

## High Power Xenon Lamp Ballast



The XLB series is a new family of OEM Xenon lamp ballasts designed for the OEM customer. The XLB series is ideal for high power applications where economy is important and performance cannot be compromised.

Compact size is possible due to the low-loss Zero Voltage Switching inverter and incorporation of planar magnetics. Power factor is greater than 0.99 and conducted emissions meet stringent European regulations. No additional line filter is required to meet EN 55011 emission requirements.

The XLB Lamp Ballasts set the standard for compact size and offer the lowest ripple specifications in the industry. They are ideal for medical, projection and industrial applications where a stable light source is essential.

**For more details, contact  
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### Advantages

**Ideal for OEM applications  
Reliable Ignition  
Compact design  
Power Factor Correction  
Low conducted emissions  
Low Ripple < 0.5%**

### Applications

**Digital Projection  
Film Projection  
Stage Lighting  
UV Sterilization  
Search Lights  
Solar Simulators  
Medical Illumination**

## High Power Xenon Lamp Ballast

Model	Pout max	Iout max	V lamp	Input Voltage	Size	Trigger Module
XLB-500	500W	35A	15-23V Max.	100-240VAC	3"H x 8.2" x 10.6 76 x 208 x 269mm	2.6" x 5.5" x 3.6" 66 x 14 x 91mm (External)
XLB-1000	1000W	50A		200-240VAC	3.4"H x 17" x 16.6" 86 x 432 x 422mm	
XLB-1500	1500W	70A				
XLB-3000	3000W	150A				

### Preliminary Specifications

#### Input

Voltage: See table: all input voltages +/- 10%, 50/60Hz  
 Power Factor: >.98  
 Efficiency: >80%

#### Interface

Connector: 15 Pin "D" Sub Female  
 Enable Lamp Power: 5V to 15V  
 Current Program: 0-10V for 0-Max Current  
 Current Monitor: 0-10V for 0-Max Current  
 Voltage Monitor: 0-10V for 0-Max Voltage

#### Boost/Ignition

Boost Voltage: 250V  
 Boost Energy: 10 Joules  
 Ignition Voltage: >30kV (~1uSec rise time)  
 Ignition Energy: 0.5 Joules

#### Performance

Line Regulation: <0.02% of maximum output current  
 Current Regulation: <0.5% of Maximum output current  
 Current Ripple: <0.5% of maximum output current  
 Power Limit: Limited to maximum power with power fold-back circuit

#### Environment

Operating Temp: 0 to 40°C  
 Storage: -25to 85°C  
 Humidity: 0 to 95% non-condensing  
 Cooling: Forced air

#### Regulatory

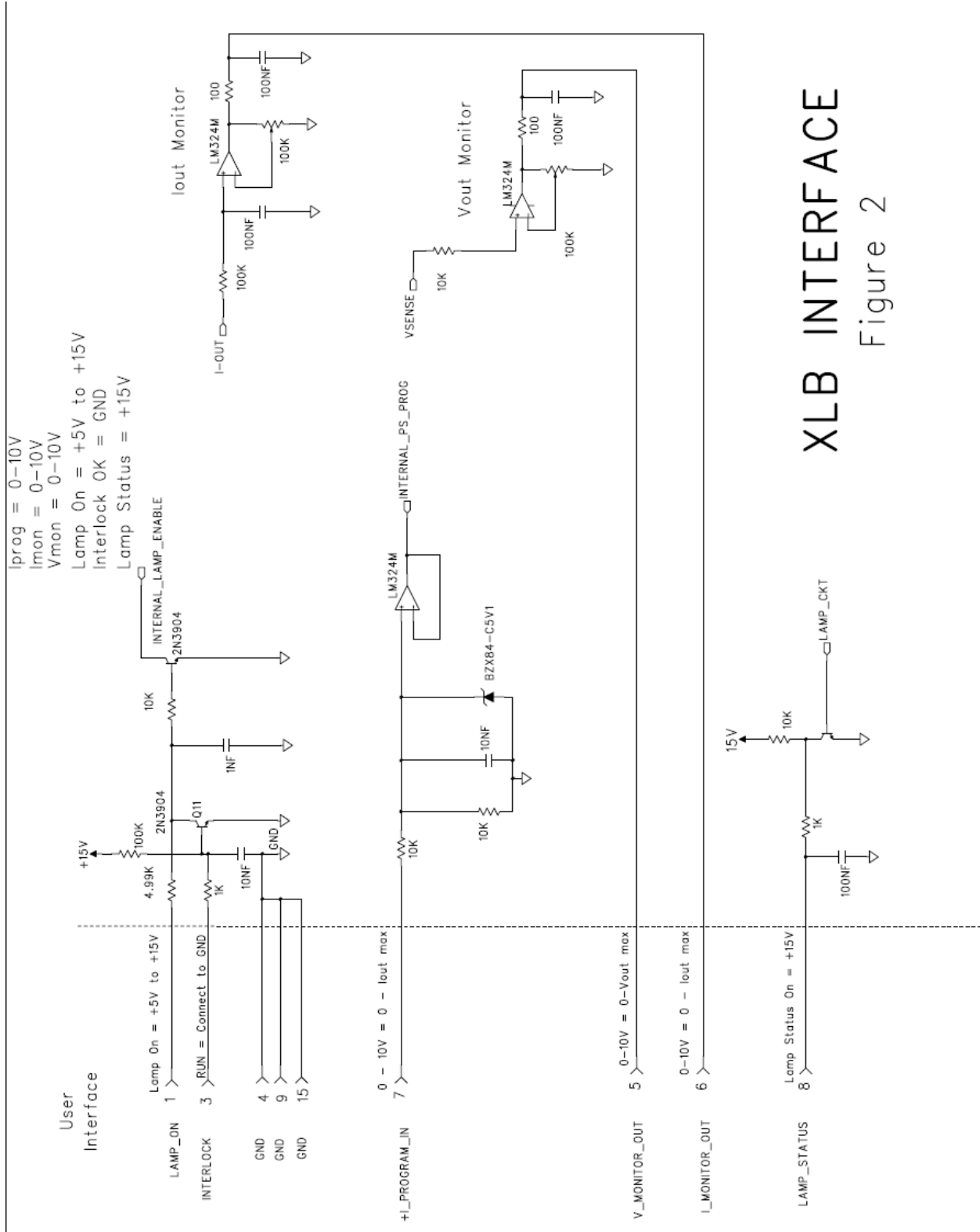
Safety: UL60950  
 Emissions/Immunity: FCC 47 CFR Class A Emissions, EN55011:1998 Group 1 Class A Emissions, EN61000-3-2, EN 6100003-3, EN60601-1-2:2001

**XLB Lamp Driver Interface**  
**Connector Type: 15 pin D-sub Female**  
(Refer to Figure 2, XLBS Interface Schematic)

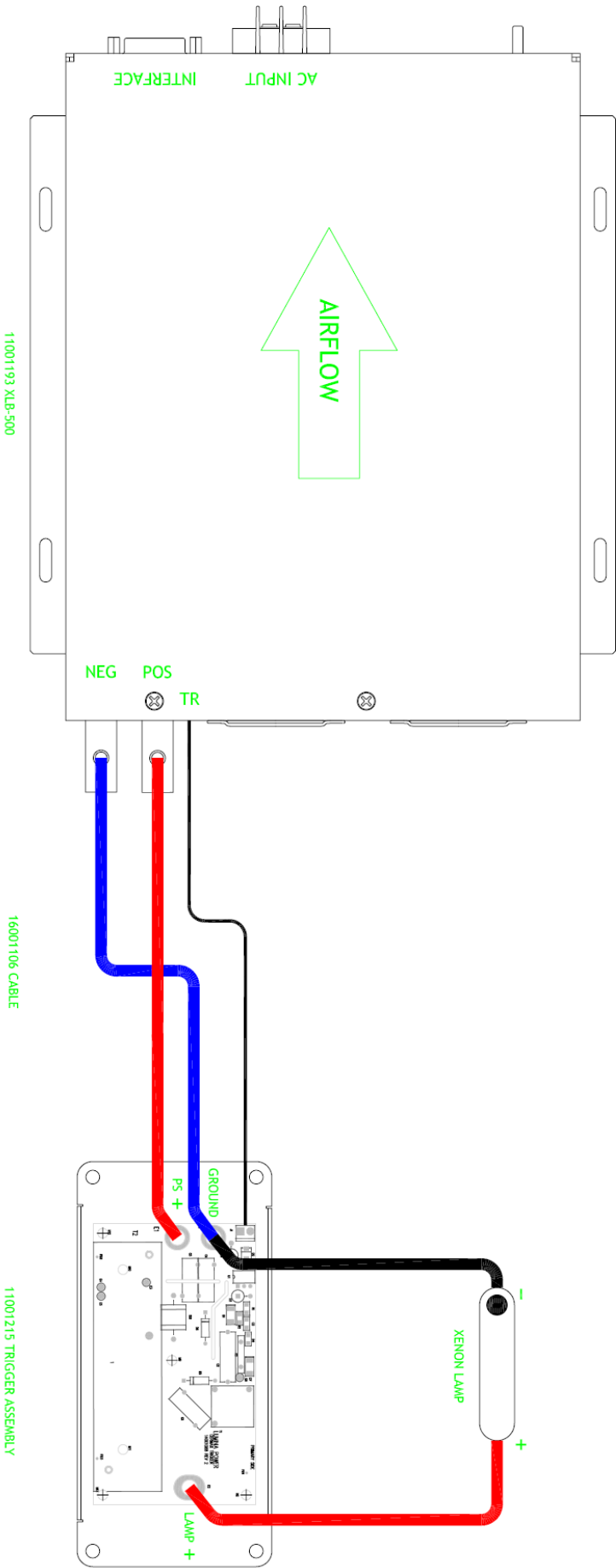
Pin #	Pin Name	Functional Voltage Level	Description
1	<b>Lamp On/Off</b> (input)	High = RUN = +5V to +15V Low = OFF = 0V	The <b>Lamp On/Off</b> function is the control function which turns the lamp on and off. When the lamp is turned on, a trigger and boost sequence will ignite the lamp and deliver current as programmed via <b>Iprogram(+)</b> , Pin 7.
3	<b>Interlock</b> (input)	Open = OFF Connect to GND = RUN	The <b>Interlock</b> function can be connected to external interlock switches such as door or overtemp switches.
4	GND		Referred to (-) output of power supply.
5	<b>Vout Monitor:</b> (output)	0 – 10V = 0 – 35V	The output voltage of the supply can be monitored by <b>Vout Monitor</b> .
6	<b>Iout Monitor</b> (output)	0 – 10V = 0 – Iout <sub>max</sub>	The output current of the supply can be monitored by <b>Iout Monitor</b> .
7	<b>Iprogram(+):</b> (input)	0 – 10V = 0 – Iout <sub>max</sub>	The power supply output current is set by applying a 0-10V analog signal to <b>Iprogram(+)</b> .
8	<b>Lamp Status</b>	High = Lamp Off = 15V Low = Lamp On = 0V	The status of the lamp is monitored by <b>Lamp Status</b>
9	GND		Referred to (-) output of the power supply.
13, 14	<b>+15V@200mA</b>		+15V Auxiliary output. Maximum current available is 200mA
15	GND		Referred to (-) output of the power supply.

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**XLB INTERFACE**  
Figure 2



11001193 XLB-500/1000 INTERCONNECTION DIAGRAM