Imagine... the possibilities.
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.

Easy to install, program and operate, Unison 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
- **Ground:** (1) #14AWG stranded

**Backbox:**
- **1-gang flush:** RACO 690 (not by ETC)
- **1-gang surface:** ETC 7081A2004-1 (supplied by ETC)

### Ordering Information

#### Button Stations

<table>
<thead>
<tr>
<th>Model #</th>
<th>Description</th>
<th>Legend</th>
</tr>
</thead>
<tbody>
<tr>
<td>U00001 - __1F</td>
<td>1/2 gang, 1 button</td>
<td>On/Off</td>
</tr>
<tr>
<td>U00001 - __2F</td>
<td>1/2 gang, 1 button</td>
<td>Entry</td>
</tr>
<tr>
<td>U00001 - __3F</td>
<td>1/2 gang, 1 button</td>
<td>Panic</td>
</tr>
<tr>
<td>U00002 - __1F</td>
<td>1/2 gang, 2 button</td>
<td>On, Off</td>
</tr>
<tr>
<td>U00002 - __2F</td>
<td>1/2 gang, 2 button</td>
<td>Open, Close</td>
</tr>
<tr>
<td>U00005 - __1F</td>
<td>1/2 gang, 5 button</td>
<td>Preset 1-4, Off</td>
</tr>
<tr>
<td>U10001 - __1F</td>
<td>1 gang, 1 button</td>
<td>On/Off</td>
</tr>
<tr>
<td>U10001 - __2F</td>
<td>1 gang, 1 button</td>
<td>Entry</td>
</tr>
<tr>
<td>U10001 - __3F</td>
<td>1 gang, 1 button</td>
<td>Panic</td>
</tr>
<tr>
<td>U10002 - __1F</td>
<td>1 gang, 2 button</td>
<td>On, Off</td>
</tr>
<tr>
<td>U10002 - __2F</td>
<td>1 gang, 2 button</td>
<td>Open, Close</td>
</tr>
<tr>
<td>U10005 - __1F*</td>
<td>1 gang, 5 button</td>
<td>Preset 1-4, Off</td>
</tr>
<tr>
<td>U10007 - __1F</td>
<td>1 gang, 7 button</td>
<td>Raise, Lower, Preset 1-4, Off</td>
</tr>
<tr>
<td>U10010 - __1F</td>
<td>1 gang, 10 button</td>
<td>Preset 1-9, Off</td>
</tr>
<tr>
<td>U11K00 - __1F</td>
<td>1 gang, 1 keyswitch</td>
<td>Lockout</td>
</tr>
<tr>
<td>U11K01 - __1F</td>
<td>1 gang, 1 keyswitch</td>
<td>Lockout, On/Off</td>
</tr>
<tr>
<td>U11K02 - __1F</td>
<td>1 gang, 2 keyswitch</td>
<td>Lockout, On, Off</td>
</tr>
<tr>
<td>U11K03 - __1F</td>
<td>1 gang, 3 keyswitch</td>
<td>Lockout, Panic</td>
</tr>
<tr>
<td>U11K05 - __1F</td>
<td>1 gang, 5 keyswitch</td>
<td>Lockout, Preset 1-4, Off</td>
</tr>
</tbody>
</table>

*Product shown above.

**Keyswitch stations available in momentary configurations.**

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.
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:
- Link Power: (1) Belden 8471 – Topology free, polarity independent
- Max run 1500’ w/o Repeater
- Ground: (1) #14AWG stranded

Backbox:
- 1–7 gang flush: RACO Series (not by ETC)
- 1–7 gang surface: ETC 7081A2004-X Series (supplied by ETC)

Ordering Information

Fader Stations

<table>
<thead>
<tr>
<th>Model #</th>
<th>Description</th>
<th>Legend</th>
</tr>
</thead>
<tbody>
<tr>
<td>U10100 - __1F</td>
<td>1 gang, 1 fader</td>
<td>Master</td>
</tr>
<tr>
<td>U10101 - __1F</td>
<td>1 gang, 1 fader, 1 button</td>
<td>Master, On/Off</td>
</tr>
<tr>
<td>U10102 - __1F</td>
<td>1 gang, 1 fader, 2 buttons</td>
<td>Master, On, Off</td>
</tr>
<tr>
<td>U10105 - __1F</td>
<td>1 gang, 1 fader, 5 buttons</td>
<td>Master, Preset 1-4, Off</td>
</tr>
<tr>
<td>U30407 - __1F*</td>
<td>3 gang, 4 fader, 7 buttons</td>
<td>Manual, Record, Master, Zone 1-3, Preset 1-4, Off</td>
</tr>
<tr>
<td>U30412 - __1F</td>
<td>3 gang, 4 fader, 12 buttons</td>
<td>Manual, Record, Master, Zone 1-3, Preset 1-9, Off</td>
</tr>
<tr>
<td>U40707 - __1F</td>
<td>4 gang, 7 fader, 7 buttons</td>
<td>Manual, Record, Master, Zone 1-6, Preset 1-4, Off</td>
</tr>
<tr>
<td>U40712 - __1F</td>
<td>4 gang, 7 fader, 12 buttons</td>
<td>Manual, Record, Master, Zone 1-6, Preset 1-9, Off</td>
</tr>
<tr>
<td>U51007 - __1F</td>
<td>5 gang, 10 fader, 7 buttons</td>
<td>Manual, Record, Master, Zone 1-9, Preset 1-4, Off</td>
</tr>
<tr>
<td>U51012 - __1F</td>
<td>5 gang, 10 fader, 12 buttons</td>
<td>Manual, Record, Master, Zone 1-9, Preset 1-9, Off</td>
</tr>
<tr>
<td>U61307 - __1F</td>
<td>6 gang, 13 fader, 7 buttons</td>
<td>Manual, Record, Master, Zone 1-12, Preset 1-4, Off</td>
</tr>
<tr>
<td>U61312 - __1F</td>
<td>6 gang, 13 fader, 12 buttons</td>
<td>Manual, Record, Master, Zone 1-12, Preset 1-9, Off</td>
</tr>
<tr>
<td>U71607 - __1F</td>
<td>7 gang, 16 fader, 7 buttons</td>
<td>Manual, Record, Master, Zone 1-15, Preset 1-4, Off</td>
</tr>
<tr>
<td>U71612 - __1F</td>
<td>7 gang, 16 fader, 12 buttons</td>
<td>Manual, Record, Master, Zone 1-15, Preset 1-9, Off</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Station</th>
<th>Link Power</th>
<th>Auxiliary 24Vdc</th>
<th>Ground</th>
</tr>
</thead>
<tbody>
<tr>
<td>Station</td>
<td>(1) Belden 8471 – Topology free, polarity independent Max 4 LCD per process or Max run 1500’ w/o Repeater</td>
<td>(2) #16AWG Max run 1500’ w/o Repeater</td>
<td>(1) #14AWG stranded</td>
</tr>
</tbody>
</table>

#### Backbox:

<table>
<thead>
<tr>
<th>Flush:</th>
<th>Surface:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETC 7081A2002 (supplied by ETC)</td>
<td>ETC 7081A2001 (supplied by ETC)</td>
</tr>
</tbody>
</table>

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

For more information
www.etcarchitectural.com

### Ordering Information

#### LCD Station Options

<table>
<thead>
<tr>
<th>Model #</th>
<th>Description</th>
<th>Legend</th>
</tr>
</thead>
<tbody>
<tr>
<td>ULCD - __F</td>
<td>Flush-Mount LCD</td>
<td></td>
</tr>
<tr>
<td>ULCD - __S</td>
<td>Surface-Mount LCD</td>
<td></td>
</tr>
<tr>
<td>ULCD - __P*</td>
<td>Portable LCD/Industrial Clam shell design</td>
<td>Note: U1RS Receptable Station Required</td>
</tr>
<tr>
<td>ULCD - __D</td>
<td>Portable LCD/Consolette Desktop design</td>
<td>Note: U1RS Receptable Station Required</td>
</tr>
<tr>
<td>U1RS - __F</td>
<td>1 gang, Portable Receptacle Portable</td>
<td></td>
</tr>
<tr>
<td>U1RS - __S</td>
<td>1 gang, Portable Receptacle Portable</td>
<td></td>
</tr>
</tbody>
</table>

*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
www.etcarchitectural.com

ETC ARCHITECTURAL
Infrared Controls

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

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:**
**Station:**
- **Link Power:** (1) Belden 8471 – Topology free, polarity independent
- **Max run** 1500’ w/o Repeater

**Ground:** (1) #14AWG stranded

**Backbox:**
- **1-gang flush:** RACO 690 (not by ETC)
- **1-gang surface:** ETC 7081A2004-1 (supplied by ETC)

**Functional:**
- **Receiver reception cone:** 60°
- **Transmitter range:** 35’

Ordering Information

**Infrared**

<table>
<thead>
<tr>
<th>Model #</th>
<th>Description</th>
<th>Legend</th>
</tr>
</thead>
<tbody>
<tr>
<td>U1IR - _F</td>
<td>1 gang – Infrared Receiver</td>
<td></td>
</tr>
<tr>
<td>UP-05</td>
<td>5 button handheld IR transmitter</td>
<td>Preset 1-4, Off</td>
</tr>
<tr>
<td>UP-10</td>
<td>10 button handheld IR transmitter</td>
<td>Preset 1-9, Off</td>
</tr>
</tbody>
</table>

*Product shown above.

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

For more information

www.etcarchitectural.com

Imagine... the possibilities.
Contact Interface

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

### Specification

<table>
<thead>
<tr>
<th>Mechanical:</th>
<th>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.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical:</td>
<td>Output Contact Rating: 0.5A@120VAC / 1A@30Vdc  Switch Input Rating: 5V@10mA (unit requires dry contact closure)</td>
</tr>
<tr>
<td>Wiring:</td>
<td>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  Ground: (1) #14AWG</td>
</tr>
<tr>
<td>Switch Input:</td>
<td>(2) #18AWG – twisted – max 300’  Relay Output: (2) #10AWG to #18AWG – twisted – max 300’</td>
</tr>
</tbody>
</table>

### Ordering Information

<table>
<thead>
<tr>
<th>Model #</th>
<th>Description</th>
<th>Dimensions (h x w x d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UCI*</td>
<td>Unison Contact Interface</td>
<td>10.5” x 14” x 3”</td>
</tr>
<tr>
<td>R MK</td>
<td>Rack Mount Kit (6U)</td>
<td>10.0” x 2.5” x 3”</td>
</tr>
</tbody>
</table>

*Product shown above.*

---

Fader Interface

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

### Specification

<table>
<thead>
<tr>
<th>Mechanical:</th>
<th>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.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical:</td>
<td>Lamp Output Rating: 100mA @ 12Vdc  Fader Input Rating: 0-5Vdc (Must be referenced to Aux Power common)</td>
</tr>
<tr>
<td>Wiring:</td>
<td>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  Ground: (1) #14AWG</td>
</tr>
<tr>
<td>Fader Input:</td>
<td>(3) #18AWG – twisted – max 300’  Indicator Output: (2) #18AWG</td>
</tr>
</tbody>
</table>

### Ordering Information

<table>
<thead>
<tr>
<th>Model #</th>
<th>Description</th>
<th>Dimensions (h x w x d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UFI</td>
<td>Unison Fader Interface</td>
<td>10.5” x 14” x 3”</td>
</tr>
</tbody>
</table>
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.

### 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
- **Circuit Bkr:** Tungsten rated, fully magnetic
- **SCR:** Sealed patented assembly consisting of two back-to-back SCR’s per circuit
- **Filtering:** Integral toroidal filter chokes used to limit objectionable harmonics, reduce lamp-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

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

#### 277 Volt Modules

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

*Product shown above.

For more information:

www.etcarchitectural.com
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.

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, 10,000 A SCCR
- 3P/4W, 277/480 VAC plus ground – 50/60Hz, 14,000 A SCCR
- 1P/3W, 120/240 VAC plus ground – 50/60Hz, max 200A DR12, 22,000 A 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’

**Ground:**
(1) #14AWG

**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

- 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

**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**

<table>
<thead>
<tr>
<th>Model #</th>
<th>Description</th>
<th>Dimension (H x W x D)</th>
<th>Wt. (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DR6-12-120</td>
<td>6 module (12 channel) dimming rack – 120VAC</td>
<td>21.9” x 17” x 9.6”</td>
<td>31</td>
</tr>
<tr>
<td>DR12-24-120*</td>
<td>12 module (24 channel) dimming rack – 120VAC</td>
<td>31.0” x 17” x 9.6”</td>
<td>42</td>
</tr>
<tr>
<td>DR6-12-277</td>
<td>6 module (12 channel) dimming rack – 277VAC</td>
<td>21.9” x 17” x 9.6”</td>
<td>31</td>
</tr>
<tr>
<td>DR12-24-277</td>
<td>12 module (24 channel) dimming rack – 277VAC</td>
<td>31.0” x 17” x 9.6”</td>
<td>42</td>
</tr>
</tbody>
</table>

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

**Control Modules**

<table>
<thead>
<tr>
<th>Model #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMD</td>
<td>Dimming Control Module</td>
</tr>
<tr>
<td>CMEd</td>
<td>Dimming Control Module w/Architectural station processor</td>
</tr>
</tbody>
</table>

**Rack Options**

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

*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.

### Specification

**Mechanical:** Surface rack mount – 18-gauge formed steel – gray, scratch-resistant epoxy paint.

**Electrical:**
- Input:
  - 3P/4W, 120/208 VAC plus ground – 50/60Hz
  - 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

<table>
<thead>
<tr>
<th>Model #</th>
<th>Description</th>
<th>Dimension (H x W x D)</th>
<th>Wt. (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AX6-M</td>
<td>Main Breaker Rack for DR6-100A/3P**</td>
<td>21.9” x 13” x 9.6”</td>
<td>33</td>
</tr>
<tr>
<td>AX12-M*</td>
<td>Main Breaker Rack for DR12-200A/3P**</td>
<td>31.0” x 13” x 9.6”</td>
<td>66</td>
</tr>
<tr>
<td>AX12X-M</td>
<td>Main Breaker Rack for (2) DR12 X-bussed – 400A/3P</td>
<td>31.0” x 13” x 9.6”</td>
<td>66</td>
</tr>
<tr>
<td>AX12X-ML</td>
<td>Main Lug Rack for (2) DR12 X-bussed**</td>
<td>31.0” x 13” x 9.6”</td>
<td>66</td>
</tr>
</tbody>
</table>

#### Trip Plug Options

<table>
<thead>
<tr>
<th>Model #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>100ATP</td>
<td>100A Trip Plug Assembly (for AX12 racks)</td>
</tr>
<tr>
<td>200ATP</td>
<td>200A Trip Plug Assembly (for AX12X racks)</td>
</tr>
</tbody>
</table>

*Product shown above.

**Single-Phase options available.

For more information [www.etcarchitectural.com](http://www.etcarchitectural.com)
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.

**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:** 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* (*CME and CMEi)
- **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**

<table>
<thead>
<tr>
<th>Model #</th>
<th>Description</th>
<th>Dimension (H x W x D)</th>
<th>Wt. (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ER4-120*</td>
<td>External Processing Rack – Wall Mt. – 120VAC</td>
<td>16.25” x 15.5” x 7.00”</td>
<td>20</td>
</tr>
<tr>
<td>RM</td>
<td>19” Rack Mount Kit</td>
<td>17.50” x 19.0” x 8.63”</td>
<td>12</td>
</tr>
</tbody>
</table>

*Note: Racks also available in 230V standard configurations.*

**Control Modules**

<table>
<thead>
<tr>
<th>Model #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CME</td>
<td>Extended Architectural Control Module</td>
</tr>
<tr>
<td>CMEi</td>
<td>Extended Architectural Control Module w/Network Connections</td>
</tr>
</tbody>
</table>

**Option Modules**

<table>
<thead>
<tr>
<th>Model #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>REP</td>
<td>Repeater Option Module (Required for each additional group of 32 station OR wire runs &gt;1500’)</td>
</tr>
<tr>
<td>AIR</td>
<td>Blank Airflow Module (Used to fill unused rack spaces)</td>
</tr>
</tbody>
</table>

*Product shown above.*
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 tab-styled 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.
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.
(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
- 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
- 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
- Wire Type: (1) Belden #9729
- Maximum wire: 1600’

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

Guidelines
- Wire Type: (1) Belden #9729
- Maximum wire: 50’
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**

<table>
<thead>
<tr>
<th>Model #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>U1RSP - F</td>
<td>PC Connector</td>
</tr>
</tbody>
</table>

Easy system configuration
Graphical user interface
Integral astronomical timeclock
Programmable buttons and faders
Macro sequencing
Multilevel electronic security

For more information
www.etcarchitectural.com

Imagine... the possibilities.
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.

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
  Toledo, Ohio
- 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

Imagine... the possibilities.
Imagine... the possibilities.

- 6 Sensor SR48 Dimmer Racks
- 180 Sensor D20DHR Modules
- 2 48-Circuit Relay Panels
- 96 Circuits of Emergency Transfer (ELTS)
- 8 Custom Unison LCD Stations with Macro Controls
- 2 Portable Unison LCD Stations
- 2 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
- 1 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
Imagine... the possibilities.