

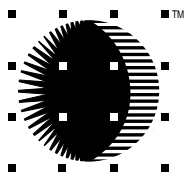
# OWNER'S MANUAL



PD620

PD620-6R

PD66



**ETA** SYSTEMS

*A Creative Light & Sound Company*

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# HIGH AMP POWER DISTRIBUTION

ETA's High Amperage Power Distribution is the professional system designed for power hook-up of sound and lighting equipment.



PD620 / PD66



PD620 BACK



PD66 BACK

**WARNING:** Do not remove cover. No user serviceable parts inside. Refer servicing and hook-up to qualified individuals only.

**DANGER:** Due to life threatening shock hazard, hook-up of this power distribution pack must be made by qualified electricians only.

**DANGER:** Shock hazard, disconnect power before removing lid, or for servicing.

The PD66 and PD620 are designed for use on Three Phase (3Ø) WYE 120/208V 4-pole 5-wire electrical service. With the ability to operate on Single Phase (1Ø) 120/240V 3-pole 4-wire electrical service, (easily configured internally).

DO NOT connect high voltage leg of DELTA type systems (the higher voltage will damage sensitive equipment connected this way)—see NOTE below.

The **PD66** can provide up to 140 amps total, 40 amps on one leg, 50 amps each on remaining two legs (3Ø WYE 120/208V hook-up), **OR** \*70 amps per leg (two legs) (1Ø 120/240V hook-up <internal configuration>).

The **PD620** can provide up to 120 amps total, 40 amps per leg (three legs) (3Ø WYE 120/208V hook-up), **OR** \*60 amps per leg (two legs) (1Ø 120/240V hook-up <internal configuration>).

\* When using Single Phase, incoming supply lines **MUST** be sized to accomodate 20 amps more per leg than highest per leg rating (PD66-70 amps, PD620-60 amps).

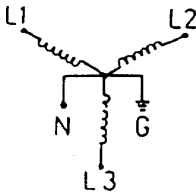
**Minimum recommended AWG (American Wire Gauge) for electrical hook-up**  
(90° C Copper Wire).

3Ø	1Ø	Position	Color
#8 AWG	#6 AWG	Ground	Green
#8 AWG	#6 AWG	Neutral	White
#8 AWG	#6 AWG	Line 1	Black
#8 AWG	#6 AWG	Line 2	Red
#8 AWG	N/C	Line 3	Blue

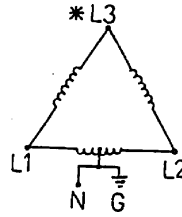
Follow National Electrical Code, or Local Electrical Code when sizing input electrical supply lines.

**NOTE:** Delta systems have one (1) leg at a higher potential (208 Volts) in reference to neutral, sometimes termed “Crazy Leg”, or “High Leg” typically the orange color is reserved for designation of this line. **Do not** connect this leg into the **PD66** or **PD 620**.

## SERVICE (SUPPLY) CONFIGURATIONS



**3Ø WYE**  
120/208V



**3Ø DELTA**  
120/240V

L1-L2 = 208V

L2-L3 = 208V

L3-L1 = 208V

L1-N = 120V

L2-N = 120V

L3-N = 120V

Ø = PHASE symbol

PD620

L1-L2 = 240V

L2-L3 = 240V

L3-L1 = 240V

L1-N = 120V

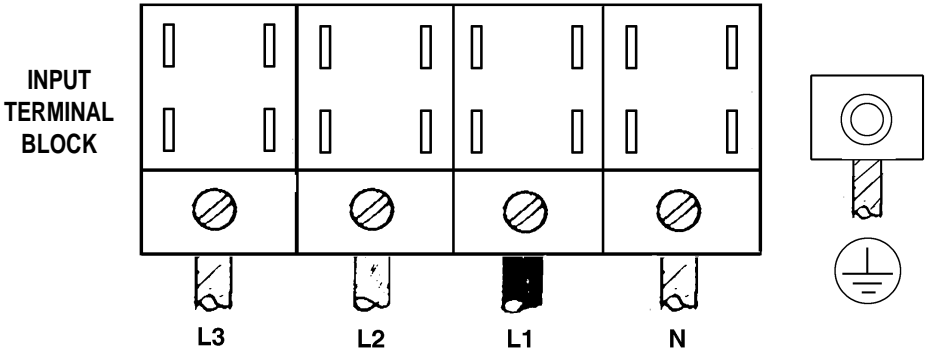
L2-N = 120V

\*L3-N = 208V

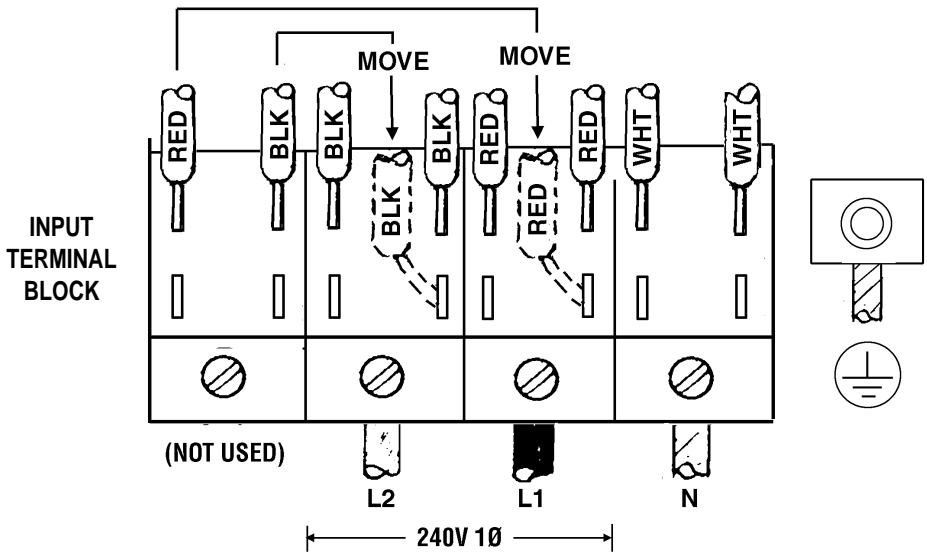
\* DO NOT connect this leg to the PD66 or the

} L1-N-L2 = 1Ø

**INPUT POWER CONNECTION FOR 120/208V 3-PHASE WIRING  
(120/208V 3Ø WYE SYSTEM)**



**INPUT POWER CONNECTION FOR 120/240V SINGLE PHASE WIRING  
(2 LEGS OF 120/240V 3Ø DELTA SYSTEM)**



**120/240 1Ø WIRING**

- Move unit red wire from terminal block L3 terminal to L1 terminal (L1 will now contain three red wires)
- Move unit black wire from terminal block L3 terminal to L2 terminal (L2 will now contain three black wires)
- Increase supply lines gauge size to accommodate the ADDITIONAL 20 amps (2400 VA) on each leg

<b>PD66 (140 Amp Total)</b>		<b>PD620 (120 Amp Total)</b>	
<b>Breaker</b>	<b>Outlet</b>	<b>Breaker</b>	<b>Outlet</b>
No. 1 20 amp	No. 1 (2) NEMA 5-20R (Duplex Receptacle)	No. 1 20 amp	No. 1 (1) NEMA 5-20R (Duplex Receptacle)
No. 2 20 amp	No. 2 (2) NEMA 5-20R (Duplex Receptacles)	No. 2 20 amp	No. 2 (1) NEMA 5-20R (Duplex Receptacle)
No. 3 20 amp	No. 3 (1) NEMA 5-20R (Duplex Receptacle)	No. 3 20 amp	No. 3 (1) NEMA 5-20R (Duplex Receptacle)
No. 4 20 amp	No. 4 (1) NEMA 5-20R (Duplex Receptacle)	No. 4 20 amp	No. 4 (1) NEMA 5-20R (Duplex Receptacle)
No. 5 30 amp	No. 5 (Internal Terminal Block) (Accepts 3/4" strain relief)	No. 5 20 amp	No. 5 (1) NEMA 5-20R (Duplex Receptacle)
No. 6 30 amp	No. 6 (Internal Terminal Block) (Accepts 3/4" strain relief)	No. 6 20 amp	No. 6 (1) NEMA 5-20R (Duplex Receptacle)

PD66: Outlets No. 5 and No. 6 (internal terminal blocks) access openings will accept 3/4" strain relief(s).

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