

# ETA Conditioned Power Distribution...

The Benchmark By Which Professionals Compare.

For over 20 years ETA has developed, manufactured, and sold high amperage theatrical lighting systems from which have evolved an extensive line of rack mounted conditioned power distribution products designed to protect today's sensitive electronic digital equipment.

The "PD" Conditioned Power Distribution Series easily deals with normal AC line power fluctuations, as well as the more drastic abnormalities of the spike and surge variety. Also, the filtering of interferences—caused by electromagnetic (EMI) and radio frequency (RFI) transmissions—is routinely accomplished.

More sophisticated ETA models utilize microprocessor technology to regulate AC power and sequence power turn-on—reducing high in-rushes of power.

ETA's sophisticated electronic protection technology is the favorite of professionals who demand flawless operation of digital mixers, processors, amplifiers and PCs—whether in the studio, in the boardroom, on tour, or in a home entertainment environment.

## Power Conditioning Firsts from ETA

- "Always-On" Protected Outlets
- 10 Rear Panel Outlets
- Front Panel Convenience Outlets
- Digital Voltmeter Display Readouts
- Microprocessor Managed Voltage Regulators
- Programmable and Linkable Sequential Turn-on Models
- Models Adaptable for Multiple AC Adapters
- High Amperage Conditioned Models
- Easy Bulb Change

### Every ETA Power Conditioning Model Features

- Spike and Surge Protection and EMI/RFI Filtration on All Three Legs of the Incoming AC Power—A Must Design and Engineering Standard to Ensure Protection of Electronic Components and Equipment.

CE Compliant Models Available with IEC320 Connectors.



## Pro Series - 20 amp models

### Standard Equipment Package

- 20 Amps, 2400 Watts, 120 Volts, Single Phase
- Requires 20 Amp Circuit and Receptacle
- 3-Stage Spike & Surge Protection
- Ground and AC Line Fault Check
- 2-Stage EMI and RFI Filtration
- 20 Amp Total Unit Overload Protection
- 15 Amp Front Panel Outlet Overload Protection
- 8 Protected Outlets on Rear Panel
- 2 Always-On and Protected Rear Panel Outlets
- 1 Always-On and Protected Front Panel Outlet
- 10-Foot 20 Amp Power Cord
- 1 Rack Space High
- 1 Year Limited Warranty

### Optional Equipment Package

- Digital Voltmeter Readout Display
- Dual Swivel Rack Illuminators with Easy Bulb Change Feature
- Microprocessor Monitored Sequential Systems with 4-Stage Sequential Time Delay Power-Up/Down
- 4 Preset Timed Sequential Power Up Intervals and Manual Settings Option
- Remote Turn-On Standard with Sequential Models
- Link or Daisy Chain Feature (PD11SP Model) allows any number of units to be linked, up to 1000 feet between master and slave units, including remote turn-on option

### Special Feature Package

- AC Line Voltage Regulation that stabilizes incoming power to 117 Volts within a range of 80-150 Volts at 15 Amps Output
- Auto Re-Start Standard on PD10VRS
- Crown IQ System Interface Feature

## HIGH AMP POWER DISTRIBUTION MODELS

### Sequential Power Up/Down

## PD320VS



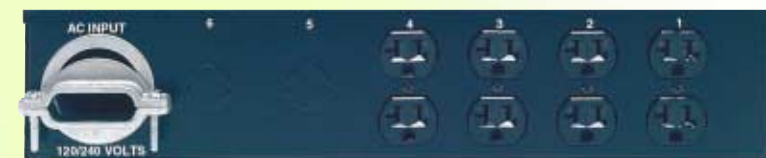
- Three Separate Power Up/Down Sequential Distribution Circuits to Reduce High In-Rush Current
- 5 to 30 Second Field-Adjustable Intervals Between Circuits
- Three 20-Amp Circuits, 7200 Watts Total Input Per Unit, 60 Total Amps
- Four or Six AC Outlets Per 20-Amp Circuit, Sixteen Outlets Total, Conditioned and Protected
- Single or Three-Phase Power Up, Each Phase Circuit Breaker Protected, Circuit Breakers on Front Panel
- "Always On" Digital Voltmeter Readout for All Three Circuits
- Spike and Surge Protection, Each Circuit
- EMI/RFI Filtration, Each Circuit
- External 0.300 mA Fuse Protected Transformer
- Remote Operation



## PD6



- 140-Amp Total Unit
- Two 30-Amp Hard Wire Terminal Blocks, and Four 20-Amp Single U-Grounded Edison Receptacles
- 120/240 Volts Single Phase or 120/208 Volts Three Phase Power



### ETA Product Applications:

- Live Productions
- Sound Reinforcement
- Permanent Installations
- Recording Studios
- Theatres
- Clubs
- Schools
- Churches
- Board Rooms
- Audio-Visual Multi-Use Rooms
- Tours
- Bands, DJs
- A-V Racks
- Computer Networks
- Home Entertainment Centers

### Power Distribution Terminology

**POWER CONDITIONER** An electrical device used to protect sensitive electronic equipment from voltage spike, surges and EMI/RFI noise. Power conditioners also include voltage regulation to protect against abnormal voltage sags or surges.

**NOISE** AKA electromagnetic (EM) and radio frequency (RFI) interference caused e.g. by load switching and radio transmitters. Can be intermittent or chronic and have adverse effect on computer data streams. Can be quite audible in audio and sound systems.

**METAL OXIDE VARISTOR (MOV)** An electrical device commonly used in power conditioners for absorbing the energy of spikes.

**SAG** A short term decrease in voltage. Electronic devices are damaged or may not function when voltage drops below a safe operating range.

**SPIKE** An instantaneous, dramatic increase in voltage of short duration causing damage to solid state components or data loss. Effects are cumulative causing gradual deterioration and/or catastrophic failure.

**SURGE** A short term voltage increase causing damage to sensitive electronic devices when voltage exceeds safe operating range.

**ZERO VOLTAGE SWITCHING** A sensing network which allows an AC line regulating device to switch only when its supply voltage is at zero volts.

**SEQUENTIAL POWER UP/DOWN** A function of power conditioners where devices are switched on, one-at-a-time in a sequence. Eliminates large in-rush currents, and associated audible noise, e.g. "pops" when switching on audio components.

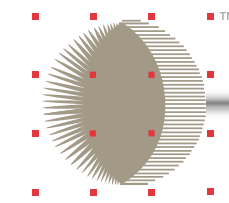
## ETA SYSTEMS

A Creative Light & Sound Company  
Division of National Biological Corporation  
1532 Enterprise Parkway • Twinsburg, Ohio 44087  
330-425-3388 • 800-321-6699 • Fax: 330-425-9700  
<http://www.etasys.com> E-mail [eta@etasys.com](mailto:eta@etasys.com)

All designs and specifications are subject to change without notice. 9/98 20000-LIT  
Copyright © 1998 ETA Systems.



D I S T R I B U T I O N  
C O N D I T I O N I N G  
R E G U L A T I O N  
S E Q U E N C I N G



ETA SYSTEMS

The Power Just Keeps On Coming

**ETA SYSTEMS - PRO SERIES - 20 AMP MODELS**

**SEQUENTIAL POWER DISTRIBUTION MODELS**

**15 AMP SERIES**



PD11LVSP

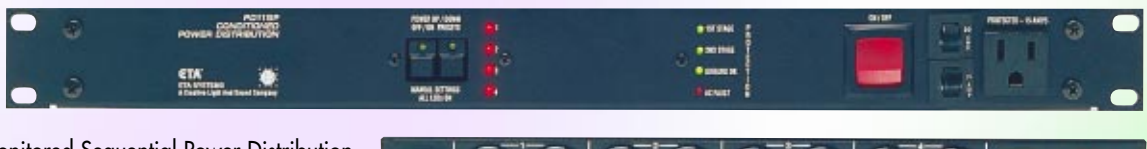
# Conditioned Power Distribution

- PD11LVP Features:
- Microprocessor Monitored Sequential Power Distribution
  - 4-Stage Sequential Time Delay Power Up/Down, 4 Preset Timed Intervals (1, 5, 10, or 30 seconds) or Manual Setting Option
  - Remote Turn-On Feature
  - Relay Turn-On Feature



PD11LVP

PD11SP



- Standard on all Pro Series Models:
- 20 Amps, 2400 Watts, 120 Volts, Single Phase
  - 3-Stage Spike & Surge Protection, all legs incoming power
  - Ground and AC Line Fault Check
  - 2-Stage EMI and RFI Protection
  - 20 Amp Total Unit Overload Protection
  - 15 Amp Front Panel Overload Protection

- PD11LVP Features:
- Dual Swivel Retractable Rack Illuminators
  - High/Low Light Settings and Easy Bulb Change
  - Digital Voltmeter Display

- Microprocessor Monitored Sequential Power Distribution
- Link or Daisy-Chain Unlimited Units
- 9 U-Grounded Protected AC Outlets
- 8 Back, 2 Outlets Per Stage, 1 Front "Always On"
- 4-Stage Sequential Power Up/Down
- 4 Preset Intervals (1, 5, 10 or 30 seconds) or Manual Setting Option
- 3-Stage Spike and Surge Protection
- 2-Stage EMI/RFI Filtration
- 20 Amp Output
- Remote Turn-On Feature
- Relay Turn-On Feature



Back View PD11SP: Daisy Chain Feature, RCA Connectors, and Screw Terminals

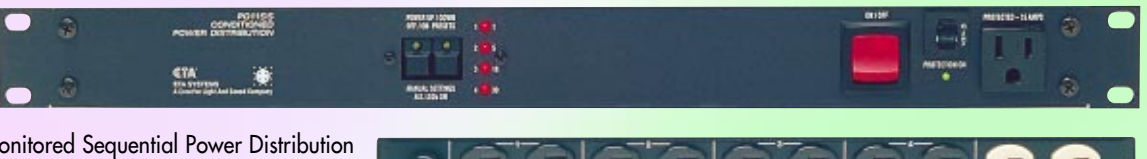
## Programmable Sequencing

## Spike/Surge Protection



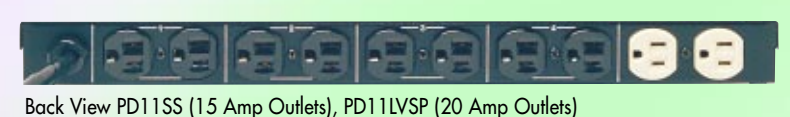
PD11LP

PD11SS



- PD11LP Features:
- Dual Swivel Retractable Rack Illuminators
  - High/Low Light Settings and Easy Bulb Change

- Microprocessor Monitored Sequential Power Distribution
- Stand Alone Unit
- 11 U-Grounded Protected AC Outlets, 1 Front "Always On"
- 8 Back, 2 Outlets Per Stage, 2 "Always On"
- 4-Stage Sequential Power Up/Down
- 4 Preset Intervals (1, 5, 10 or 30 seconds) or Manual Setting Option
- Spike and Surge Protection
- EMI/RFI Filtration
- 15 Amp Output
- Remote Turn-On Feature
- Relay Turn-On Feature



Back View PD11SS (15 Amp Outlets), PD11LVP (20 Amp Outlets)

## AC Line Regulated Power

## EMI/RFI Filtration



PD11VP

PD10VRS



- PD11VP Features:
- Digital Voltmeter Display
  - 120-Volt Line Operated Readout



PD10VRS-IQ With Crown IQ System Interface

- AC Line Voltage Regulator
- 10 U-Grounded Protected AC Outlets
- 8 Back, Regulated, 2 "Always On"
- Spike and Surge Protection
- EMI/RFI Filtration
- Microprocessor Controlled Auto Restart Function
- Intelligent Digital Message Display
- 4-Stage Sequential Power Up/Down
- 20 Amp Input, 15 Amp Output

- PD11P Features:
- 20-Amp Total Unit Overload Protection
  - 15-Amp Front Panel Overload Protection

Back View Featuring Two "Always On" Outlets and 8 Protected Outlets

## AC Adapter Friendly

PD9LV



- 9 U-Grounded Protected AC Outlets
- 8 Back, 1 Front
- Spike and Surge Protection
- EMI/RFI Filtration
- L.E.D. Voltage Display
- Dual Swivel Retractable Rack Illuminators
- High/Low Light Settings and Easy Bulb Change



Back View PD9LV/L - Accommodates 6-7 AC adapters (wall warts)

PD9L



- 9 U-Grounded Protected AC Outlets
- 8 Back, 1 Front
- Spike and Surge Protection
- EMI/RFI Filtration
- Dual Swivel Retractable Rack Illuminators
- High/Low Light Settings and Easy Bulb Change

## Clean Conditioned Power

PD8L

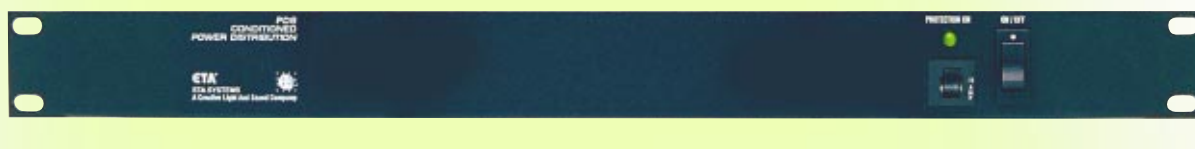


- 8 U-Grounded Protected AC Outlets
- Spike and Surge Protection
- EMI/RFI Filtration
- Dual Swivel Retractable Rack Illuminators
- High/Low Light Settings and Easy Bulb Change



Back View PD8/8L

PD8



- 8 U-Grounded Protected AC Outlets
- Spike and Surge Protection
- EMI/RFI Filtration