



Type(s)

Project

Date

Notes

GENERAL INFORMATION

Unison DRd Series Rack Enclosures are the workhorses behind the scenes, supporting two processor options and a variety of dimming, switching, and option modules. DRd Rack Enclosures are trusted for their reliability and versatility.

APPLICATIONS

- Houses of worship
- Hotels
- Convention centers
- Theatres
- Schools
- Restaurants

FEATURES

- All-On – clearly marked switch allows for all loads to be turned on to full, without the need for a control processor
- High Fault – protection from power spikes and surges with short-circuit current ratings from 22,000 amps
- Regulation – monitoring and adjustment of incoming line voltage with min and max scale voltages
- Bypass – emergency lighting control bypass input with load shedding
- Hold Last Look – dimming engine holds the last output during any loss of control
- Quick Boot – dimming engine boot time of less than four seconds
- HiRes Dimming – support for 16-bit DMX and over 65,000 steps of dimming

ORDERING INFORMATION

DRd Rack Enclosures

MODEL	DESCRIPTION
DRd6-12-__ ¹	Six-module rack enclosure (12 circuits)
DRd12-24-__ ¹	12-module rack enclosure (24 circuits)
DRd12-48-__ ^{1,2}	Two 12-module rack enclosures (48 circuits)
DRd6N-12-230CE	Six-module rack enclosure (12 circuits)
DRd12N-24-230CE	12-module rack enclosure (24 circuits)

¹ Available for 100–120 V and 240/277 V options. Enter the desired voltage in the blank space when ordering (for example DRd6-12-120 for 100–120 V or DRd12-24-277 for 240/277 V).

² In 48-channel configurations, two 12-module racks are cross-bussed using AX series main-lug or main-breaker enclosures.

Auxiliary Enclosures

MODEL	DESCRIPTION
AX12X-MCB-3-400	Auxiliary Rack with 400 A Main Breaker for two DRd12 - 3ø, 4-wire
AX12X-ML-3-400	Auxiliary Rack with Main Lugs for two DRd12 - 3ø, 4-wire
AX12X-ML-1-600 ³	Auxiliary Rack with Main Lugs for two DRd12 - 2ø, 3-wire

³ Available for 100–120 V only.

DRd Control Options and Accessories

MODEL	DESCRIPTION
E-ACP	Echo Architectural Control Processor
E-SPM-A	Echo Station Power Module
P-ACP-E Mk2	Paradigm Processor Mk2 - Enclosure
P-SPM-E Mk2	Paradigm Station Power Module Mk2 - Enclosure
DRd-LVD	DRd 0–10 V Control Option
DRd-DALI	DRd DALI Control Option
DRd-PED	DRd Floor-Mount Pedestal
URTO Mk2	Unison Mk2 RideThru Option

DRd Upgrade Kits

DRd Upgrade Kits are available for upgrading a DRd enclosure with the original DRd dimming engine to support the P-ACP-E Mk2 processor. The P-ACP-E Mk2 processor is not included in the upgrade kit and must be ordered separately.

MODEL	DESCRIPTION
DRd-Upg-120	DRd Upgrade Kit to include Paradigm Mk2 Termination Kit and Mk2 CPU2 Dimming Engine
DRd-Upg-230	DRd Upgrade Kit to include Paradigm Mk2 Termination Kit and Mk2 CPU2 Dimming Engine
DRd-Upg-240/277	DRd Upgrade Kit to include Paradigm Mk2 Termination Kit and Mk2 CPU2 Dimming Engine

Contact Technical Support at etcconnect.com/contact-us.aspx for help determining if you need an upgrade kit.

SPECIFICATIONS

GENERAL

- DRd rack enclosures available in two sizes: DRd6 with support for six modules and up to 12 circuits and DRd12 with support for 12 modules and up to 24 circuits
- Full eight-year warranty

FUNCTIONAL

- High-density dimming for incandescent, fluorescent, neon, cold cathode, electronic and magnetic low-voltage transformer load types
- 16-bit DMX input
- Designed for reliable, continuous operation

MECHANICAL

- Welded 18-gauge formed steel construction
- Surface- or floor-stand mount
- Hinged, lockable full-height door with electrostatic air filter
- Fine-textured, scratch-resistant epoxy paint
- Integral low-voltage fan
- Modular control electronics

ELECTRICAL

- UL Models
 - 120/208 V Three Phase, Four Wire + Ground
 - Supports Voltages down to 100/170 V Nominal
 - 120/240 V Bi-Phase, Three Wire + Ground supported using reconfigurable bus bars
 - 277/480 V Three Phase, Four Wire + Ground
 - Supports Voltages down to 240/415 V Nominal
 - Voltage tolerance $\pm 10\%$
- CE Models
 - 230 V Three Phase, Four Wire + Ground
 - Voltage tolerance $\pm 10\%$
- Single-Pole, Neutral Disconnect or Residual Current Device (RCD) per dimmer
- Operating frequency: 50–60 Hz
- DRd6/DRd12 Rack Enclosure fault current protection:
 - 22,000 A Short Circuit Current Withstand

THERMAL

- Ambient room temperature: 0°C–40° C (32°F–104°F)
- Ambient humidity: 10%–90% non-condensing

REGULATORY AND COMPLIANCE

- 100–120 V and 240/277 V Models
 - All enclosures are cULus Listed
 - UL 924 Listed
- 230 V Models
 - CE Compliant

ACCESSORIES AND OPTIONS

CONTROL PROCESSORS

- Echo Architectural Control Processor (E-ACP)
- Paradigm Architectural Control Processor (P-ACP-E Mk2)

STATION POWER OPTIONS

- Echo Station Power Module (E-SPM-A)
 - Provides EchoConnect power for up to 16 Echo control devices and 16 Echo output devices
 - Supports up to 500 m (1,640 ft) of station bus wiring
- Paradigm Station Power Module (P-SPM-E Mk2)
 - Provides LinkConnect power for up to 63 Unison stations
 - Provides 24 V auxiliary power for interface and touchscreen stations
 - Allows for up to 500 m (1,640 ft) of station bus wiring

ACCESSORIES

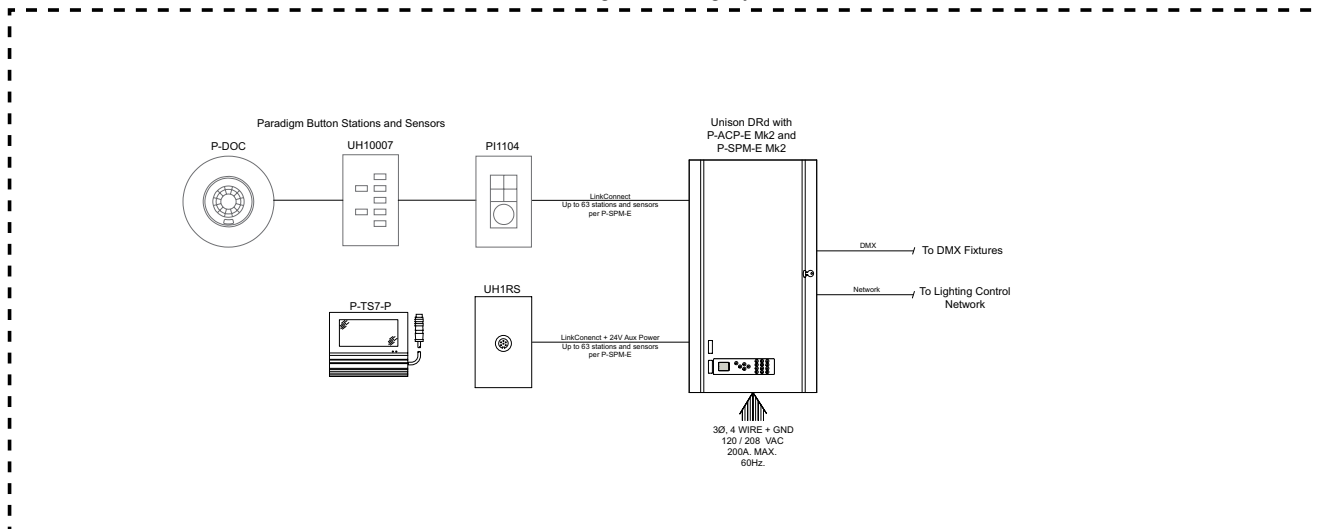
- Unison RideThru Option (URTO Mk2)
 - Short-term power backup of control electronics for at least 10 seconds
 - Automatically engages when power is lost
 - Recharges during normal power operation
 - Prevents ACP from rebooting after a brownout once power is restored
- 0–10 V (four-wire) control option (DRd-LVD)*
 - 0–10 V (sink) driver and ballast control
 - Up to 24 outputs
 - 100 mA per channel
- DALI Ballast option (DRd-DALI)*
 - Support for 24 subnets of DALI control in broadcast mode
 - Up to 64 ballasts per output
 - External DALI power supply required (by others)

*Either one DRd-DALI or one DRd-LVD option card may be used in each DRd enclosure

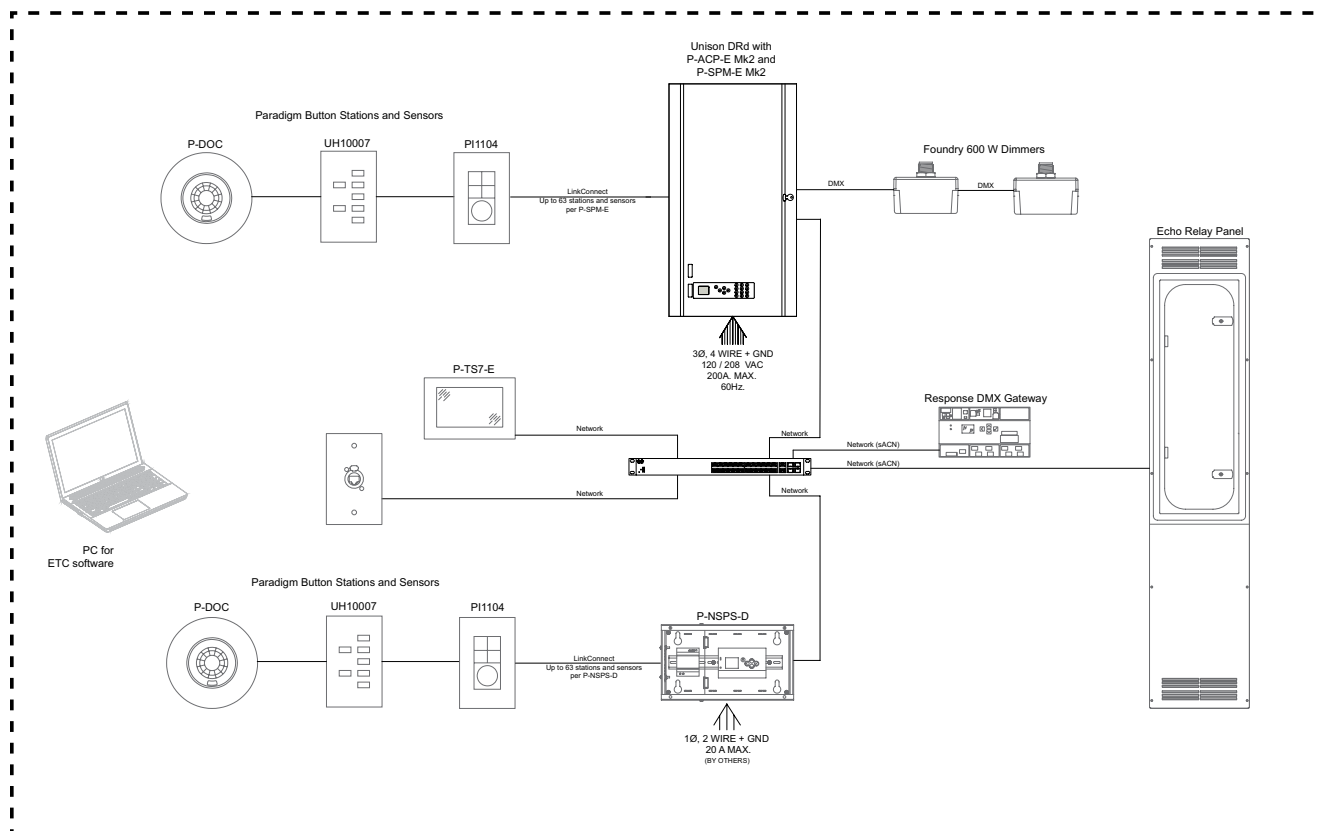
Maximum Current Draw

MODEL	MAIN FEED	MAX CURRENT DRAW	REC. MAIN FEED BREAKER RATING
DRd6	2 \emptyset , 3-wire	120 A	150 A
	3 \emptyset , 4-wire	80 A	100 A
DRd12	2 \emptyset , 3-wire	240 A	300 A
	3 \emptyset , 4-wire	160 A	200 A
AX12X	2 \emptyset , 3-wire	480 A	400 A
	3 \emptyset , 4-wire	320 A	400 A

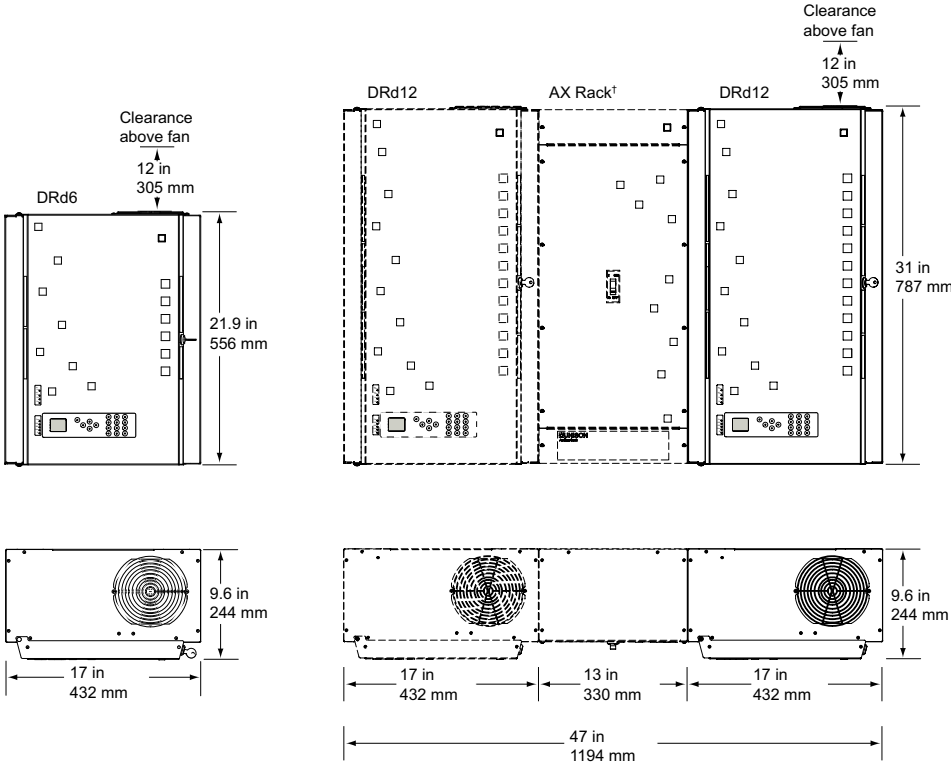
Paradigm Dimming System



Advanced Paradigm Riser with P-ACP-E



PHYSICAL



† Optional AX Shown

DRd Dimensions¹

MODEL	HEIGHT		WIDTH		DEPTH	
	mm	in	mm	in	mm	in
DRd6-12-__ ²	556	21.9	432	17.1	244	9.6
DRd12-24-__ ²	787	30.1	432	17.1	244	9.6
AX12X-__ ³	787	30.1	330	13.0	203	8.0
DRd6N-12-230CE	556	21.9	432	17.1	244	9.6
DRd12N-24-230CE	787	30.1	432	17.1	244	9.6

¹Weights and dimensions typical

²Available for 100–120 V and 240/277 V options. See Ordering Information on page 1.

³ Available with several options. See Ordering Information on page1.

DRd Weights¹

MODEL	WEIGHT		SHIPPING WEIGHT	
	kg	lb	kg	lb
DRd6-12-__ ²	17.2	38.0	19.1	42.2
DRd12-24-__ ²	23.2	51.2	25.0	55.2
AX12X-ML-__ ³	15.0	33.1	18.2	40.2
AX12X-MCB-3-400	15.9	35.1	19.1	42.2
DRd6N-12-230CE	17.2	38.0	19.1	42.2
DRd12N-24-230CE	23.2	51.2	25	55.2

DRd Sound Pressure Level⁴

MODEL	LOW FAN SPEED (dBA)	HIGH FAN SPEED (dBA)
DRd6-12-__ ¹	49	54
DRd12-24-__ ¹	49	54
DRd6N-12-230CE	44	49
DRd12N-24-230CE	44	49

⁴dBA values for each DRd enclosure measured at one meter with an ambient noise level of 36.5 dBA.

