

Unison DR6

**GENERAL INFORMATION**

Unison dimming, from ETC — low cost, flexible, modular dimming for architectural and theatrical lighting control applications.

- APPLICATIONS**
  - Churches
  - Hotels
  - Convention Centers
  - Theatres
  - Schools
  - Restaurants
- FEATURES**
  - Low profile rack
  - Fully pre-wired
  - Easy installation, configuration and operation
  - Scalable modular processing
  - Backlit control electronics
  - Single phase option
  - Main breaker and bypass options
  - Integral RS232 interface
  - Dry contact interface
  - Supports Dimmer Doubling™
  - Controls incandescent, fluorescent, low voltage, neon, and cold cathode load types
- GENERAL**
  - Available in 100, 120, 230 and 277 Volt systems
  - 6, 12 and 24 dual module configurations DR6-12, DR12-24, DR12-48.
  - For use with ETC-Unison dual and single density dimmer modules
  - Controls incandescent, low voltage, fluorescent, neon, and cold cathode load types
  - Ambient Temperature 32-104°F/0-40°C
  - Ambient Humidity 30-90° non-condensing
  - UL and cUL Listed, CE Marked

**ORDERING INFORMATION**

**120 Volt - DR Racks**

Model#	Description
DR6-12-120	6 module rack - 120 Volt (12 circuits)
DR12-24-120	12 module rack - 120 Volt (24 circuits)
DR12-48-120*	(2) 12 module racks - 120 Volt (48 circuits)

\*In 48 channel configurations, (2) 12 module racks are cross-bussed using AX Series main lug or main breaker enclosure.

**120 Volt - AX Racks**

Model#	Description
AX6-M-120-1	Auxiliary Rack with 200A Main Breaker for DR6 - 1ø, 3W
AX6-M-120-3	Auxiliary Rack with 100A Main Breaker for DR6 - 3ø, 4W
AX12-M-120-1	Auxiliary Rack with 400A Main Breaker for DR12 - 1ø, 3W
AX12-M-120-3	Auxiliary Rack with 200A Main Breaker for DR12 - 3ø, 4W*
AX12X-M-120-3	Auxiliary Rack with 400A Main Breaker for (2) DR12 - 3ø, 4W*
AX12X-ML-120-1	Auxiliary Rack with Cross-bus for (2) DR12 - 600A -1ø, 3W
AX12X-ML-120-3	Auxiliary Rack with Main Lug for (2) DR12 - 400A - 3ø, 4W*

\*See Options/Accessories for reduced current trip plug options.

**Control Modules**

Model#	Description
CMd	Control module with dimming processor* (DMX only)
CMEd	Control module with dimming and station processor*

\*A (d) dimming processor is required in every rack. One (E) station processor is required in each system using Unison stations.

**Options and Accessories**

Model#	Description
ARCH	Architectural Option Board (used in all stations)
FLO	Fluorescent Option Board (4-wire)
1PH6	Single phase strap kit for DR6
1PH12	Single phase strap kit for DR12
BYP	Bypass Option Board (for supplemented egress lighting)
100ATP	100 Amp trip plug for AX12 MCB Rack
200ATP	200 Amp trip plug for AX12X MCB Rack
STD	Floor mounting stand for DR rack
USI-I/O	Dry contact closure 8/in-8/out
RS232	RS232 interface (in)

**Compatible Dimming Modules**

Model#	Description
L10	Dual 10A Low Wattage Module 100V-120V 350µS
L10F	Dual 10A Fluorescent Low Wattage Module 100V-120V 350µS
D15	Dual 15A Universal Module 100V-120V 350µS
D15E	Dual 15A Universal Module 100V-120V 500µS
D15F	Single 15A Fluorescent Module (3 wire) 100V-120V
R15	Dual 15A Relay Module
CC15	Dual 15A Constant Circuit
D20	Dual 20A Universal Module 100V-120V 350µS
D20E	Dual 20A Universal Module 100V-120V 500µS
D20F	Single 20A Fluorescent Module (3 wire) 100V-120V
R20	Dual 20A Relay Module
CC20	Dual 20A Constant Circuit
AFM	Airflow Module



## SPECIFICATIONS

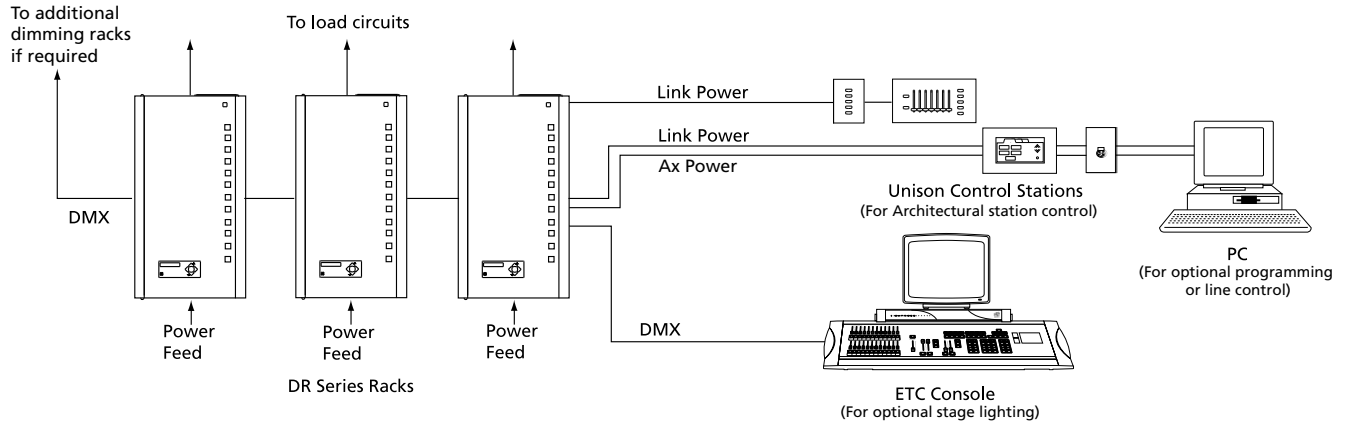
<b>MECHANICAL</b>	<p>Welded 18-gauge formed steel construction Surface or floor mount stand Hinged, lockable full-height door with electrostatic air filter Fine textured, scratch resistant, gray epoxy paint Integral low-noise fan Modular control electronics w/ backlit 20 character LCD</p>
<b>ELECTRICAL</b>	<p>100, 120, 230, and 277 Volt, 3 phase systems – voltage range tolerance <math>\pm 10\%</math> 1 phase option kit (120 and 230 Volt only) 50-60Hz. Operating frequency</p> <p><b>DR6 Rack:</b> 10,000 AIC fault current protection at 208/120Volt, three phase 173/100Volt, three phase 14,000 AIC protection at 277/480Volt, three phase</p> <p><b>DR12 Rack:</b> 22,500 AIC fault current protection at 208/120Volt, three phase 173/100Volt, three phase 65,000 AIC at 208/120Volt, three phase when installed using AX Auxilliary Rack with M option - Main Breaker</p> <p>Main lugs accept maximum 400 MCM wire (205 mm<sup>2</sup>) Load terminals accept maximum #8 AWG wire (10 mm<sup>2</sup>) AX Racks equipped with breakers sized for maximum load capacity Lower rated trip plug options available</p>
<b>CONTROL MODULE</b>	<p>Control Module (CM) houses dimming and architectural station processors. Contains a nine-button membrane overlay and a two-line by 20 character LCD for system configuration, testing and diagnostics</p>
<b>DIMMING PROCESSOR</b>	<p>Utilizes industry standard DMX-512 control protocol Data input switches for initialization and configuration Configuration stored in non-volatile flash memory</p>

<b>ARCHITECTURAL STATION PROCESSOR</b>	<p>Station processors accept Echelon Link Power control signals from stations and remote interfaces Link Power network utilizes polarity-independent, low-voltage Class II twisted pair wiring: Belden type 8471 (unshielded) Belden 8719 (shielded) 1500' (500m) wiring limit without the use of a repeater Repeater (REP) Option module increases wire length in increments of 1500' (500m). Configuration through Light Manager System software Station configuration and program information stored in flash memory 3.5" floppy disk drive for loading configurations Controls 512 dimmers x 512 zones with 32 stations – 4 LCDs maximum. Use Repeater Option module to increase station count in increments of 32.</p>
<b>RACK OPTIONS</b>	<p>ARCH – Architectural Option Board supports termination of Unison stations, DMX, Auxiliary power and RS232 communications. FLO – Fluorescent Option Board provides 24 outputs for control of 4-wire (0-10vdc) fluorescent ballasts (Contact factory for approved ballast manufacturers). BYP – Bypass Option Board senses loss of Normal power and drives selected loads to full bright.</p>













# Unison® 120V Dimming Racks

## DR Series

### UNISON DIMMING AND CONTROL RISER



### INTERWIRING GUIDE

	Dimmer Rack	External Rack	Sensor Rack	Station	LCD	Console
						
<b>Dimmer Rack</b> 	<b>DMX</b> (1) Belden 9729	<b>DMX</b> (1) Belden 9729	<b>DMX</b> (1) Belden 9729	<b>LINK Power</b> (1) Belden 8471 (1) #14 AWG*	<b>LINK Power</b> (1) Belden 8471 (1) #14 AWG* <b>Ax Power</b> (2) #16 AWG	<b>DMX</b> (1) Belden 9729
<b>External Rack</b> 	<b>DMX</b> (1) Belden 9729	<b>NA</b>	<b>DMX</b> (1) Belden 9729	<b>LINK Power</b> (1) Belden 8471 (1) #14 AWG*	<b>LINK Power</b> (1) Belden 8471 (1) #14 AWG* <b>Ax Power</b> (2) #16 AWG	<b>DMX</b> (1) Belden 9729
<b>Sensor Rack</b> 	<b>DMX</b> (1) Belden 9729	<b>DMX</b> (1) Belden 9729	<b>DMX</b> (1) Belden 9729	<b>NA</b>	<b>NA</b>	<b>DMX</b> (1) Belden 9729 <b>ETC Link</b> (1) Belden 9729 (2) #16 AWG
<b>Station</b> 	<b>LINK Power</b> (1) Belden 8471 (1) #14 AWG*	<b>LINK Power</b> (1) Belden 8471 (1) #14 AWG*	<b>NA</b>	<b>LINK Power</b> (1) Belden 8471 (1) #14 AWG*	<b>LINK Power</b> (1) Belden 8471 (1) #14 AWG* <b>Ax Power</b> (2) #16 AWG	<b>NA</b>
<b>LCD</b> 	<b>LINK Power</b> (1) Belden 8471 (1) #14 AWG* <b>Ax Power</b> (2) #16 AWG	<b>LINK Power</b> (1) Belden 8471 (1) #14 AWG* <b>Ax Power</b> (2) #16 AWG	<b>NA</b>	<b>LINK Power</b> (1) Belden 8471 (1) #14 AWG* <b>Ax Power</b> (2) #16 AWG	<b>LINK Power</b> (1) Belden 8471 (1) #14 AWG* <b>Ax Power</b> (2) #16 AWG	<b>NA</b>
<b>Console</b> 	<b>DMX</b> (1) Belden 9729	<b>DMX</b> (1) Belden 9729	<b>DMX</b> (1) Belden 9729 <b>ETC Link</b> (1) Belden 9729 (2) #16 AWG	<b>NA</b>	<b>NA</b>	<b>NA</b>

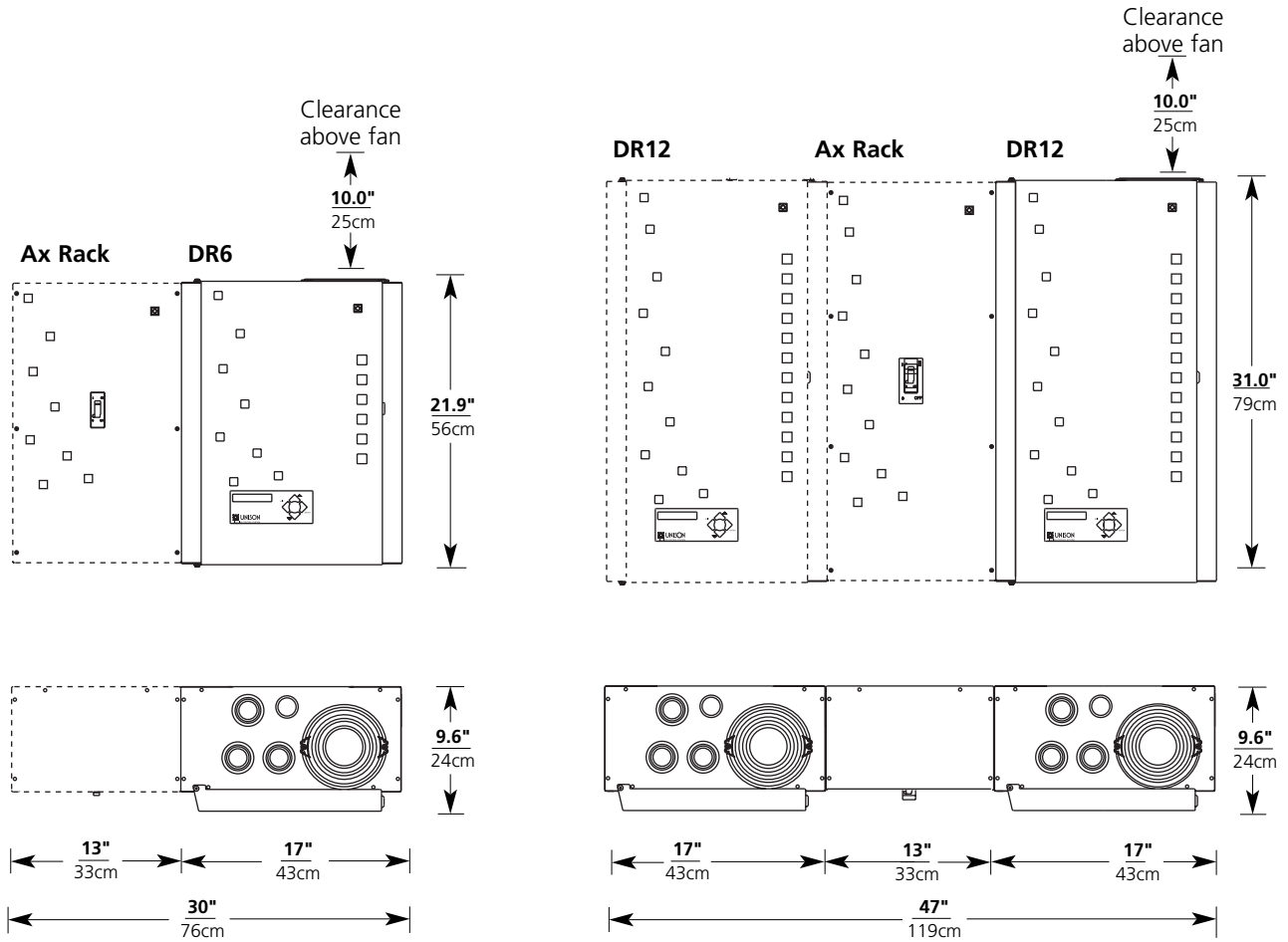
\*Not required in systems with grounded metal conduit.

NA = Not Applicable

# Unison® 120V Dimming Racks

## DR Series

### RACK DIMENSIONS



### PHYSICAL

#### Rack Dimensions

Model	Height		Width		Depth	
	inches	cm	inches	cm	inches	cm
DR6	21.9	55.6	17.0	43.1	9.6	24.4
DR12	31.0	78.7	17.0	43.1	9.6	24.4
AX6	21.9	55.6	13.0	33.0	9.6	24.4
AX12	31.0	78.7	13.0	33.0	9.6	24.4
AX12X	31.0	78.7	13.0	33.0	9.6	24.4

#### Rack Weights\* no modules

Model	Weight		Shipping Weight	
	lbs	kgs	lbs	kgs
DR6	31.0	14.1	37.0	16.8
DR12	42.0	19.1	49.0	22.2
AX6	33.0	15.0	38.0	17.2
AX12	66.0	29.9	72.0	32.7
AX12X	54.0	24.5	60.0	27.2

\* Weights and Dimensions typical



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