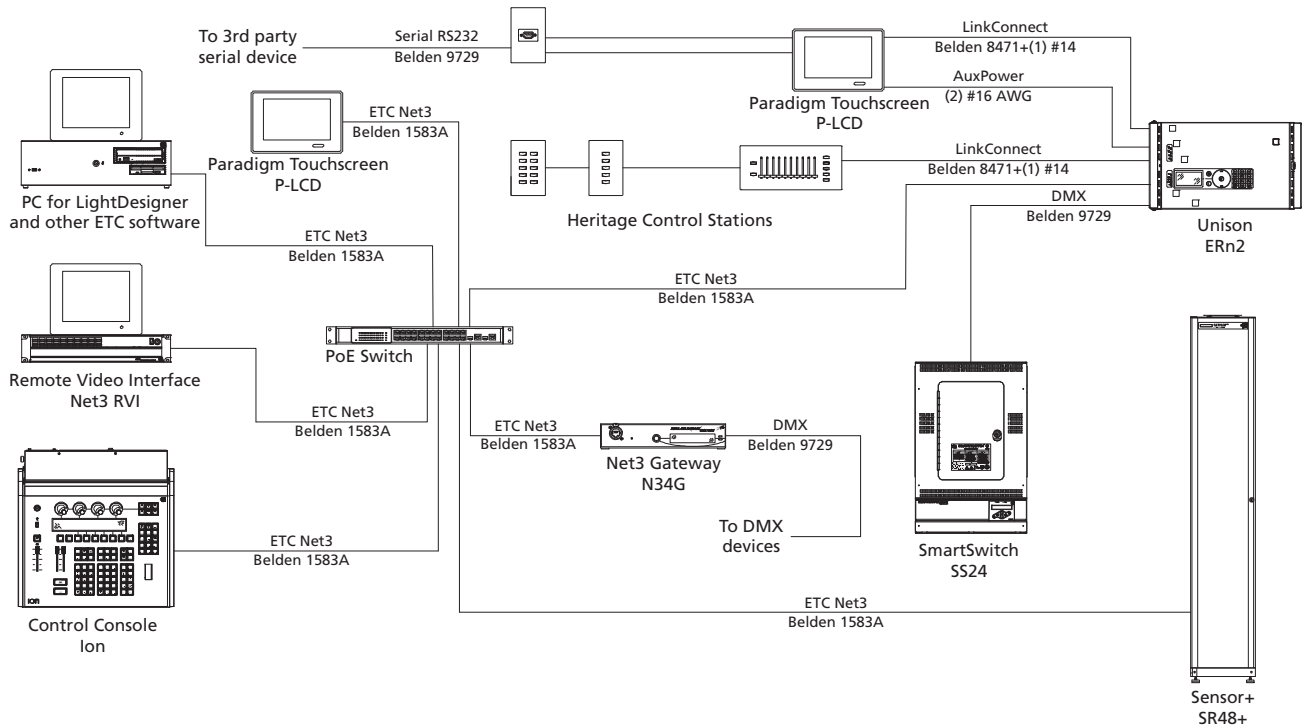
CONTROL ENCLOSURES

Model	Description
ERn2-W	Unison 2-Slot Wall-Mount Control Enclosure
ERn4-W	Unison 4-Slot Wall-Mount Control Enclosure
ERn2-RM	Unison 2-Slot Rack-Mount Control Enclosure
ERn4-RM	Unison 4-Slot Rack-Mount Control Enclosure

ER_n ACCESSORIES

Model	Description
ERn-Net	Unison ER _n Ethernet Switch Option
ERn-RPS	Unison ER _n Redundant Power Supply
URTO	Unison RideThru Option
UBPO	Unison Battery Pack Option

UNISON® ER_n WITH PARADIGM™ CONTROL



SMARTLINK® ARCHITECTURAL CONTROL

When Paradigmpower is more than your smaller-scale architectural lighting system needs, choose ETC's SmartLink!

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 SmartLink-enabled devices, such as 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 dimming enclosures.



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