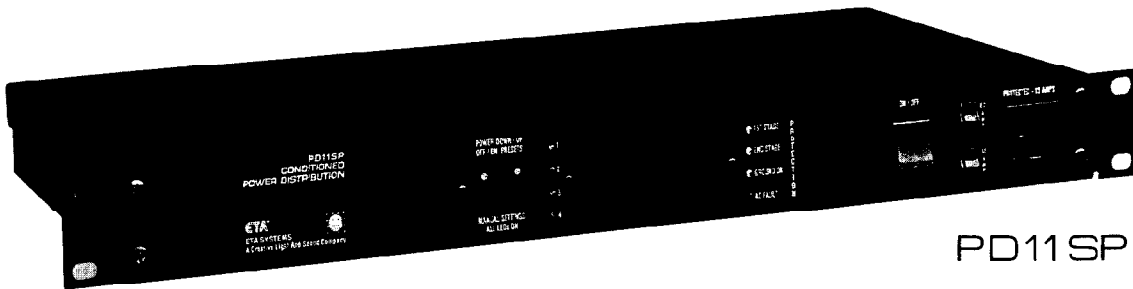
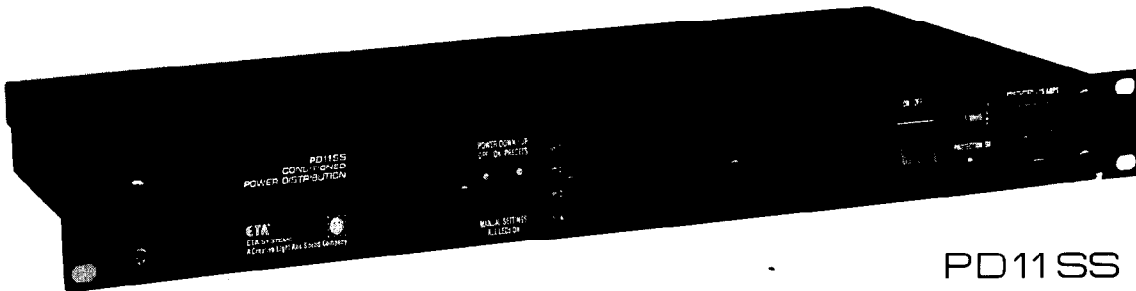


OWNER'S MANUAL

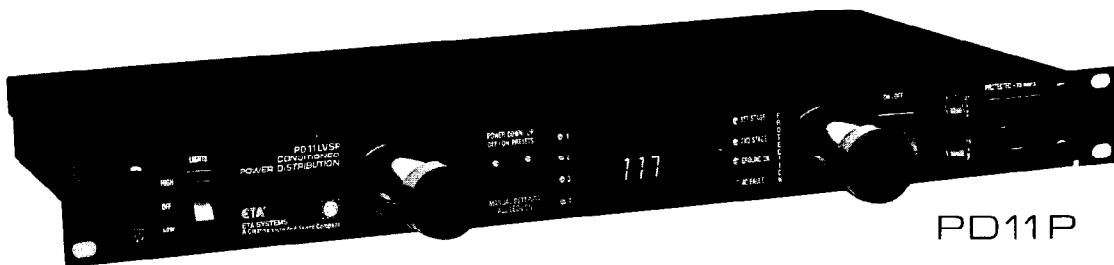
CONDITIONED POWER DISTRIBUTION
SEQUENTIAL POWER UP / POWER DOWN



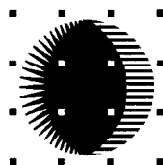
PD11SP



PD11SS



PD11P
PD11VP
PD11LP
PD11LVP
PD11LVSP



ETA SYSTEMS

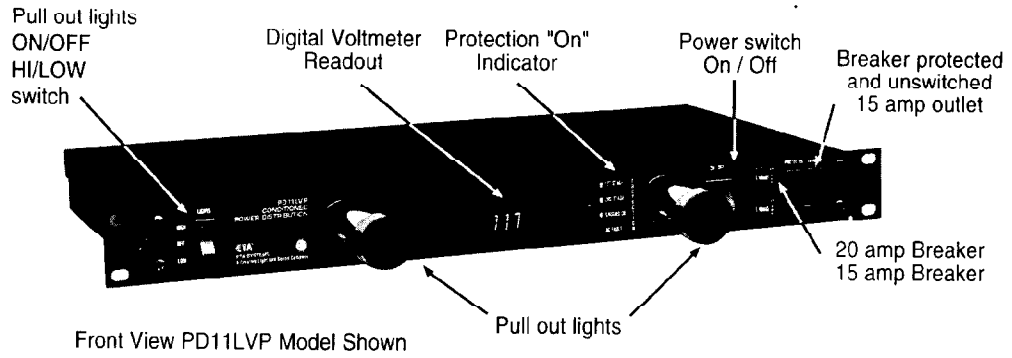
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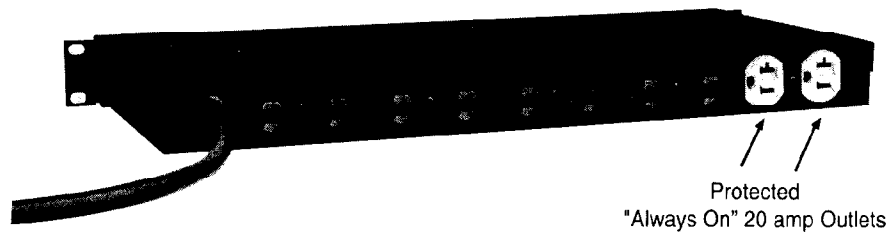
<http://www.etasys.com> E-mail eta@etasys.com

PD1 1P
 PD1 1VP
 PD1 1LP
 PD1 1LVP
 PD1 1LVSP

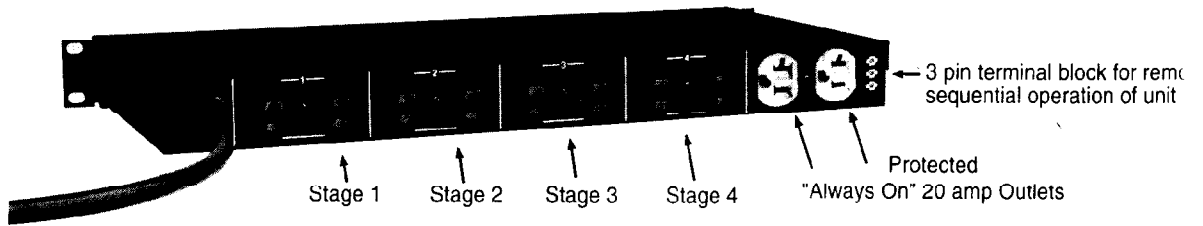


Front View PD11LVP Model Shown

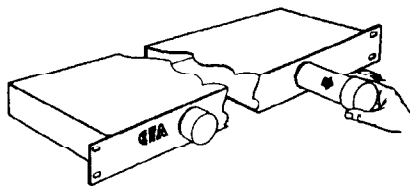
Back View PD11P, 11VP, 11LP, 11LVP



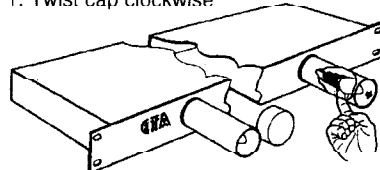
Back View PD11LVSP



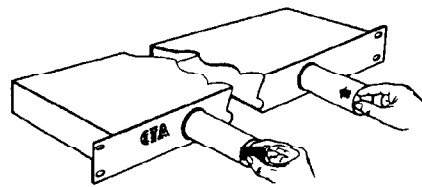
Easy 4-step bulb replacement. Use 120 volt 4 watt bulb (Christmas tree bulb). PD11LP, 11LVP, 11LVSP



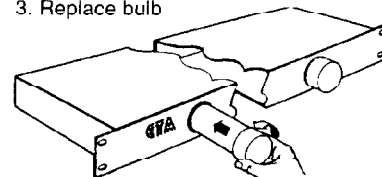
1. Twist cap clockwise



2. Release bulb & socket



3. Replace bulb



4. Replace socket, snap on cap, turn cap counter-clockwise

PD11P, PD11VP, PD11LP, PD11LVP Features:

- Light Switch (PD11LP/LVP/LVSP) activates rack illumination; choice of HI or LOW intensity
- Light Tubes (PD11LP/LVP/LVSP) illuminates up to 25 rack spaces
- 4 dual 20 amp U-grounded switched outlets per unit
- 1 dual 15 amp U-grounded "always on" and protected outlet
- Digital Voltmeter Readout (PD11VP/LVP/LVSP) displays incoming line voltage
- Resettable 20 amp thermal circuit breaker; 15 amp for front panel outlet
- Lighted Outlet Power Switch activates protection and filtration to all switch outlets and front panel outlet
- 12-gauge, 3-prong, 10-foot, 20-amp power cord. Requires 20 amp circuit and receptacle outlet
- Protected "always on" 15 amp AC power outlet on the front panel
- Total unit 20 amp and 15 amp outlet circuit breakers located on front panel
- Three-stage spike and surge protection
- Two-stage EMI/RFI filtration
- Ground and AC line fault check
- One rack space high
- One year limited warranty

PD11LVSP Features:

- Microprocessor monitored sequential power distribution system
- Four power up/down steps or stages of distributed and conditioned power
- Four pre-set power up/down intervals of 1, 5, 10 or 30 seconds
- Optional manual settings for up to 240 seconds between intervals
- One dual 120 amp U-grounded outlet per stage
- One dual 20 amp "always on" U-grounded outlet
- Full 20 amps, 2400 watts capacity per unit
- 12-gauge, 3-prong, 10-foot, 20-amp power cord. Requires 20 amp circuit and receptacle outlet
- Protected "always on" 15 amp AC power outlet on the front panel
- Total unit 20 amp and 15 amp outlet circuit breakers located on front panel
- Three-stage spike and surge protection
- Two-stage EMI/RFI filtration
- Ground and AC line fault check
- One rack space high
- One year limited warranty

Other Features:

- Remote control operation
- The remote feature is accessed externally through a 3-wire remote block

PD11LVSP/LVP/LP/VP/P Specifications:

Dimensions	19" L x 10" D x 1 ³ / ₄ " H
Weight	10 lbs.
Quality Finish	Black powder coat chassis, black anodized aluminum front panel
Electrical	120V, 50/60 Hz, single phase
Max. amps	20/unit
Max. watts	2400/unit
Max. front outlet	15 amps
Spike/surge protection	Line to neutral, neutral to ground, line to ground
Clamping level	200V peak
Response time	1 nanosecond
Max. surge voltage	6000V
Max. surge current	23,000 amps (PD11LVSP/LVP/VP/LP/P)
Max. spike energy	630 joules total
Noise attenuation	Transverse > 20 dB, 1.5 kHz to 200 MHz
Certification	ETL listed

Installation Requirements

PD11P, PD11VP, PD11LP, PD11SP, PD11LVP, PD11LVSP

Plug unit into power source and observe status of four "Protection" light emitting diodes. The (green) "1st Stage", "2nd Stage", and "GROUND OK" L.E.D.'s should normally be illuminated and the (red) "FAULT" L.E.D. should be off. When these indications are present, test the power "On/Off" switch which will illuminate to indicate that power is being supplied to the switched outlets on the rear of the unit.

- The "1st Stage" and "2nd Stage" L.E.D.'s indicate that both the input (1st) and output (2nd) stages of circuit protection are active.
- The "GROUND OK" L.E.D. indicates that the chassis is connected to the ground wire of the supply outlet.
- Fault conditions are represented by the following indications:

NOTE: (X) = "ON" () = "OFF"

1 st Stage	2 nd Stage	Ground OK	Fault	
(X)	(X)	(X)	()	Supply circuit outlet wiring OK
()	()	()	()	Open hot
()	()	(X)	(X)	Open Neutral or Hot & Ground Reversed
(X)	(X)	()	()	Open Ground
(X)	(X)	()	(X)	Hot & Neutral Reversed

NOTE: On the PD11SS Model a green L.E.D. located on the front panel is illuminated (indicating "Protection On" status) when unit is plugged into a power source ensuring input and output stages of circuit protection are active.

Operating Instructions

- Install in a standard 19" rack or free-standing position.
- Connect Power Distribution power cord into a 20 amp, 120 volt wall outlet (15 amp for Model PD11SS).
- Plug sensitive electrical equipment into conditioned outlets. All models have an additional protected outlet on the front panel.
- Move power outlet switch to "ON" position to provide power to electrical equipment.
- For illumination, pull out light tubes (PD11LP/LVP/LVSP) and move light switch to "HI" or "LOW" position.
IMPORTANT! Be sure light switch is in "OFF" position when light tubes are recessed.
- Digital voltmeter readout (PD11VP/LVP/LVSP) is calibrated to nominal 117V at the factory. No adjustment necessary.
- Digital voltmeter readout automatically displays incoming voltage when power cord is connected.

Power Problems

Standard AC outlets often supply raw and unprocessed power that not only can diminish the clarity of audio signals and cause premature failure of parts, it can completely destroy your valuable equipment.

Power problems such as spikes, line surges and noise interference transmit through all standard electrical lines and affect power quality: therefore, affecting you.

Solutions

Conditioned Power Distribution can eliminate such problems from affecting you. As it filters the line voltage from your AC outlets, eliminating noise and interference, such as radio frequency interference (RFI) and electromagnetic interference (EMI), it will reduce the residual noise in the system, which will enhance audio clarity.

Audio Conditioned Power Distribution is also designed to protect electronic equipment from potentially damaging high-voltage spikes and surges.

Sequencing Audio Conditioned Power Distribution is designed to initiate a turn-on cycle, energizing one circuit immediately with remaining circuits energizing in a delayed fashion. This allows circuits to stabilize when powering up and down eliminating that on-rush of power and potential damage to equipment at output receptacle.

Quick Step Pre-Set Selection for Sequential Models

- Hold down OFF/ON switch simultaneously until L.E.D.'s flash together. If unit was previously set in a manual mode, all channel L.E.D.'s will be ON rather than ON/OFF L.E.D. flashing. Assume they are flashing and proceed to next step.
- While flashing, press ON button to step through the four (1,5,10,30 seconds) pre-sets.
- Stop on desired pre-set.
- Press OFF/ON switch simultaneously.
- To test sequential selection press ON button.
- Press OFF button to return to sequential OFF Position.

Quick Step Manual Selection

- Hold down OFF/ON switch simultaneously until L.E.D.'s flash together. If unit was previously set in a manual mode, all L.E.D.'s will be ON rather than ON/OFF L.E.D. flashing. Assume they are flashing and proceed to next step.
- While flashing, press ON button to step through the four (1,5,10,30 seconds) pre-sets.
- Stop at channel four (4).
- Press ON button one more time. All channel L.E.D.'s should now be lighted.
- Press ON to start time sequence from 5 to 240 seconds. Press OFF to stop time sequence. (Exits at 240 seconds.)
- To test manual sequential selection press ON button.
- Press OFF button to return to sequential OFF position.

Quick Step To Clear Unit

- Hold down OFF/ON switches simultaneously until L.E.D.'s flash together. If unit was previously set in a manual mode, all L.E.D.'s will be ON rather than ON/OFF L.E.D. flashing. Assume they are flashing and proceed to next step.
- Step through channels stopping at one or 1 second.
- Press OFF/ON switches together.
- Test — same as above

Three-Wire Remote Control Interface

A three-wire remote control interface is added to the main PC board for the PD11SS, PD11SP AND PD11LVSP units. This remote control interface is accessible through an external terminal block on the back of the unit (see Figure 6). This interface requires an external user provided switch, L.E.D., and a three-wire cable to implement. The interface has been tested reliably over 1000 feet with 22-gauge speaker wire (see Figures 1 and 5).

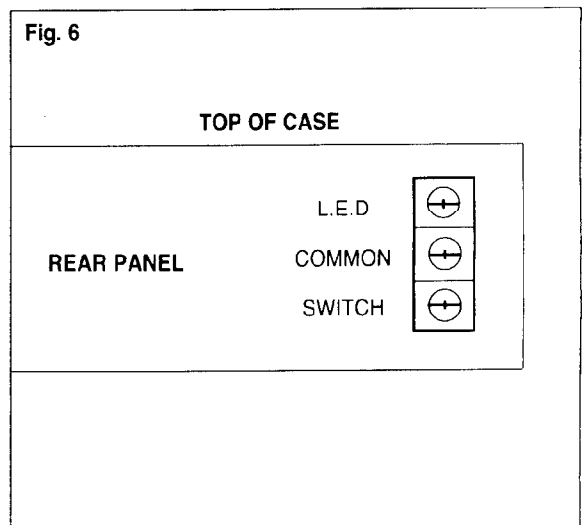
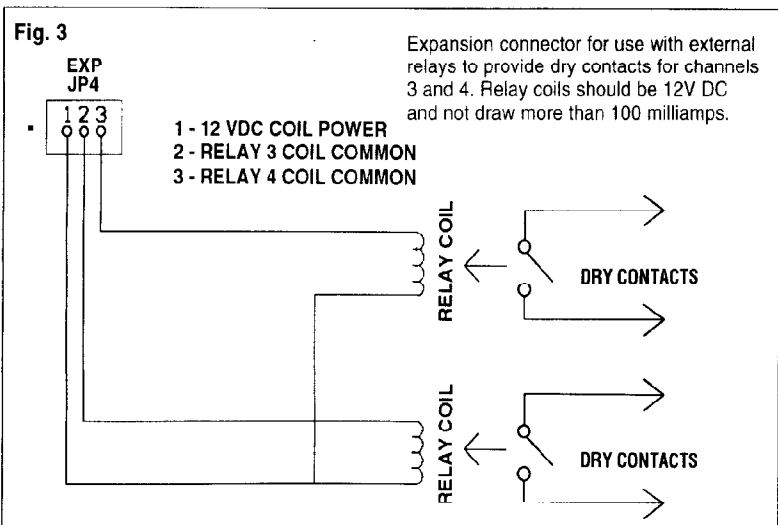
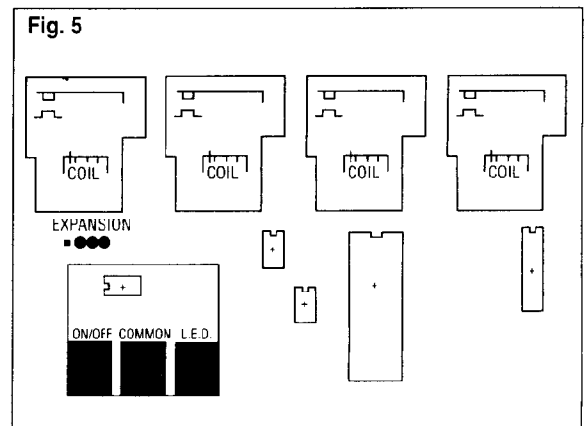
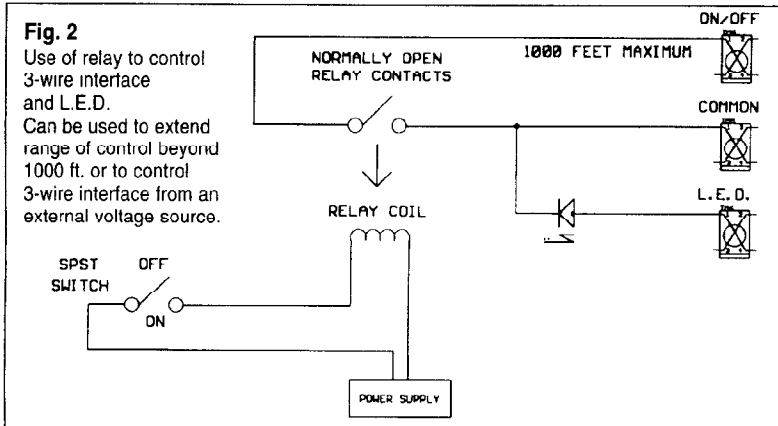
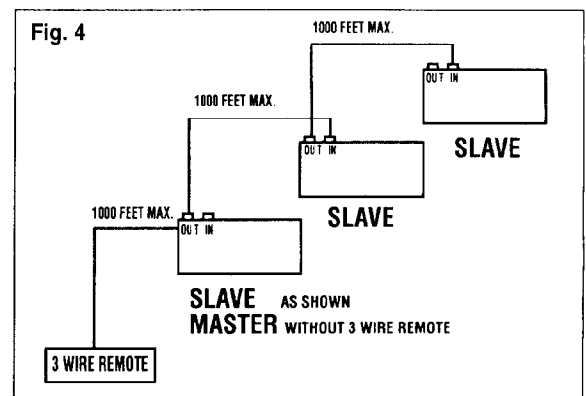
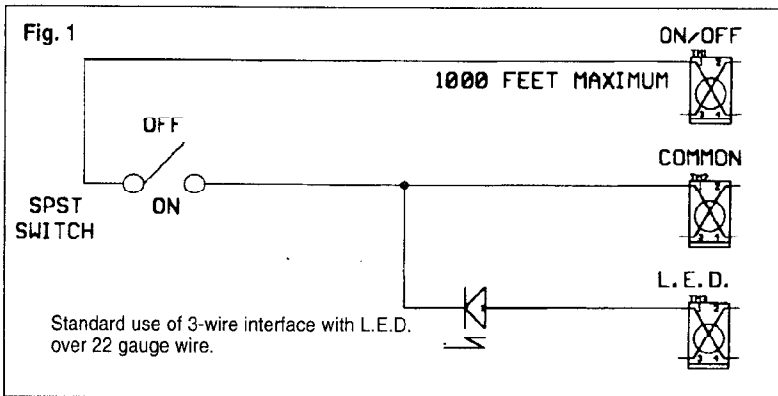
Connect the short minus (-) lead of the L.E.D. and one side of the switch to the COMMON terminal, the long plus (+) lead of the L.E.D. to the L.E.D. terminal, and finally the other side of the switch to the ON/OFF terminal. When you close the switch, the L.E.D. will begin flashing until all channels have sequenced ON, and then the L.E.D. will remain ON. When you open the switch the L.E.D. will begin flashing until all channels have sequenced OFF and then the L.E.D. will remain OFF.

Remote Relay Function Operation (optional)

Using a set of relay contacts that are normally open instead of a switch you can control the PD11SS, PD11SP AND PD11LVSP units with a relay. When you apply power to the relay the channels will sequence ON, and when you disconnect power from the relay the channels will sequence OFF. This allows you to interface a PD11SS, PD11SP AND PD11LVSP unit with other equipment that has dry (normally open) relay contacts (see Figure 2).

Larger Installations

In a larger installation, you can control different equipment racks from a remote location by running three-wire cable from each rack back to the remote location. Then attach an L.E.D. and switch as before, these would be mounted in the user's control panel, and you now have remote control of each rack in a single location (see Figure 3).



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 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, filtering of airborne interferences caused by electromagnetic and radio frequency 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 professional 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 Amp Conditioned Models
- Easy Bulb Change Feature

Standard on Every ETA Power Conditioning Model

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

Typical Uses

All Professional Permanent Installations, Recording Studios, Theatres, Schools, Clubs, Churches, any entertainment venue, business board rooms, and audio/visual multi-use presentation rooms.

Portable Applications: On-The-Road Concert Tours, Bands, and D.J. services.

Other Important Applications: A/V racks, computer networks, and home entertainment centers.

Thank you for choosing ETA Systems Power Distribution

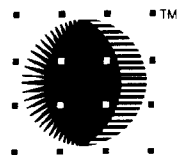
Drawing upon our 20 years of solving high-amperage lighting needs and listening to customers' concerns, we have developed a most extensive line of Audio Conditioned Power Distribution. As the problems inherent with AC power increase, you will find ETA providing solutions.

Call 1-800-321-6699 for a Full Line Brochure

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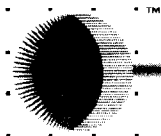
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<http://www.etasys.com> E-mail eta@etasys.com

ATTENTION

This unit is ETL approved
to UL standards
and is supplied with
the proper rated plug 
for the 20-ampere draw this model
is designed to accommodate.

DO NOT replace this plug
with a 15-ampere plug. 
This will void your warranty
and the ETL listing.

For alternatives, call ETA Systems
at 1-800-321-6699.



ETA[®] SYSTEMS

The Power Just Keeps On Coming

LIMITED WARRANTY

This limited warranty is provided to the ultimate end user (the "Purchaser" of an ETA Systems ("ETA") product (the "Equipment"). ETA warrants the Equipment against defects in materials and workmanship for a period of three (3) years on Power Distribution Products and one (1) year on all other products from the original date of purchase. All output devices such as triacs, solid state relays, output power modules, etc., shall only be warranted for a period of sixty (60) days from the original date of purchase. This Warranty is not transferrable and applies to the original Purchaser only.

The duration of this warranty is limited to claims made to ETA within the periods stated with respect to parts and labor from the date of purchase from ETA or our distributors. The Purchaser must allow ETA, at ETA's option, to inspect the Equipment on request and the Purchaser must reasonably cooperate with ETA to verify the warranty claim of the Purchaser. During the warranty period, defective equipment will be replaced or repaired to the general condition as received, at the discretion of ETA. All transportation is the responsibility of the Purchaser or owner.

This Warranty applies only to defects in materials and workmanship and does not cover failure or damage due to shipping loss or damage, abuse, misuse, mis-application, incorrect or varying power line voltages, lack of proper maintenance, natural disasters, Acts of God, or unauthorized modifications, repairs, or any alterations done without the expressed written consent by ETA.

ETA does not warrant the fitness of the Equipment for a particular purpose and does not make any warranty, express or implied, other than the warranty contained herein. No implied warranty on this Equipment, created by state law, shall extend beyond the term of this warranty, and ETA shall not be liable for any loss of use of the Equipment, or consequential damages, including damages to other parts of the installation in which the Equipment is a part.

This warranty is in lieu of any and all other warranties, expressed and/or implied, including any implied warranty of merchantability. No agent, representative, dealer, or employee has the authority to increase or alter the liability, obligations, and terms of this warranty or sale of the Equipment. This warranty gives you specific legal rights, and you may also have other rights which may vary from state to state.

NOTE: It is strongly recommended that any Equipment returned to ETA be properly packaged and insured for its full value in case of loss, handling or shipping damage. ETA shall not be responsible for damage or loss of Equipment during shipment.

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**REMOVE & RETAIN
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YOUR RECORDS**

Serial # _____
Model # _____
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Invoice/Sales # _____
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COMPLETE THIS CARD AND RETURN IT TO ETA TO PROTECT YOUR WARRANTY RIGHTS

What influenced you to buy ETA?

What features are most important to you?

What changes would you like to see?

What new products would you like?

Additional comments?

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READ AND COMPLETE
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