



Project Studio





Unison®

an affordable package

of dimming and control

products designed

specifically to

provide flexible

multi-scene lighting

presets for small to

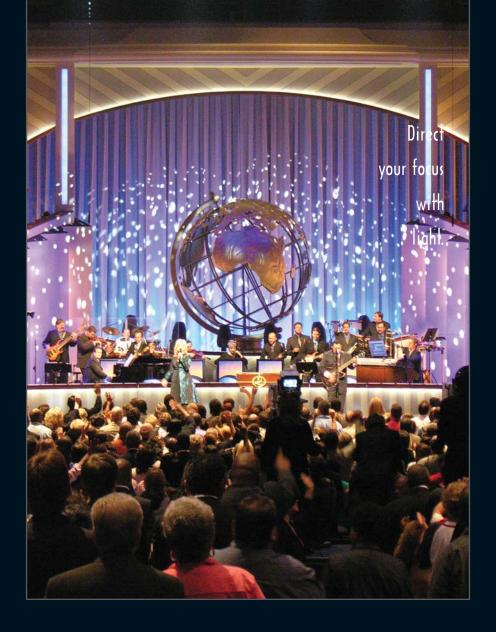
large architectural

and entertainment

applications.

Imagine...
the possibilities.





offers dimming and switching for incandescent,
fluorescent, low-voltage, neon and cold-cathode
lighting. Fully programmable fader, button and
touchscreen LCD stations provide an unsurpassed
variety of control options. Our design and support
services before and after the sale give you peace
of mind!



Integral features include:

- Control station programming
- Room Combine
- Astronomical timeclock
- Spreadsheet import/export
- Macro sequencing
- Full DMX interface

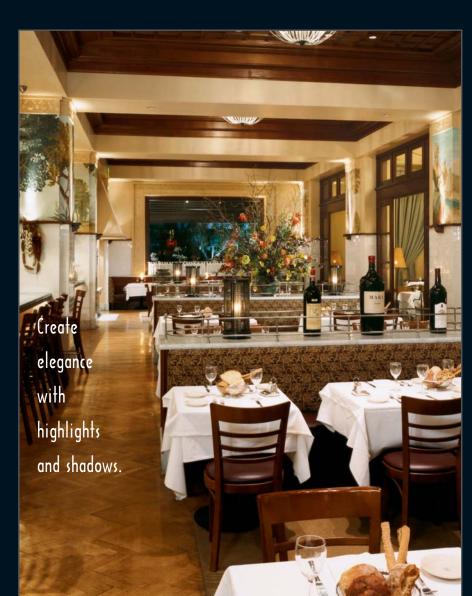
Advanced capabilities include:

- Large-system networking
- DMX routing and prioritization
- Serial interface
- Dry-contact interface

Energy Management concerns

With soaring energy costs, smart lighting controls are a must! Let Unison assist you in extending your energy dollars!

- Interface with multilevel photocells, and harvest your daylight
- Use motion sensors to turn off lighting in unoccupied spaces
- Use the integrated timeclock to automatically turn lighting on and off based on sunrise, sunset or time of day
- Program a "max" lighting level to extend lamp life



Button Station Controls

Fully programmable button stations provide preset select, non-dim control, room-combine or macro activation function in half- and one-gang sizes.



Specification

Mechanical: 1/2 or 1-gang electronic assembly and screwless faceplate with 1–10 fully

programmable buttons and integral LED response indicator. Faceplate and

button cap constructed of injection-molded ABS plastic.

Wiring: Link Power: (1) Belden 8471 – Topology free, polarity independent Max run 1500' w/o Repeater

(1) #14AWG stranded

Backbox: 1-gang flush: RACO 690 (not by ETC)

Ground:

1-gang surface: ETC 7081A2004-1 (supplied by ETC)

Field-programmable buttons

Preset Recall Manual Record Lockout Raise Lower Macro Recall Zone Bump Room Join/Separate

Beveled designer faceplates

Topology-free wiring

Connectorized station termination

White, Signal White, Ivory, Gray and Black standard station colors

Custom color, material available upon request

Flush- or surface-locking doors available

For more information

www.etcarchitectural.com

Ordering Information

Button Stations

	Model #	Description	Legend
	U000011F	1/2 gang, 1 button	On/Off
0	U000012F	1/2 gang, 1 button	Entry
	U000013F	1/2 gang, 1 button	Panic
	U000021F	1/2 gang, 2 button	On, Off
0	U000022F	1/2 gang, 2 button	Open, Close
00000	U000051F	1/2 gang, 5 button	Preset 1-4, Off
	U100011F	1 gang, 1 button	On/Off
	U100012F	1 gang, 1 button	Entry
	U100013F	1 gang, 1 button	Panic
	U100021F	1 gang, 2 button	On, Off
9	U100022F	1 gang, 2 button	Open, Close
00000	U100051F*	1 gang, 5 button	Preset 1-4, Off
00000	U100071F	1 gang, 7 button	Raise, Lower, Preset 1-4, Off
00000	U100101F	1 gang, 10 button	Preset 1-9, Off
ó	U11K001F	1 gang, 1 keyswitch (maintained**)	Lockout
	U11K011F	1 gang, 1 keyswitch (maintained**), 1 button	Lockout, On/Off
٠	U11K012F	1 gang, 1 keyswitch (maintained**), 1 button	Lockout, Entry
	U11K013F	1 gang, 1 keyswitch (maintained**), 1 button	Lockout, Panic
: 0	U11K021F	1 gang, 1 keyswitch (maintained**), 2 button	Lockout, On, Off
• • • • • • • • • • • • • • • • • • •	U11K022F	1 gang, 1 keyswitch (maintained**), 2 button	Lockout, Open, Close
00000	U11K051F	1 gang, 1 keyswitch (maintained**), 5 button	Lockout, Preset 1-4, Off

^{*}Product shown above.

Notes:

Enter station color code in __ space provided. 1-white, 2-ivory, 3-gray, 4-black, 5-signal white. Above stations flush mount (F) in industry-standard gang boxes. (Not by ETC.)

Also available in surface-mount (S) and portable (P) configurations.







^{**}Keyswitch stations available in momentary configurations.

Fader Station Controls

Unison's Fader Stations offer flexible hands-on control over different lighting zones in a facility. No user expertise required: Simply slide fader handles to smoothly adjust levels of brightness. With Unison's ultra-convenient 'preset' buttons added, one touch recalls and activates pre-designed lighting looks.



field-programmable buttons

Preset Recall
Manual
Record
Lockout
Raise
Lower
Macro Recall
Zone Bump
Join/Separate

Field-programmable faders

Master Zone Control Preset Control Fade Rate

Beveled designer faceplates

Topology-free wiring

Connectorized station termination

White, Signal White, Ivory, Gray and Black standard station colors

Custom color, material available upon request

flush- or surface-locking doors available

Portable desktop stations

For more information

www.etcarchitectural.com

Specification

Mechanical: Single and multi-gang electronic assembly and screwless faceplate with 1–16

fully programmable faders and seven or twelve buttons with integral LED response indicator. Faceplate, button and fader cap constructed of injection-

molded ABS plastic.

Wiring: Station:

Backbox:

Link Power: (1) Belden 8471 – Topology free, polarity independent

Max run 1500' w/o Repeater

Ground: (1) #14AWG stranded

1–7 gang flush: RACO Series (not by ETC)

1–7 gang surface: ETC 7081A2004-X Series (supplied by ETC)

Ordering Information

Fader Stations

	Model #	Description	Legend
	U101001F	1 gang, 1 fader	Master
D D	U101011F	1 gang, 1 fader, 1 button	Master, On/Off
9 9	U101021F	1 gang, 1 fader, 2 buttons	Master, On, Off
99999	U101051F	1 gang, 1 fader, 5 buttons	Master, Preset 1-4, Off
	U304071F*	3 gang, 4 fader, 7 buttons	Manual, Record, Master, Zone 1-3, Preset 1-4, Off
	U304121F	3 gang, 4 fader, 12 buttons	Manual, Record, Master, Zone 1-3, Preset 1-9, Off
	U407071F	4 gang, 7 fader, 7 buttons	Manual, Record, Master, Zone 1-6, Preset 1-4, Off
	U407121F	4 gang, 7 fader, 12 buttons	Manual, Record, Master, Zone 1-6, Preset 1-9, Off
	U510071F	5 gang, 10 fader, 7 buttons	Manual, Record, Master, Zone 1-9, Preset 1-4, Off
	U510121F	5 gang, 10 fader, 12 buttons	Manual, Record, Master, Zone 1-9, Preset 1-9, Off
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	U613071F	6 gang, 13 fader, 7 buttons	Manual, Record, Master, Zone 1-12, Preset 1-4, Off
***************************************	U613121F	6 gang, 13 fader, 12 buttons	Manual, Record, Master, Zone 1-12, Preset 1-9, Off
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	U716071F	7 gang, 16 fader, 7 buttons	Manual, Record, Master, Zone 1-15, Preset 1-4, Off
	U716121F	7 gang, 16 fader, 12 buttons	Manual, Record, Master, Zone 1-15, Preset 1-9, Off

^{*}Product shown above.

Enter station color code in __ space provided. 1-white, 2-ivory, 3-gray, 4-black, 5-signal white Above stations flush mount (F) in industry-standard gang boxes.

Also available in surface-mount (S) and portable (P) configurations.







Notes

Touchscreen LCD Station Controls

LCD stations consist of a backlit liquid-crystal display (LCD) with a touchscreen interface. Stations operate using graphic buttons, faders and other images on up to thirty tab-styled programmable pages. The multiple-room controller allows the importing of bitmap images and the programming of electronic lockout codes, on a page-by-page basis. Designer and industrial portable LCD stations are available.



Specification

Mechanical: Electronic Touchscreen LCD assembly and faceplate. Faceplate constructed of

injection-molded ABS plastic.

Wiring: Station:

Link Power: (1) Belden 8471 – Topology free, polarity independent

Max 4 LCD per process or Max run 1500' w/o Repeater

Auxiliary 24Vdc: (2) #16AWG

Max run 1500' w/o Repeater

Ground: (1) #14AWG stranded

Backbox:Flush:ETC 7081A2002 (supplied by ETC)Surface:ETC 7081A2001 (supplied by ETC)

32 custom or standard control pages

Field-programmable buttons

Preset Recall
Manual
Record
Lockout
Raise
Lower
Macro Recall
Zone Bump
Room Join/Separate

Virtual zone control

Custom screens

Import bitmap images

Integral electronic lockout

Custom color, material available upon request

Ordering Information

LCD Station Options

•	Model #	Description	Legend
[1]	ULCDF ULCDS	Flush-Mount LCD Surface-Mount LCD	
		Portable LCD/Industrial able Station Required	Clam shell design
		Portable LCD/Consolette sble Station Required	Desktop design
©	U1RSF U1RSS		Portable Portable

^{*}Product shown above.

Notes:

Enter station color code in __ space provided. 1-white, 2-ivory, 3-gray, 4-black, 5-signal white. All LCD backboxes supplied by ETC.

For more information







Infrared Controls

Infrared receiver/transmitter stations offer wireless lighting control for applications such as meeting rooms and ballrooms.



Wireless lighting control

Programmable buttons

Preset Recall Manual Record Lockout Raise Lower Macro Recall Zone Bump Join/Separate

Specification

Mechanical:

Receiver: 1-gang electronic assembly and screwless faceplate with IR receiver and integral

LED response indicator. Faceplate constructed of injection-molded ABS plastic.

Transmitter: 6.75" h x 2" w x 0.5" d handheld device constructed of injection-molded ABS

plastic. Enclosure to include 5 or 10 fully programmable soft-touch buttons.

Wiring:

(1) Belden 8471 – Topology free, polarity independent Station: **Link Power:**

Max run 1500' w/o Repeater **Ground:** (1) #14AWG stranded

Backbox: 1-gang flush: RACO 690 (not by ETC)

ETC 7081A2004-1 (supplied by ETC) 1-gang surface:

Functional: Receiver reception cone:

Transmitter range:

Ordering Information

Infrared

	Model #	Description	Legend
· o	U1IRF	1 gang – Infrared Receiver	
	UP-05	5 button handheld IR transmitter	Preset 1-4, Off
0 0	UP-10	10 button handheld IR transmitter	Preset 1-9, Off

Enter station color code in __ space provided. 1-white, 2-ivory, 3-gray, 4-black, 5-signal white

For more information









Contact Interface

The Contact Interface station allows integration of multiple systems via contact closure (in or out).



Sends and receives contact closure

Interface with:

Multi-level photocell Motion Sensor Fire Alarm System Partition AV System Projection Screen Blinds

Specification

Mechanical: Surface mount – 18-gauge formed steel enclosure finished in black, smooth,

matte, powder coat paint. Assembly to consist of up to 16 connections; 8 inputs functionally coupled with 8 normally open relay contact outputs. Inputs and

outputs can be configured as either maintained or momentary.

Electrical: Output Contact Rating: 0.5A@120VAC / 1A@30Vdc

Switch Input Rating: 5V@10mA (unit requires dry contact closure)

Wiring: **Link Power:** (1) Belden 8471 – Topology free, polarity independent

Max run 1500' w/o Repeater

Auxiliary 24Vdc: (2) #16AWG

Max run 1500' w/o Repeater

(1) #14AWG Ground:

Switch Input: (2) #18AWG - twisted max 300' (each)

Relay Output: (2) #10AWG to #18AWG -(each) twisted - max 300'

Ordering Information

Contact Interface

	Model #	Description	Dimensions (h x w x d)
	UCI*	Unison Contact Interface	10.5" x 14" x 3"
■ UNISON Cotate Interior	R MK	Rack Mount Kit (6U)	10.0" x 2.5" x 3"

^{*}Product shown above.

Fader Interface

The fader interface allows integration of analog components such as daylight sensors.

Specification

Activates presets, control zones and/or preset levels with analog input

Interface with:

Daylight Sensor Interface to continuously maintain lighting levels based on analog photocell input Mechanical: Surface mount – 16-gauge formed steel enclosure finished in black smooth matte

powder coat paint. Assembly to consist of up to 8 input connections and 8 output

lamp indication connections.

Lamp Output Rating: 100mA @ 12Vdc

Fader Input Rating: 0-5Vdc (Must be referenced to Aux Power common)

Wiring:

Electrical:

Link Power: (1) Belden 8471 - Topology free, polarity independent Station:

Max run 1500' w/o Repeater

Auxiliary 24Vdc: (2) #16AWG

Max run 1500' w/o Repeater

Ground: (1) #14AWG

(3) #18AWG - twisted -Fader Input:

max 300'

Indicator Output: (2) #18AWG

For more information

www.etcarchitectural.com

Ordering Information

Fader Interface

		Model #	Description	Dimensions (h x w x d)
	0	UFI	Unison Fader Interface	10.5" x 14" x 3"
Fader Intec ^{face}	0			









Dimmer Modules

Patented ETC dimming modules feature fully magnetic circuit breakers, standard or enhanced risetime, toroidal filter chokes, and smooth dimming of load types including incandescent, low voltage, fluorescent, neon and cold cathode.



Dimming and relay modules

Modular die-cast aluminum chassis

Tool-free insertion

Standard (350us) and enhanced (500us) risetime filtering

Dims incandescent, low voltage, fluorescent (2-, 3- and 4-wire), neon, and cold cathode

Magnetic breakers fully rated for continuous loads

For more information

www.etcarchitectural.com

Specification

Mechanical: Modular – heavy duty, die-cast aluminum chassis with an integral faceplate,

finished in a fine-texture, scratch-resistant, gray, epoxy powder coat.

Electrical:

Internal: Fully prewired

Module Rating: Dual and single 10, 15 and 20A @120V

Dual and single 5, 15 and 20A modules @277V

Up to 100,000A SCCR @ 120V, 14,000A SCCR @ 277V

Circuit Bkr: Tungsten rated, fully magnetic

SCR: Sealed patented assembly consisting of two back-to-back SCR's per circuit

Integral toroidal filter chokes used to limit objectionable harmonics, reduce lamp-Filtering:

filament sing and limit radio frequency interference on line and load conductors

Standard risetime: 350µs Enhanced risetime: 500µs (E)

Module Types:

Universal: Designed to control incandescent, low voltage, 2 and 4-wire fluorescent, neon

and cold cathode

Fluorescent: Designed to control 3-wire fluorescent ballasts

Relay: Electrically-held mechanical relay for any switched load including motors and

HID ballasts

Ordering Information

120 Volt Modules

Model #	Description	BTU	Efficiency (%)	Wt. (lbs)
D10, L10	10A Dual Low-Wattage Dimmer	<10	99.0	2.4
D10F, L10F	10A Single 3-wire Low-Wattage Fluorescent Dimmer	<10	99.0	2.4
D15	15A Dual Universal Dimmer – 350µs	380	96.9	5.0
D15E	15A Dual Universal Dimmer – 500µs	474	96.1	5.0
D15F	15A Single 3-wire Fluorescent Dimmer	<10	>99.0	2.4
R15	15A Dual Electrically Held Relay	<10	>99.0	2.4
CC15	15A Dual Constant Circuit	<10	>99.0	2.4
D20*	20A Dual Universal Dimmer – 350μs	522	96.8	5.0
D20E	20A Dual Universal Dimmer – 500μs	810	95.0	5.0
D20F	20A Single 3-wire Fluorescent Dimmer	<10	>99.0	2.4
R20	20A Dual Electrically Held Relay	<10	>99.0	2.4
CC20	20A Dual Constant Circuit	<10	>99.0	2.4
AFM	Air Flow Module	0		1.0

277 Volt Modules

Model #	Description	BTU	Efficiency (%)	Wt. (lbs)
AD5	5A Dual Low-Wattage Dimmer	<10	99.0	2.4
AD5F	5A Single 3-wire Low-Wattage Fluorescent Dimmer	<10	99.0	2.4
AD15	15A Dual Universal Dimmer – 225µs	380	96.9	5.0
AD15F	15A Single 3-wire Fluorescent Dimmer	<10	>99.0	2.4
AR15	15A Dual Electrically Held Relay	<10	>99.0	2.4
AD20	20A Dual Universal Dimmer – 225µs	522	96.8	5.0
AD20F	20A Single 3-wire Fluorescent Dimmer	<10	>99.0	2.4
AR20	20A Dual Electrically Held Relay	<10	>99.0	2.4

^{*}Product shown above.







DR Series Dimming Racks

The Unison DR Series Dimming Racks offer professional-quality dimming at a fraction of the cost. DR Racks are ideal for use in *any* size hotel, theater, restaurant, or worship facility.



Modular construction

Easy to install

Ships fully pre-wired

High density, small footprint

Backlit control electronics

Main breaker and single-phase options

Integral RS-232 interface

Voltage regulation

Specification

Mechanical: Surface mount – 18-gauge formed steel w/hinged, locking door – gray, scratch

resistant epoxy paint.

Electrical:

Input: 3P/4W, 120/208 VAC plus ground – 50/60Hz, max 100A DR6, 10,000A SCCR

3P/4W, 277/480 VAC plus ground – 50/60Hz, 14,000A SCCR

1P/3W, 120/240 VAC plus ground – 50/60Hz, max 200A DR12, 22,000A SCCR

Wiring: Internal:

fully prewired

Station: Link Power: (1) Belden 8471 – Topology free, polarity independent

(32 stations),

Max run 1500' w/o Repeater

Auxiliary 24Vdc: (2) #16AWG – (LCD / PC Connector / Portable Connector /

Contact Interface)

Max run 1500' w/o Repeater

DMX: (1) Belden 9729 – (Console / Moving Light / Scrollers or any

DMX device) Max run 1600'

(1) #14AWG

Serial RS232: (1) Belden 9729 (Max 50')

Ground:

Ambient: $32-104^{\circ}F/0-40^{\circ}C-30-90\%$ non-condensing humidity

Control Module: Modular plug-in assembly constructed of 18-gauge formed steel

Integral nine-button membrane overlay and two-line x 20 character LCD and

3.5" disk drive*

Control Capacity: CMd: 512 dimmers x 512 zones (DMX only control)

CMEd: Parameters based on memory usage: maximum 10,000 levels

calculated by adding (zones x presets) totals for each room

Ordering Information

Racks

Model #	Description	Dimension (H x W x D)	Wt. (lbs)
DR6-12-120	6 module (12 channel) dimming rack – 120VAC	21.9" x 17" x 9.6"	31
DR12-24-120*	12 module (24 channel) dimming rack – 120VAC	31.0" x 17" x 9.6"	42
DR6-12-277	6 module (12 channel) dimming rack – 277VAC	21.9" x 17" x 9.6"	31
DR12-24-277	12 module (24 channel) dimming rack – 277VAC	31.0" x 17" x 9.6"	42

Note: Racks also available in 230V standard and neutral-disconnect configurations

Control Modules

Model #	Description
CMd	Dimming Control Module
CMEd	Dimming Control Module w/Architectural station processor

Rack Options

Model #	Description
1PH6	Single-phase strap kit for DR6
1PH12	Single-phase strap kit for DR12
FLO	Fluorescent Option Board – provides termination for dimmable 4-wire fluorescent ballasts
BYP	Bypass Option Board – provides low cost supplemental egress lighting – UL924 Listed
USAP	Serial Access Protocol Kit

^{*}Product shown above

For more information www.etcarchitectural.com







AX Series Auxiliary Racks

AX/M Racks provide primary main circuit-breaker protection for single Unison DR Series Dimming Racks. AX/X Racks facilitate the cross-bussing of two DR Series Racks.



Easy to install

Main Breaker Option

Cross-Buss DR Series Racks

Trip Plug Options

Specification

Mechanical: Surface rack mount – 18-gauge formed steel – gray, scratch-resistant epoxy paint. **Electrical:** 3P/4W, 120/208 VAC plus ground – 50/60Hz Input: 3P/4W, 277/480 VAC plus ground - 50/60Hz 1P/3W, 120/240 VAC plus ground – 50/60Hz Wiring: Factory-supplied wire harness for rack interwiring Ambient: 32-104°F / 0-40°C -30-90% non-condensing humidity Circuit Bkr: AX/M Main Breaker Fault Rating 65,000A SCCR @120V 14,000A SCCR @277V

Ordering Information

Auxiliary Racks

Model #	Description	Dimension (H x W x D)	Wt. (lbs)
AX6-M	Main Breaker Rack for DR6-100A/3P**	21.9" x 13" x 9.6"	33
AX12-M*	Main Breaker Rack for DR12-200A/3P**	31.0" x 13" x 9.6"	66
AX12X-M	Main Breaker Rack for (2) DR12 X-bussed-400A/3P	31.0" x 13" x 9.6"	66
AX12X-ML	Main Lug Rack for (2) DR12 X-bussed**	31.0" x 13" x 9.6"	66

Trip Plug Options

Model #	Description
100ATP	100A Trip Plug Assembly (for AX12 racks)
200ATP	200A Trip Plug Assembly (for AX12X racks)

For more information







^{**}Single-Phase options available

ER Series Processing Racks

The Unison ER Series Racks offer centralized control processing for distributed Unison or Sensor dimming systems. ER Series Racks are ideal for larger applications with multiple dimming racks, such as convention centers and hotels.



Easy to install

fully pre-wired, surface-mounted racks

19" rack-mount option

Low profile

Backlit control electronics

Integral RS-232 interface

Contact Closure Interface

Networkable

Specification

Mechanical: Surface or 19" rack mount – 18-gauge formed steel w/hinged locking door –

gray, scratch-resistant epoxy paint.

Electrical:

Input: 1P/2W, 20A, 120VAC plus ground - 50/60Hz

8 amps fully loaded

Wiring:

Internal: Fully prewired

Control: **Link Power:** (1) Belden 8471 – Topology free, polarity independent

(32 stations),

Max run 1500' w/o Repeater

Auxiliary 24Vdc: (2) #16AWG

Max run 1500' w/o Repeater

DMX: (1) Belden 9729 – (Console / Moving Light / Scrollers or any

DMX device) Max run 1600'

Ground: (1) #14AWG stranded

Serial RS232: (1) Belden 9729 (Max 50')

Ambient: 32-104°F / 0-40°C - 30-90% non-condensing humidity

Control Module: Modular plug-in assembly constructed of 18-gauge formed steel

Integral nine-button membrane overlay and two-line x 20 character LCD and

3.5" disk drive*

Control Capacity: Parameters based on memory usage: maximum 10,000 levels calculated

by adding (zones x presets) totals for each room

Ordering Information

ER Racks

Model #	Description	Dimension (H x W x D)	Wt. (lbs)
ER4-120*	External Processing Rack – Wall Mt. – 120VAC	16.25" x 15.5" x 7.00"	20
RM	19" Rack Mount Kit	17.50" x 19.0" x 8.63"	12

Note: Racks also available in 230V standard configurations.

Control Modules

Model #	Description	
CME	Extended Architectural Control Module	
CMEi	Extended Architectural Control Module w/Network Connections	

Option Modules

Model #	Description
REP	Repeater Option Module (Required for each additional group of 32 station OR wire runs >1500')
AIR	Blank Airflow Module (Used to fill unused rack spaces)

^{*}Product shown above

For more information









System Layout - Small

As a combination of dimming and control products, Unison offers a variety of solutions to address your project requirements.

Installation

Designed for contractor installation, racks surface-mount and accept single- or three-phase main feeds. Unison controls use "topology-free" Echelon® Link Power wiring. Wire control in any configuration home run, star, bus or loop.

Recording Presets

Preset looks are simple to program! Adjust each zone of control to the desired level, press the record button and assign look to a recall button. Recall a preset by simply pressing the recall button. It's that easy!

Button Stations

Designed with 1–10 programmable buttons. Button function options include presets, manual, record, lockout, raise, lower, macro, zone bump, or join/separate.

Fader Stations

Designed with 1-16 programmable faders and 2-12 programmable buttons. Fader function options include master, zone, fade rate, or preset master.

IR Stations

Designed with 5 or 10 fully programmable buttons.

Touchscreen LCD Stations

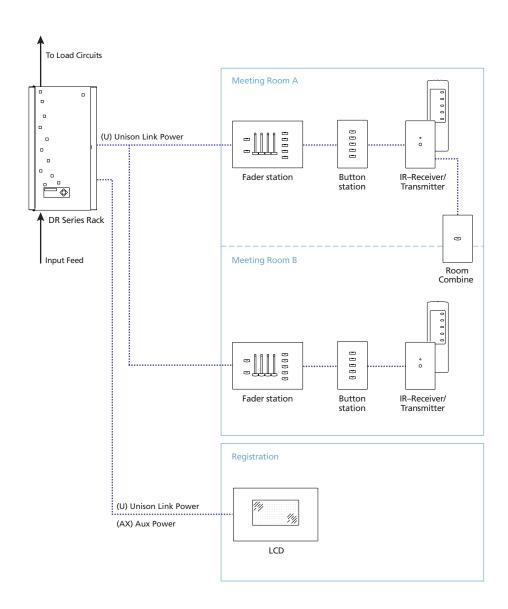
Designed with 30 programmable tabstyled pages with standard or custom page design (including imported bitmap images). Features integral electronic lockout functionality.

Custom Stations

If a standard station doesn't meet your needs, our project managers will help you create custom control specifically for your project. Wood, metal, custom... you name it!

Small Systems

Using Unison in a small church or restaurant makes it easy to recreate that special look, day in and day out. A small system consists of a DR Series dimming rack and Unison remote controls.



System Layout - Large

Room Combine

In rooms with moving partitions, lighting control can be challenging. When the partition is opened, you can manually (by pushing a button) or automatically (via micro-switches) "join" the lighting controls of adjacent rooms. Conversely, when the partition is closed, you can "separate" the lighting control of adjacent rooms.

Astronomical Timeclock

The integral astronomical timeclock can be programmed to automatically select lighting presets based on time of day, relationship to sunrise or sunset or periodic interval.

Integration

Ballrooms and meeting rooms often require the use of an entertainment-style lighting console. Unison's integral DMX prioritizer allows you to program your room on a zone-by-zone basis to automatically relinquish control when a console is plugged in.

Dry Contact Interface

With Unison, you can send or receive dry-contact closures to/from peripheral equipment such as multi-level photocells, motion sensors, partition sensors or AV systems.

Serial Interface

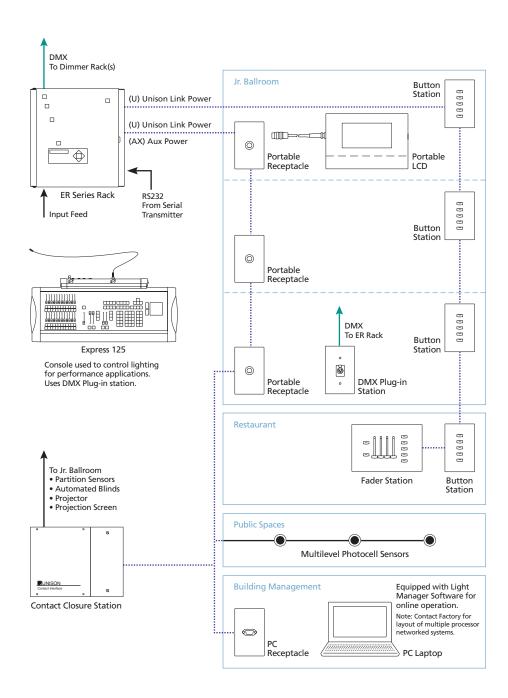
A lighting system should make control easier. The Unison Serial Access Protocol or AV/Serial station receives serial command strings from an AV or building-automation system to activate presets, macros or control individual zones.

Networking

Connect multiple control processors on an ETCNet2[™] network to control systems with over 512 dimmers.

Large Systems

In large systems such as hotels and convention centers, Unison simplifies the integration of other control equipment such as audio/visual, building-automation or entertainment controls. A typical large system may consist of multiple DR or SR Series dimming racks, an ER Series control rack, a variety of Unison controls, and various peripheral devices such as consoles, photo-sensors or AV equipment.



System Wiring

(U) Link Power

(U) Link Power

Link Power is an Echelon® communications protocol used in Unison control systems. Link Power allows topology-free and polarity-independent wiring. This means you can wire in any configuration — star, bus, or loop.

Guidelines	Link Power
Wire Type:	(1) Belden #8471
	(1) #14AWG stranded (ground)
Maximum wire length (w/o repeater)	1500′

(AX) Auxiliary Power

24Vdc auxiliary power is required for LCD, PC interface, portable receptacle and contact-closure stations. The AX power supply is located in the control module in the DR or ER Series rack. Auxiliary power is always used in conjunction with Link Power.

Guidelines	AX Power
Wire Type:	(2) #16 AWG
Maximum wire length (w/o repeater)	1500′

(D) DMX

DMX refers to DMX-512, the entertainment-industry standard protocol originally designed for communication between dimmers and controls. DMX has been widely adopted by the lighting industry and is commonly used for control of LEDs, fiber optic illuminators, moving lights, color scrollers and other devices.

Guidelines	DMX
Wire Type:	(1) Belden #9729
Maximum wire	1600′

(R) RS232

DC222 :- - -

RS232 is a serial communications protocol that is used to allow communication between, and control of, different types of equipment.

Guidelines	RS232
Wire Type:	(1) Belden #9729
Maximum wire	50′

(AX) Auxiliary Power

(D) DMX

(R) RS232

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Light Manager™

Light Manager is a Windows[™]-based programming software used for initial system configuration and online system operation. Light Manager configurations provide basic system parameters such as quantity of rooms, presets and zones. Configurations are downloaded to the Unison processor via the 3.5″ disk drive or via network connection.

Specification

PC Requirements: Pentium 90 or better with a minimum of 16MB RAM and 10MB free hard-drive Windows 95 or Windows 98 operating system

VGA monitor, 3.5" hard drive and mouse

Ordering Information

Light Manager

	Model #	Description
HE LIESUFFICERS	LM	Light Manager Disk/Manual/Site License/Training
Light Manager 1.8 User Guide		
	U1RSPF	PC Connector

Easy system configuration

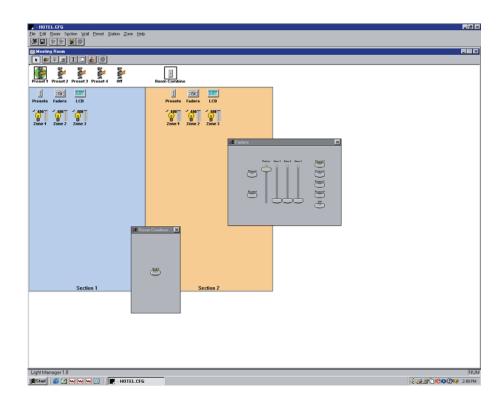
Graphical user interface

Integral astronomical timeclock

Programmable buttons and faders

Macro sequencing

Multilevel electronic security



For more information









Networking Tools

In applications where dimmer and station quantities exceed single-processor limitations, or when an architectural system requires integration with ETC Entertainment equipment, use ETCNet2™ networking. Simply put, a network is a collection of devices that are connected via a standard Ethernet switch. Networks are designed to utilize a common set of communication "languages." In addition to scalability, an ETCNet2 network offers simplified wiring, centralized operation and unsurpassed integration of architectural and entertainment controls. Below is an overview of ETCNet2 Tools. Contact your local ETC Representative for assistance in network system layout.

Unison CMEi



Net3 4-Port Gateway



Congo



Eos



Switch



Ethernet Tap



CMEi – Unison Control Module: Extended with network connections

The CMEi is the Unison architectural control module used in network applications. The CMEi mounts in an ER Series control rack. The CMEi consists of the architectural processor, the associated power supplies and the Ethernet control connector. The CMEi supports termination of UTP-10Base-T wiring.

Net3 4-Port Gateway

The Net3 4-Port Gateway is a DMX data distribution device designed to take advantage of the quality and reliability of ETC's network development, built for both the proven ETCNet2 protocols and the new industry standard ACN. An Ethernet-native network device, the Net3 4-Port Gateway uses bi-directional communication with other network devices to send/receive DMX512 digital signals via the four configurable ports on the rear of the unit. The DMX ports can be individually configured to be either inputs (receive DMX from a console or other DMX source and put on the network) or outputs (receive information from the network and create DMX for other devices).

ETC Consoles

In architectural application, ETC consoles like the new Eos™ and Congo™ can be used for programming a venue's lighting control, which can then be transferred to a rack-mountable lighting playback controller. Console features include ETCNet2 and Net3 (ACN) networking compatibility, high channel counts and output capacities, integrated fixed-focus (conventional) and moving light controls, multiple cue lists, dynamic effects and timecode programs. Both systems offer the option to use two consoles or lighting playback controller units to provide full backup.

Switch

The Hub/Switch is a network device required for the connection of ETCNet2 devices. Both devices typically consist of (4–24) RJ-45 Ethernet ports. The Hub transmits network data across all ports while a Switch allows for varying levels of data management across ports.

Ethernet Tap

The Ethernet Tap provides a wall-mounted connection to your ETCNet2 system.

A selection of ETC Architectural installations

Asprey Store, Trump Tower

New York, New York

Canadian Museum of Civilization

Ottawa, Ontario

Cerritos Library

Cerritos, California

Copenhagen Opera House

Copenhagen, Denmark

Copia: The American Center for Wine, Food, and the Arts Napa, California

Crown Fountain, Millennium Park

Chicago, Illinois

Disney themeparks

Worldwide

Hålogaland Theater

Tromsø, Norway

Holland Performing Arts Center

Omaha, Nebraska

Imperial Palace Hotel

Seoul, South Korea

Maumee River Crossing Bridge

The Museum of Russian Art

Minneapolis, Minnesota

Overture Center for the Arts

Madison, Wisconsin

Ruth's Chris Steakhouse

St. Louis, Missouri

Schiphol Airport

Amsterdam, The Netherlands

United Nations Assembly Hall

New York, New York

 United States Air Force Museum Dayton, Ohio

Venetian Hotel and Casino

Las Vegas, Nevada

Wynn Las Vegas

Las Vegas, Nevada

- (A) Sensor SR48 Dimmer Racks
- (180) Sensor D20DHR Modules
- 48-Circuit Relay Panels
- (96) Circuits of Emergency
 Transfer (ELTS)
- (8) Custom Unison LCD Stations with Macro Controls
- Portable Unison LCD Stations
- (7) Unison ER4 Processor Racks
- (2) Unison CMEi Control Modules
- (40) Custom Unison worklight button stations
- (17) Custom Unison houselight button stations
- (50) Custom distribution wallplates
- (31) Source Four jr ellipsoidals
- (1) Unison Light Manager Software
- Network Configuration Editor (NCE)
- (24) Sensor D20E Modules

Extensive additional ETC lighting equipment in Overture Hall and Promenade Hall, including Emphasis Control System, ETCNet2 network, Source Four fixtures, Sensor dimming, and ETC distribution.



Overture Center for the Arts, Madison, Wisconsin © Zane Williams

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