

AC Power CF400PCS

Portable Power Distribution

By RichardCadena

hen the show must go on, the power must first be applied. To apply it correctly it must be applied safely, and that's where all those codes and regulations come in. If you read the National Electrical Code (or the Canadian Electrical Code, the British Wiring Regulations in the UK, or any of the equivalents in other countries) and you are able to properly decipher them, then you might be capable of building your own portable power distribution system and use it successfully without

hurting yourself or anyone else. Good luck with that.

Or you could simply tap into one of several good manufactured portable power distros that are currently available on the market. They are often designed by people who have been involved in quadrillions of shows, from the extremely large to the everyday commonplace show like the one you're doing next week.

What's that you say? You want to save money by building your own? There are some things on which you just don't want to cut cor-

ners. Heart surgery and safety come to mind. So before you venture to Home Depot and buy some Romex, electrical tape, j-boxes, and plywood, check out these professionally designed and built portable power distribution units.

Do they cost more than what you might be able to cobble together? Sure, but you'll pay considerably less than a negligence lawsuit.

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Entertainment Power Systems (EPS) racks from Creative Stage Lighting







Entertainment 1 portable power distros







Peavev Distro



DBT-4681L





BORN UNDER A LUCKY STAR



More on the new KARA modular line source at www.l-acoustics.com



Manufacturer Web Address	Model	Input Voltage/Current/Connector Type	Outputs (Number/Current/Voltage/Connector Type)	Type of Enclosure		Dimensions	Compliance	Weight	Retail Price	Comments
AC Power Distribution acpowerdistribution.	SST Series Camlock Spiders (8 new models)	400A 120/208v 3Ø or 277/480V 3Ø 5wire Camlock	5-wire Camlock	Type 1 indoor or type 3R outdoor		Varies by configuration		Varies by con- figuration	Varies by configuration	Available in 1x3, 2x3, 2x6 or 4x4 input/output. All versions (except 480v) include 20a courtesy outlets (with or without GFCI), voltage test jacks, and safety covers on all outputs and secondary inputs.
	SST Series Portable Camlock Disconnects (9 New Models)		(1) output of 5-wire Camlock			19" x 13" x 11"	UL listed			Adjustable main 100% rated main breaker; (3) 20-amp courtesy outlets avail. w/ or w/o GFCI; voltage test jacks.
com	CF400PCS Portable Company Switch	400A 120/208v 3Ø 5-wire Camlock w/ double neutral	(2) parallel outputs of 5-wire Camlock w/ double neutral	1		23" x 13" x 11"		75 lbs.	\$3,995	Adjustable main; 100% rated main breaker; built-in two-fer output; double neutral for 6-wire use w/ spiders or dim- mers; (3) 20-amp courtesy outlets available w/ or w/o GFCI; voltage test jacks.
	PD-ALD (automated lighting distribution)	120/208V; 400A 3-phase; cam type connectors with pass-thru & main breaker	(8) 208V 6-circuit 19-pin outputs w/ branch breakers and (6) Edison duplex outputs w/ branch breakers						\$8,995	PM-360 power monitor; complete system UL rating standard; other configurations & upgrades available upon request.
Applied Electronics appliednn.com	PD-Custom Portable	120/208 3-phase or single phase; 20-400 amp, Cam type or Twistlock input	Mix any twistlock, 19-pin, U-ground, Powercon or straight blade receptacle	ATA style aluminum lined rolling rack		20" x 20" x as required	UL	Varies by con- figuration	Varies by configura- tion	Custom configuration for any application; accessories include PM-360 Power Monitor System; PM1000 remote power monitor; LSC 5 or 10 port DMX splitter with RDM; custom logos, case colors & sizes.
	RB-Custom Rackbox	120/208 3-phase or single phase; 20-100 amp, Cam type or Twistlock input	Mix any twistlock, 19pin, U-ground, powercon or straight blade receptacle	2U or 3U rack mount module		19"x10"x 2 or 3 rack spaces			Varies by configura- tion	Custom breakout boxes for use in FOH, amp and work racks.
	DAD 2400 SC Super Cam Thru Spider Box	120/208VAC, 3Ø, 800A per phase, Cam-Lok feed-thru	120/208VAC, 3Ø, 800A per phase, Cam-Lok Feed thru			24" x 10" x 12"		75 lbs	\$2,495	Available configurations: 2-in X 6-out or 4-in X 4-out; *480V units available; one year warranty
Dadco dadco-Ilc.com	DAD 6SP FT3 Socapex Distro	120/208VAC, 3Ø, 400A per phase, Cam-lok feed-thru 120/208/240VAC, 3Ø, 400A per phase, Cam-Lok feed-thru	(6) 120V 6-circuit Socapex-type outlets plus (2) 20A duplex courtesy receptacles, 120V	NEMA Type 1		20" x 20"W x 10"	UL 1640 ETL	60 lbs	\$2,595	36 breakers for individual control of 6-circuit Socapex-type outlets plus (2) 20A 120V duplex outlets; one year war- ranty
	DAD 1200 SL Three Phase Distro		(6) 100A/120V Bates outlets, (3) 100A/250V Bates outlets, (2) 20A/120V duplex receptacles						\$2,995	Slim Line version of the 1200 FC3 Duzz-All Distro; one year warranty
	E1PDCB1- 1 Tier					10" x 10" x 9"				Lunch box type HD w/ 10 single breakers in single unit; size can be custom designed for any type of small power distro requirements.
Entertainment 1 e1llc.com	E1PDCB2- 2 Tier	120/208VAC 3-phase; any type power connector in & available pass through, G/N reversed	Custom design per customer spec	Rubber-based total green enclosure		10" x 10" x 14"		Varies by con- figuration	N/A	Lunch box type HD w/ 20 single breakers in a double unit; size can be custom designed for any type of mid-size power distro requirements.
	E1PDCB3- 3 Tier					10" x 10" x 19"				Lunch box type HD w/ 30 single breakers in triple unit; size can be custom designed for any type of large power
Entertainment Power	2-000-010-0001		4 x 6-Circuit 208V 20Amp 19-pin multi; 6 x 120V 20Amp Edison duplex; 2 x L6-20 208V;			22"x24"x27"		125 lbs.	\$9,456.98	distro requirements.
Systems/ Creative Stage Lighting	2-000-010-0003	120/208V; 225A 3-phase; Cam-type connectors in & pass through, G/N reversed	2 x L5-20 120V 2 x 6-Circuit 120V 20Amp 19-pin multi; 2 x 6-Circuit 208V 20Amp 19-pin multi; 4 x 120V	Aluminum lined ATA roadcase		22"x24"x24"		100 lbs.	\$8,462.88	Custom engraving optional
entertainmentpower systems.com	2-000-010-0007	pass unough, diviseverseu	20Amp Edison duplex; 2 x L6-20 208V, 2 x L5-20 120V 4 x 6-Circuit 120V 20Amp 19-pin multi; 4 x 120V 20Amp Edison duplex	Toudeuse		22"x24"x21"		75 lbs.	\$7,253.68	-
Furman	ACD-100	100A 120/208v 3 phase or American 240 split	5 20A duplexes	2RU steel chassis		3.5"x 19"x 8"	NRTL-C Tuv	12 lbs.	\$649	100 amp power distro with surge suppression
furmansound.com	ASD-120	120A 120/208v 3 phase or American 240 split	6 20A duplexes	2RU steel chassis		3.5" x 19" x 8"	NRTL-C Tuv	20 lbs.	\$799	120 amp power distro with surge suppression and power sequencing
Indu-Electric North America, Inc indu-electric.com	Cube Series 4 Way 208V 19 Pin	120/208V; 400A 3-phase; cams, 1- 400A rated cam pass through	4 - 208V 20A 19-pin, 2-120V 20A Edison duplex	Non-conductive, UL 94 V0, NEMA 1, upgradable to		23.75″x 11.75″x 10.75″	UL 1640, CSA	45 lbs.	 Varies by configuration 	Multiple configurations such as cam, stage pin, twist-lock, 19-pin, straight blade, pin & sleeve and GFCI are available in standard, outdoor rain-tight or custom configurations; all power distros are UL 1640, CSA, and CE listed; available in domestic or international configurations.
				NEMA 1, upgradable to NEMA 3R		15"L x 10"W x 10.75H	0L 1040, C3A	35 lbs.		All branch devices fully recessed; shock absorbing steel enhanced molded rubber corners; recessed swivel handle; laser engraved labeling; solid internal bus bar CAM construction; optional main breaker; custom laser engraved logo.
	Cube Series 24 Way Duplex	400/0001/ 2001 4001 - 14 20 14 14	24-120V 20A Edison duplex					37 lbs.		12-way, 15-way Edison duplex Indu Cubes available.
Leprecon, LLC leprecon.com	Leprecon PD Series: portable, custom-built power distribution	120/208V; 300A, 400A optional 1 or 3Ø switchable, 200A; 6-wire cam-type connectors, optional cam-type pass-through w/ indicators	20A duplex receptacles, L-5, L-6, L-14, L-15, L-16 & L-21 series Twistlocks, 120 or 208V 19-pin, 20A stage pin	Aluminum lined ATA road- case w/ casters, flatpacks		As required		Varies by con- figuration	Varies by configura- tion	"Heavy-duty" power distribution systems can be configured using wide assortment of power and load options including rack-mount dimmers, duplex (2) with breakers, digital voltmeter, digital amp meter & Littlite Raklite(s).
	PowerRack-Rolling Distro	120/208V; up to 400A 3-phase; 3-phase to single-phase switchable option; cam-type connector input	NEMA devices, 19-pin, pin & sleeve, and stagepin options for custom configurations	Rolling, extruded aluminum frame w/ high-density plastic outer panels & removable doors		26" or 30" x 24" x 16"- 58" (4RU-28RU)	UL	Varies by configuration	Varies by configura- tion	Custom dimming and power configurations to meet application; extruded aluminum frame and high-density plastic panels designed for light-weight and "road worthiness;" latching front and back doors; custom laser engraving services
Lex Products Corp lexproducts.com	PowerHouse Pagoda Rubber Distro, Cam to 15 Duplex; DB100AA401520	100A, 3-phase, 5-wire Cam-type tails	(15) 20A duplex receptacles	Pagoda; NEMA 1 indoor or 3R rubber outdoor		14" x 14" x 13"	UL, cUL	32 lbs.	\$1,469.23	"Heavy-duty" molded rubber enclosure is fully insulated, providing shock, impact, corrosion and weather resistance; available as UL Listed NEMA 3R weatherproof with covers throughout, or as NEMA 1 indoor with covers on female cams only.
	PowerHouse-Neutrik PowerCon Rubber Quad Box	120VAC; 20A Neutrik PowerCon input and thru	(2) NEMA 5-20 duplex receptacles	Rubber Quad Box; NEMA 1 indoor		4.7" x 2.5" x 4.2"		1.5 lbs.	\$153.46	Create power taps and stringers on the fly utilizing PowerCon cables; Heavy duty, compact, rubber enclosure
	Type 7841, 1200 Amp Cam-Lok Pass-Thru Plus	208Y/120VAC, 60HZ, 3-phase, 5-wire, 400A per leg,	6-100A 120V stage plugs, 3-100A 208V stage plugs, 2-20A duplex receptacles			23.75″x 12″ x 11″		58 lbs.		A complete line of pass-thru plus distribution boxes are available.
Mole-Richardson Company mole.com	Type 79944, 4800 Amp See-Thru Cam Spider	Cam-Lok	4-208Y/120VAC, 60HZ, 3-phase, 5-wire, 1,600A per leg, Cam-Lok receptacles	NA		14.25 x 24.5 x 8.25	ETL	72 lbs.	N/A	A complete line of see-thru spider distribution boxes are available.
mole.com	Type 3781, 48-Circuit DMX Remote Switch- board	208Y/120VAC 60HZ, 3-phase, 5-wire, 960A, AC or DC, Cam-Lok	48 x 2.4kw 120v outputs via 16-Socapex receptacles. (2 per 6-channel)			38.25" x 12.25" x 22.75"		133 lbs.		A complete line of DMX remote switchboards boxes are available.
Motion Laboratories,	Audio/Video PD Lighting PDs	120/208V; 400A 3-phase; cam-type connectors	Modular design allows for variable configurations; Twistlock, pin & sleeve, 19-pin, PowerCon, stage pin, Edison	NEMA Type 1 in ATA shock mount road case		31" x 22.5" x customer specified height	ETL Listed to UL 1640, UL 508A and certified to	Varies by con- figuration	Varies by configura- tion	Variety of panel options available to configure to customer spec.
motionlabs.com	Stackables		Twistlocks, pin & sleeve, 19-pin, PowerCon, stage pin and Edison	NEMA Type 1		23" x 14" x 10.5" (15.75" H is also available)	CSA C22.2 no. 14	40 lbs.	Variable	Tailety of parter options trained to configure to customer specia
Peavey peavey.com	Distro	NEMA 14-50P 4 conductor #6	6 output circuits each with a 20A Edison Duplex outlet			2RU	ETL		\$599.99	Dual 120V 40A circuits (240V)
PRG prg.com	Series 400 Power/Data Distribution System	120/208V 400-amp Cam-Lok	Single, dual and 3-phase 120/208V outputs available	Custom rolling road case		47" x 21" x 26"	ETL	Varies by con- figuration - 305 lbs fully loaded	Varies by configura- tion	Intregrated power and Ethernet data distribution system w/ modular design. A single rack can support up to 256 DMX universes, as well as power for 72x1.2KW devices w/ single, dual and 3-phase 120/208V outputs. Rack includes: flush-mounted rocker breakers, digital LED power metering, hot-swappable modules, integrated DMX and now Artnet A/B switch, up to a 4-way HTP DMX Merge, and built-in Ethernet cable testing. V3.0 software now includes S400 Tools for Mac or PC to remotely configure and monitor S400 systems.
Quantum Energy Design qedinc.tv	TR range (Touring PD)/ Motor control. Instal- lation motor and power pd.	120/208V 3phase; 250Amps; Cam in/thru	Any combination	NEMA type 1, steel box, within a road case		28″x19″x 18″	UL1640, UL508A		Varies upon con- figuration	100% rated branch breakers, overrated internal X-Ploy cable. Power coat finish.
	ProPower CE HPS-24 and HPS-48	415V up to 400A Powerlock or pin & sleeve	KC or Socapex 19-pin via Wieland patch leads, plus convenience outlets			19" rack in-flight case w/casters. HPS-24: 6.5" x 26"; HPS-48: 26.5" x 40"	CE		\$7,500 TO \$12,000	Incorporates 24-way or 48-way dimming; power or mix configuration; CE; non-dimmed hot patch optional.
	ProPower CE RMD		Variety		$\perp \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \!$	EIA 19" rack width; height varies with configuration			\$1,500 and up	Custom configurable; CE; optional dimming; aluminum panels; flight case, casters optional.
TMB tmb.com	ProPower RPD	120/240V or 120/208V; up to 400A 1Ø or 3Ø; Cam-Lok or pin & sleeve		Rolling ATA flight case		Varies with configuration		Varies with configuration		Configuration can be specified from numerous input/output panels; optional dimming and signal panels available; UL listed; 19-pin "pin out" indicator display; "heavy-duty" aluminum construction.
	ProPower DP	120/240V or 120/208V; 30A 1Ø or 3Ø, 50A 1Ø; pin & sleeve or Twist-lock	Various configurations available	Self-contained 3U rack- mount aluminum and steel enclosure (optional top mounted receptacles available)		19" x 6" x 5.25" (12" depth also avail.)	UL, cUL		Varies by configuration	Assortment of available distro packs; UL listed; multiple units may be customized in a larger configuration; "heavy-duty" aluminum and zinc-coated steel construction.
Union Connector unionconnector.com	DBJ-5001545/DBJ-5001546 (single phase)	60A 120V 1Ø 3-wire 2P&G pin pigtail	3 x 20A 120V Edison duplex (DBJ-5001545) or 3 x 20A 120V stagepin (DBJ-5001546)			6" x 5" x 3"		5 lbs.		All wiring devices are UL listed, grounding type; all branch circuits provided w/ UL listed branch rated circuit breaker and UL recognized pilot light; pigtails are UL listed stage cable w/ strain relief; analog or digital meters optional; accessories include dolly tray.
	DBT-4681 (3-phase)	200A 120/208V 3Ø, 5-wire Cam 2/0 pigtails	(6) 100A 120V 2P&G stagepin, (1) 20A 120V Edison duplex	Anodized aluminum, steel or stainless steel on request		15" x 10" x 10"	UL, cUL	33 lbs.		
	DBS-3991 (single phase)	100A 120V 1Ø, 3-wire 2P&G stagepin	2 x 60A 120V stagepin, 1 x 20A 120V Edison duplex			10" x 6½" x 6½"		9 lbs.		