

Crown XLi2500

Crown XLi2500 Two-Channel Power Amplifier

USER MANUAL

Introduction

The Crown XLI Series power amplifiers represent a new era in quality power amplification, building on over six decades of Crown's experience in amplifier technology. These amplifiers are designed for a wide range of applications, including use by musicians, DJs, entertainers, and in various venues such as houses of worship, discos, clubs, and pubs. The XLi2500 model, part of this robust series, is engineered to deliver powerful, reliable, and affordable audio amplification.

This manual provides essential information for setting up, operating, maintaining, and troubleshooting your Crown XLi2500 amplifier, ensuring you achieve consistent and high-quality performance.

Key Features

- **Stereo/Parallel/Bridge-Mono Mode:** Offers versatile operation modes to suit various audio configurations.
- **User-Selectable Input Sensitivity:** Choose between 0.775V or 1.4V to match different audio sources.
- **Flexible Inputs & Outputs:** Equipped with electronically balanced RCA & XLR inputs, and binding post & Speakon outputs for broad compatibility.
- **Efficient Cooling:** Features forced-air cooling to prevent excessive thermal buildup and ensure longevity.
- **Comprehensive Indicators:** Two level controls, a power switch, a power LED, and six LEDs (signal presence, clip, and fault) for each channel provide clear operational status.
- **Robust Protection:** Includes protection against shorts, no-load conditions, on-off thumps, and radio-frequency interference.

Product Overview



Figure 1: Front view of the Crown XLi2500 Power Amplifier, showcasing its controls and indicators.



Figure 2: Detailed front view of the Crown XLi2500 Power Amplifier, highlighting the channel controls and power indicator.

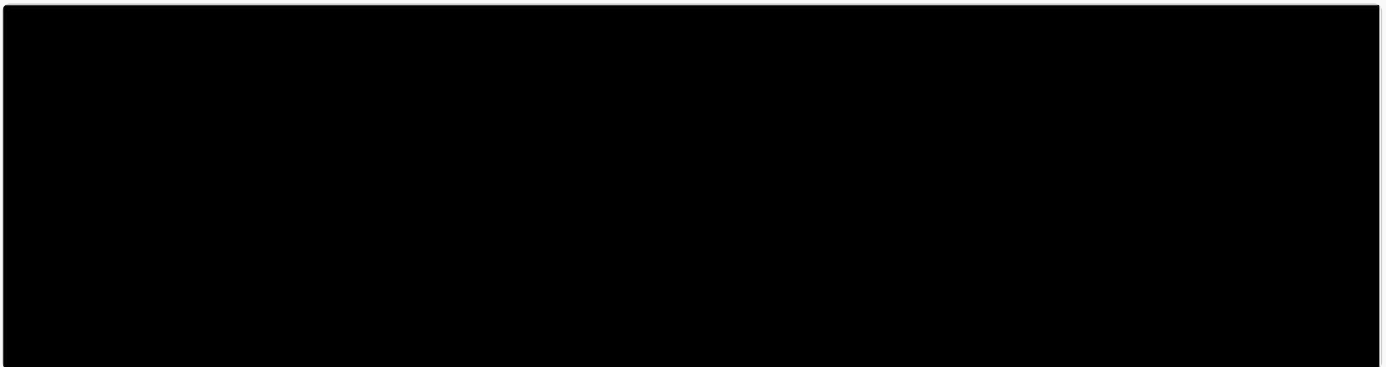


Figure 3: Side view of the Crown XLi2500 Power Amplifier, showing its rack-mountable design.



Figure 4: Rear view of the Crown XLi2500 Power Amplifier, displaying input and output connections.



Figure 5: A Crown XLi1500 amplifier (similar to XLi2500) shown in a rack setup, demonstrating its operational status with a blue power light.

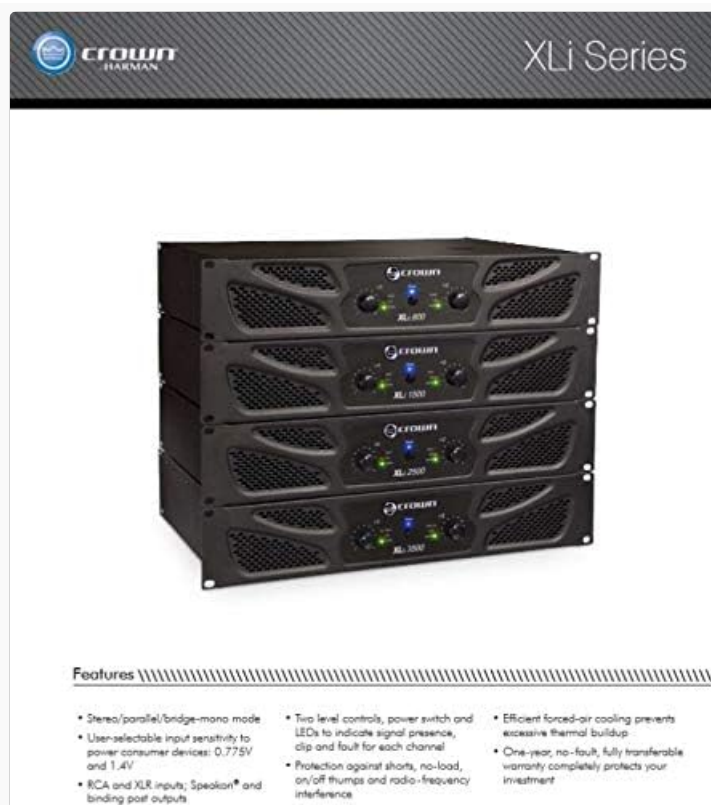


Figure 6: A stack of Crown XLi Series amplifiers (XLi800, XLi1500, XLi2500, XLi3500), illustrating the product line's design consistency.

XLi Series



XLi 800, 1500, 2500, 3500

Power Matrix

Model	Channels	4Ω Dual	8Ω Dual	8Ω Bridged
800	2	300W	300W	600W
1500	2	450W	330W	900W
2500	2	750W	600W	1500W
3500	2	1350W	1000W	2700W

Performance Specifications				
	XLi 800	XLi 1500	XLi 2500	XLi 3500
Frequency Response (at 1 Volt)	20Hz - 20kHz, 10dB			
Total Harmonic Distortion (THD)	< 0.05% 20Hz - 20kHz			
Intermodulation Distortion (IMD) (10Hz and 1 kHz at 0.1 V from full rated output to < 0.05%)	at < 0.05%	at < 0.05%	at < 0.05%	at < 0.05%
Gain	> 100dB	> 100dB	> 100dB	> 100dB
Dynamic Range	27dB	27dB	27dB	27dB
Clipping Factor (Sine)	> 300	> 300	> 300	> 300
Signal-to-Noise Ratio (S/N)	> 100dB	> 100dB	> 100dB	> 100dB
Distortion (before rated power) at 10Hz	< 0.05%	< 0.05%	< 0.05%	< 0.05%
at 20kHz	< 0.05%	< 0.05%	< 0.05%	< 0.05%
Input Sensitivity for Full Rated Power at 0.05%	0.775V @ 1.4V	0.775V @ 1.4V	0.775V @ 1.4V	0.775V @ 1.4V
Input Impedance (nominal)	20kΩ	20kΩ	20kΩ	20kΩ
Unbalanced	15kΩ	15kΩ	15kΩ	15kΩ
AC Line Voltage and Frequency Configuration (at 100%)	120V ~ 60Hz 220V ~ 50/60Hz 230V/240V ~ 50/60Hz			
Physical Specifications				
Width	19" w/ 48.3 mm			
Height	3.8" w/ 96.5 mm			
Depth	12.8" w/ 325.1 mm to 360.0" w/ 914.4 mm			
Weight	XLi 800: 26.7 lbs (12.1 kg) XLi 1500: 28 lbs (12.7 kg) XLi 2500: 39 lbs (17.7 kg) XLi 3500: 42 lbs (19.0 kg)			

Figure 7: A detailed view of the specifications and power matrix table for the Crown XLi Series amplifiers, providing performance data.

Setup

Proper setup is crucial for optimal performance and safety. Follow these guidelines:

- Placement:** Install the amplifier in a well-ventilated area, ideally in a standard audio rack. Ensure adequate space around the unit for airflow, especially for the forced-air cooling system.
- Input Connections:** Connect your audio source (mixer, pre-amplifier, etc.) to the XLi2500 using either the balanced XLR inputs or the unbalanced RCA inputs. Select the appropriate input sensitivity (0.775V or 1.4V) on the rear panel to match your source equipment's output level.
- Output Connections:** Connect your speakers to the amplifier's outputs using either Speakon connectors or binding posts. Ensure correct polarity (+ to + and - to -) for all connections.

- 4. **Operating Mode:** Select the desired operating mode (Stereo, Parallel, or Bridge-Mono) using the switch on the rear panel. Refer to the specifications section for power output ratings in each mode.
- 5. **Power Connection:** Connect the amplifier to a suitable AC power outlet. Ensure the power source meets the voltage requirements specified on the unit.

Operating Instructions

Once the amplifier is set up, follow these steps for operation:

- 1. **Power On:** Ensure all connections are secure and turn on your audio source first. Then, press the power switch on the front panel of the XLi2500. The blue Power LED will illuminate.
- 2. **Level Controls:** Adjust the individual level controls for Channel 1 and Channel 2 to achieve the desired output volume. Start with the controls at a low setting and gradually increase them.
- 3. **Monitoring Indicators:** Observe the front panel LEDs:
 - **Signal Presence (Green):** Illuminates when an audio signal is detected on the respective channel.
 - **Clip (Red):** Illuminates when the output signal is clipping (distorting). Reduce the input level or the channel's level control if this LED lights up frequently.
 - **Fault (Red):** Illuminates if a fault condition is detected. Refer to the Troubleshooting section if this occurs.
- 4. **Power Off:** Before powering off, reduce the level controls to minimum. Then, turn off the amplifier's power switch, followed by your audio source.

Maintenance

To ensure the longevity and optimal performance of your Crown XLi2500 amplifier, regular maintenance is recommended:

- **Cleaning:** Periodically clean the exterior of the amplifier with a soft, dry cloth. Avoid using abrasive cleaners or solvents.
- **Ventilation:** Ensure that the ventilation grilles on the front and rear panels are free from dust and obstructions. The forced-air cooling system relies on clear airflow to prevent overheating.
- **Connections:** Regularly check all input and output connections for tightness and corrosion. Loose connections can lead to signal loss or intermittent performance.
- **Environmental Conditions:** Operate the amplifier within its specified temperature and humidity ranges. Avoid exposing the unit to excessive moisture or extreme temperatures.

Troubleshooting

If you encounter issues with your Crown XLi2500 amplifier, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
No Power	Power cable disconnected; Power outlet fault; Amplifier internal fault.	Check power cable connection; Test power outlet with another device; If problem persists, contact customer support.
No Sound Output	Input cables disconnected/faulty; Output cables disconnected/faulty; Incorrect input sensitivity; Channel level controls too low; Speaker issues.	Verify all input and output connections; Check input sensitivity setting; Increase channel level controls; Test speakers with another amplifier.
Clip LED Illuminates Frequently	Input signal too high; Output overloaded.	Reduce the input signal level from your source; Lower the amplifier's channel level controls; Ensure speaker impedance matches amplifier's capabilities.
Fault LED Illuminates	Overheating; Short circuit in speaker wiring; Internal amplifier fault.	Ensure proper ventilation; Check speaker wiring for shorts; Disconnect speakers and restart amplifier. If fault persists, seek professional service.

Specifications

Specification	Value
Brand	Crown
Model Number	XLi2500
Number of Channels	2
Output Power	750W at 4Ω, 500W at 8Ω (per channel)
Voltage Gain	33 dB
Input Sensitivity	0.775V or 1.4V
Inputs	Balanced XLR (x2), Unbalanced RCA (x2)
Outputs	Speakon (x2), Binding Post (x2 pair)
Dimensions (L x W x H)	12.4 x 19 x 3.5 inches
Item Weight	29.7 pounds
Cooling	Forced-air cooling
Protection	Shorts, no-load, on-off thumps, RFI
AC Input Voltage	220V, 50/60Hz

Official Product Videos

Currently, there are no official product videos from the seller available for this model. Please refer to the text and images for product information.

Warranty and Support

Crown XLi Series amplifiers typically come with a one-year, no-fault, fully transferable warranty that protects your investment. For specific warranty details and to register your product, please refer to the official Crown website or the documentation included with your purchase.

Additional protection plans may be available for purchase:

- 2-Year Protection Plan
- 3-Year Protection Plan
- Complete Protect (monthly plan covering eligible purchases)

For further assistance, technical support, or service, please visit the [Crown Store on Amazon](#) or consult the official user manual PDF available online: [User Manual \(PDF\)](#).

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