# **XLS Series** Operation Manual




**XLS 1000**

**XLS 1500**

**XLS 2000**

**XLS 2500**

**Obtaining Other Language Versions:** To obtain information in another language about the use of this product, please contact your local Crown Distributor. If you need assistance locating your local distributor, please contact Crown at 574-294-8000.

This manual does not include all of the details of design, production, or variations of the equipment. Nor does it cover every possible situation which may arise during installation, operation or maintenance.

The information provided in this manual was deemed accurate as of the publication date. However, updates to this information may have occurred. To obtain the latest version of this manual, please visit the Crown website at www.crownaudio.com.

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**Some models may be exported under the name Amcron®**

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Harman International

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# Important Safety Instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.



12. Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. Use the mains plug to disconnect the apparatus from the mains.
16. WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.



17. DO NOT EXPOSE THIS EQUIPMENT TO DRIPPING OR SPLASHING AND ENSURE THAT NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, ARE PLACED ON THE EQUIPMENT.
18. THE MAINS PLUG OF THE POWER SUPPLY CORD SHALL REMAIN READILY OPERABLE.



TO PREVENT ELECTRIC SHOCK DO NOT REMOVE TOP OR BOTTOM COVERS. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



TO COMPLETELY DISCONNECT THIS EQUIPMENT FROM THE AC MAINS, DISCONNECT THE POWER SUPPLY CORD PLUG FROM THE AC RECEPTACLE. THE MAINS PLUG OF THE POWER SUPPLY CORD SHALL REMAIN READILY OPERABLE.

**WATCH FOR THESE SYMBOLS:**



The lightning bolt triangle is used to alert the user to the risk of electric shock.



The exclamation point triangle is used to alert the user to important operating or maintenance instructions.

**CAUTION**
**RISK OF ELECTRIC SHOCK DO NOT OPEN**



**IMPORTANT**



XLS Series amplifiers require Class 2 output wiring.

**MAGNETIC FIELD**

CAUTION! Do not locate sensitive high-gain equipment such as preamplifiers or tape decks directly above or below the unit. Because this amplifier has a high power density, it has a strong magnetic field which can induce hum into unshielded devices that are located nearby. The field is strongest just above and below the unit.

If an equipment rack is used, we recommend locating the amplifier(s) in the bottom of the rack and the preamplifier or other sensitive equipment at the top.

## FCC COMPLIANCE NOTICE

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

# DECLARATION OF CONFORMITY

**Issued By:** Harman International.
1718 W. Mishawaka Rd.
Elkhart, IN 46517 U.S.A.

FOR COMPLIANCE QUESTIONS ONLY: Sue Whitfield
574-294-8289
Sue.Whitfield@harman.com

**European Representative's Name and Address:**
David J. Budge
10 Harvest Close
Yateley
GU46 6YS
United Kingdom

**Equipment Type:** Power amplifiers
**Family Name:** XLS Series
**Model Names:** XLS 1000, XLS 1500, XLS 2000, XLS 2500

**EMC Standards:**

**EN 55103-1:1997** Electromagnetic Compatibility – Product Family Standard for Audio, Video, Audio-Visual and Entertainment Lighting Control Apparatus for Professional Use, Part 1: Emissions

**EN 55103-1:1997** Magnetic Field Emissions-Annex A @ 10 cm and 1 M

**EN 61000-3-2:2005 & Amd 1: 2008** Limits for Harmonic Current Emissions (equipment input current ≤16A per phase)

**EN 61000-3-3:1998** Limitation of Voltage Fluctuations and Flicker in Low-Voltage Supply Systems Rated Current ≤16A

**EN 55022:2006** Limits and Methods of Measurement of Radio Disturbance Characteristics of ITE: Radiated, Class B Limits; Conducted, Class B

**EN 55103-2:1997** Electromagnetic Compatibility – Product Family Standard for Audio, Video, Audio-Visual and Entertainment Lighting Control Apparatus for Professional Use, Part 2: Immunity

**EN 61000-4-2:2001** Electrostatic Discharge Immunity (Environment E2-Criteria B, 4k V Contact, 8k V Air Discharge)

**EN 61000-4-3:2006** Radiated, Radio-Frequency, Electromagnetic Immunity (Environment E2, Criteria A)

**EN 61000-4-4:2007** Electrical Fast Transient/Burst Immunity (Criteria B)

**EN 61000-4-5:2006** Surge Immunity (Criteria B)

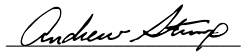
**EN 61000-4-6:2006** Immunity to Conducted Disturbances Induced by Radio-Frequency Fields (Criteria A)

**EN 61000-4-11:2001** Voltage Dips, Short Interruptions and Voltage Variation

**Safety Standard:**

**IEC 60065: 2001: 7Ed & Amd 1: 2005** Safety Requirements - Audio Video and Similar Electronic Apparatus

I certify that the product identified above conforms to the requirements of the EMC Council Directive 89/336/EEC as amended by 92/31/EEC, and the Low Voltage Directive 73/23/EES as amended by 93/68/EEC.

Signed 

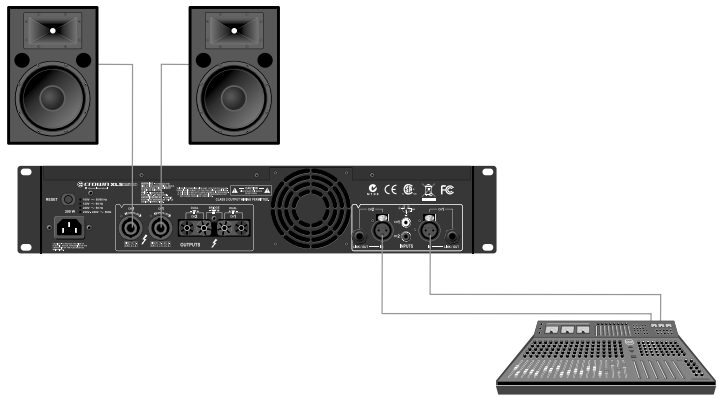
Andrew Stump

Title: Director of Manufacturing

Date of Issue: February 1, 2010

# Get Started

### Stereo Bypass Mode



This is the default mode the amplifier is set to from the factory. The amplifier is configured for stereo mode with the PureBand™ Crossover System Bypassed.

1. Connect Left/Right signal source to Channel 1 and Channel 2 using either the XLR, ¼ Inch, or RCA connectors.
2. Connect a speaker to each channel output using Speakon®, Banana Plugs, or bare wire.

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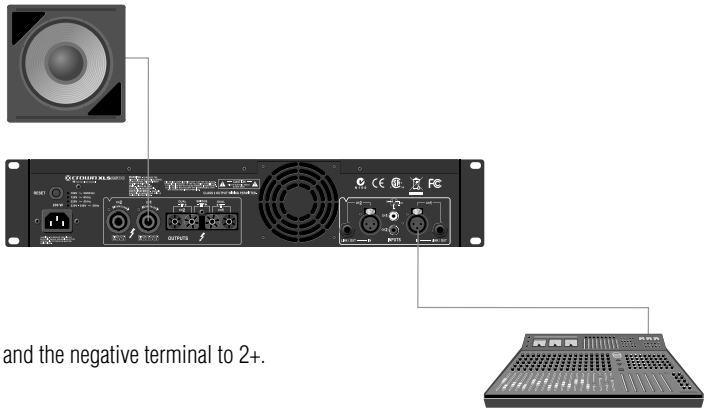
### Bridge-Mono Mode



Bridge-Mono Mode delivers the power of both amp channels into a ***single*** 8 or 4 ohm load.

Before you get started ensure that you:

1. Connect signal source to Channel 1 **only** using either the XLR, ¼ Inch, or RCA connectors.
2. Connect the speaker as shown.
   a. If using the binding post outputs, connect the positive terminal of the speaker to the positive terminal of Channel 1 and the negative terminal of the speaker to the positive terminal of Channel 2.
   b. If using a Speakon® connector, connect the positive terminal of the speaker to 1+ and the negative terminal to 2+. Plug the connector into the Channel 1 output only.

Follow these quick steps to configure the amplifier for "Bridge Mode":

1. Hold the "Mode/Menu" button down for 3 sec until the LCD screen displays "Amp Mode <More>".
2. Press the "Mode/Menu" button to begin configuring the Amp Mode.
3. Press the "Next" button until the LCD screen reads "Mode: Bridge".
4. Press the "Mode/Menu" button to confirm your selection.
5. Now press the "Next" button until the LCD screen displays "Bypass". Press the "Mode/Menu" button to confirm your selection. The LCD screen should now read "Bridge Bypass".

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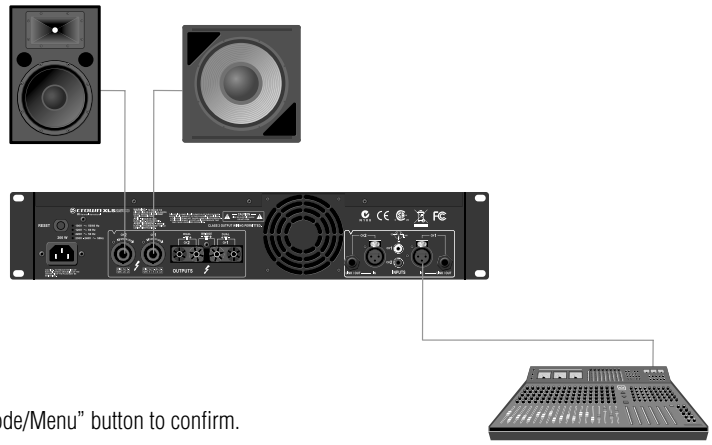
### Crossover Mode



When using the "Crossover Mode", the amplifier is configured to use a LowPass Filter on Channel 1 and a HighPass Filter on Channel 2.

Before you get started ensure that you:

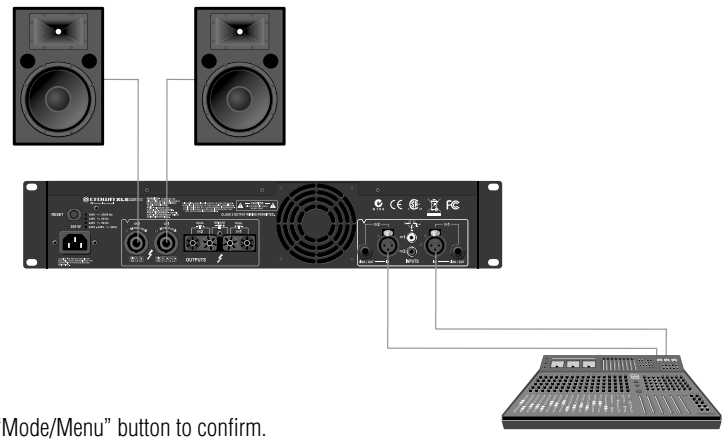
1. Connect signal source to Channel 1 **only** using either the XLR, ¼ Inch, or RCA connectors.
2. Connect a speaker to each channel output using Speakon®, Banana Plugs, or bare wire.

Follow these quick steps to configure the amplifier for "Crossover Mode":

1. Hold the "Mode/Menu" button down for 3 sec until the LCD screen displays "Amp Mode <More>".
2. Press the "Mode/Menu" button to begin configuring the Amp Mode.
3. Press the "Next" button until the LCD screen displays "Input Y". Now press the "Mode/Menu" button to confirm.
4. Now press the "Next" button until the LCD screen displays "XOVER" and press the "Mode/Menu" button to confirm.
5. Now use the "Previous" or "Next" button to select your desired crossover point.
6. Once you have selected your crossover point, press the "Mode/Menu" button to confirm your selection. The LCD screen should now read "Input Y XOVER".

# Get Started

### HighPass Mode



When using the “HighPass Mode”, the amplifier is configured to use a HighPass Filter on Channel 1 and Channel 2 at the selected frequency.

Before you get started ensure that you:

1. Connect Left/Right signal source to Channel 1 and Channel 2 using either the XLR, ¼ Inch, or RCA connectors.
2. Connect a speaker to each channel output using Speakon®, Banana Plugs, or bare wire.

Follow these quick steps to configure the amplifier for “HighPass Mode”:

1. Hold the “Mode/Menu” button down for 3 sec until the LCD screen displays “Amp Mode <More>”.
2. Press the “Mode/Menu” button to begin configuring the Amp Mode.
3. Press the “Next” button until the LCD screen displays “Stereo”. Now press the “Mode/Menu” button to confirm.
4. Now press the “Next” button until the LCD screen displays “HighPass” and press the “Mode/Menu” button to confirm.
5. Now use the “Previous” or “Next” button to select your desired crossover point.
6. Once you have selected your crossover point, press the “Mode/Menu” button to confirm your selection. The LCD screen should now read “Stereo HighPass”.

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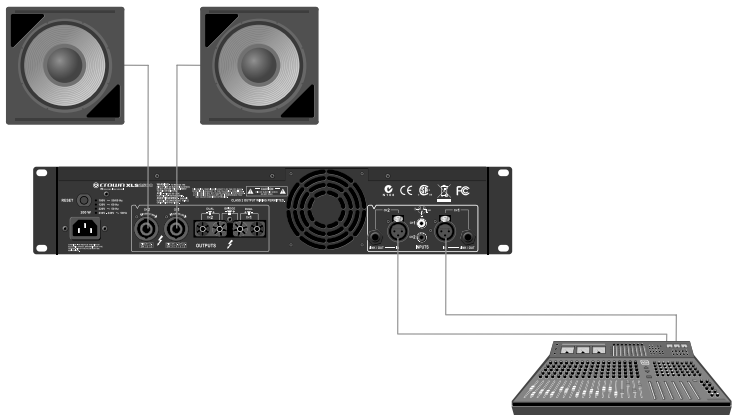
### LowPass Mode



When using the “LowPass Mode”, the amplifier is configured to use a LowPass Filter on Channel 1 and Channel 2 at the selected frequency.

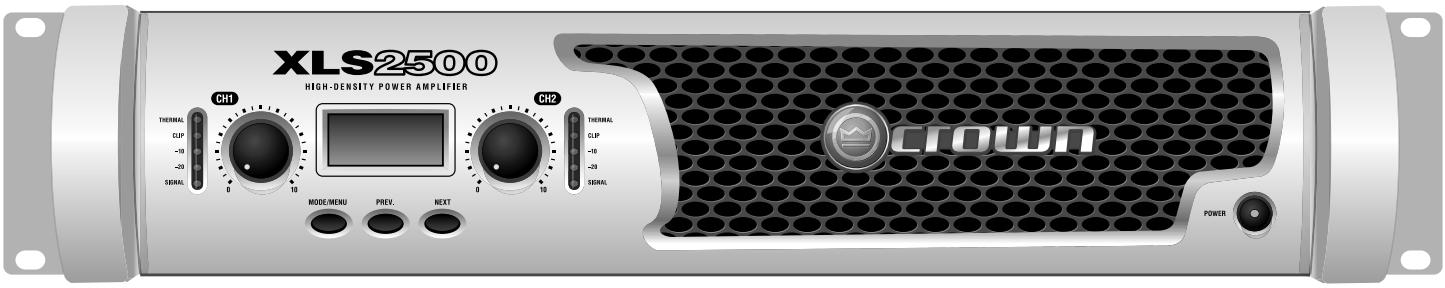
Before you get started ensure that you:

1. Connect Left/Right signal source to Channel 1 and Channel 2 using either the XLR, ¼ Inch, or RCA connectors.
2. Connect a speaker to each channel output using Speakon®, Banana Plugs, or bare wire.

Follow these quick steps to configure the amplifier for “HighPass Mode”:

1. Hold the “Mode/Menu” button down for 3 sec until the LCD screen displays “Amp Mode <More>”.
2. Press the “Mode/Menu” button to begin configuring the Amp Mode.
3. Press the “Next” button until the LCD screen displays “Stereo”. Now press the “Mode/Menu” button to confirm.
4. Now press the “Next” button until the LCD screen displays “LowPass” and press the “Mode/Menu” button to confirm.
5. Now use the “Previous” or “Next” button to select your desired crossover point.
6. Once you have selected your crossover point, press the “Mode/Menu” button to confirm your selection. The LCD screen should now read “Stereo LowPass”.

# Welcome




Crown's XLS Series amplifiers define the standard for portable PA systems with unmatched performance, technology and affordability that effortlessly deliver the goods night after night. We packed XLS with enormous flexibility, thanks to its integrated Crossover and Peak$_X$™ Limiters. The XLS weighs under 11 pounds, compared to 40 pounds for its competitors.

Simply put, the XLS is the most powerful, flexible, efficient amp available in its class.

Modern power amplifiers are sophisticated pieces of engineering capable of producing extremely high power levels. They must be treated with respect and correctly installed if they are to provide the many years of reliable service for which they were designed.

In addition, XLS Series amplifiers include a number of features which require some explanation before they can be used to their maximum advantage.

Please take the time to study this manual so that you can obtain the best possible service from your amplifier.

### Features

- High performance, lightweight Class-D amplifier powered by DriveCore™ Technology
- Integrated PureBand™ Crossover System ensures seamless transitions from low to high frequency drivers
- Integrated Peak$_X$™ Limiters provide maximum output while protecting your speakers
- XLR, ¼", RCA inputs ensure compatibility with any source
- ¼" Inputs can be used as loop-thrus to distribute signal to additional amplifiers
- Crown No-Fault Fully-Transferable 3-year Warranty completely protects your investment

### How to Use This Manual

This manual provides you with the necessary information to safely and correctly setup and operate your amplifier. It does not cover every aspect of installation, setup or operation that might occur under every condition. For additional information, please consult Crown's Amplifier Application Guide (available online at www.crownaudio.com), Crown Technical Support, your system installer or retailer.

We strongly recommend you read all instructions, warnings and cautions contained in this manual. Also, for your protection, please send in your warranty registration card today. And save your bill of sale — it's your official proof of purchase.

# Front Panel Features

**Indicators:**

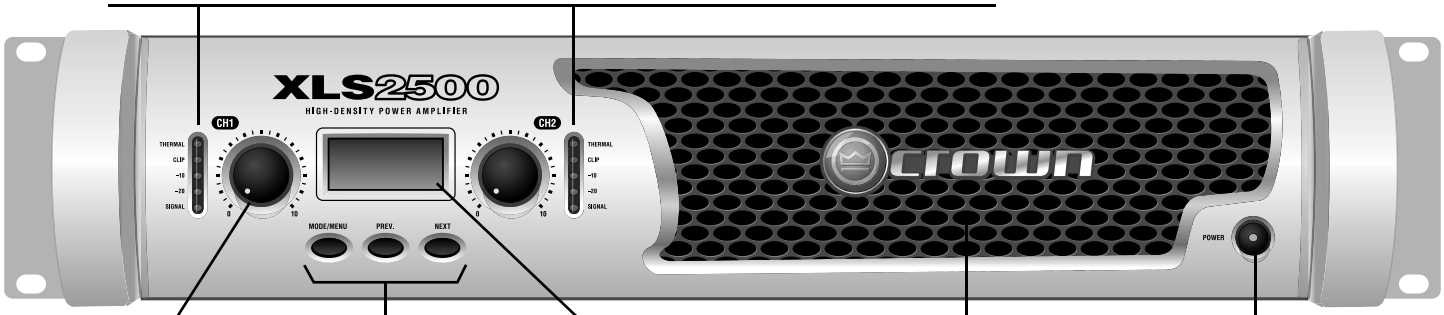
**Signal Presence Indicator:** Two green LED's, one for each channel, illuminate when the channel input signal exceeds -40dBu

**-10 Indicator:** Green LED flashes when output signal level exceeds -10dB below clip

**-20 Indicator:** Green LED flashes when output signal level exceeds -20dB below clip

**Clip Indicator:** Two red LED's, one for each channel, illuminate when the channel's output is being overdriven.

**Thermal Indicator:** Two red LED's, one for each channel, illuminate when thermal compression begins.




**Gain (Level) Controls:**
Two black rotary level controls, one for each channel.

**Menu/Prev/Next:**
Three buttons located near the LCD screen that are used to configure and access the integrated processing.

**LCD Screen:**
Back-lit LCD screen allows for crossover configuration, amplifier mode configuration, and limiter configuration.

**Cooling Vents:**
Front to rear forced air flow.

**Power Button**
Turns amplifier power on and off. Blue LED will illuminate when power is turned on.

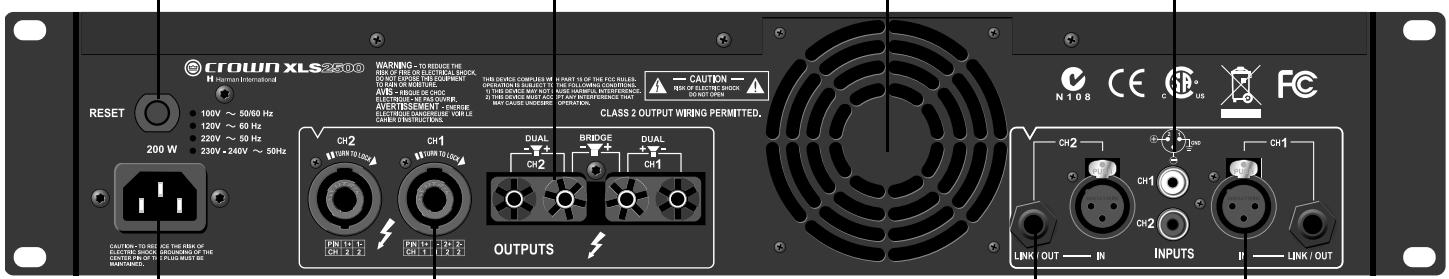
# Back Panel Features

**Binding Post Output Jacks:**
One pair per channel, accepts banana plugs or bare wire. Note: Binding post outputs on European models come with safety plugs installed to prevent European power plugs from being inserted. The side entry positions for these connectors should be used with European models.

**Circuit Breaker:**
Provides overload protection

**Fans:**
Provide front to back forced airflow for cooling.

**RCA (Phono) Inputs:**
Two RCA inputs are provided (one per channel)




**AC Power Connector**

**4-Pole Speakon® Output Connectors:**
These two connectors accept 2-pole or 4-pole Speakon connectors. The channel 1 connector is wired for both channels so it can be used for bridge-mode wiring or stereo wiring of two speakers to a single Speakon.

**¼ Inch Inputs:**
2 – ¼ Inch input connectors are provided (one per channel). These inputs can also be used to loop-thru signal to additional amplifiers.

**Balanced XLR Inputs:**
Two 3-pin XLR input connectors are provided (one per channel)

# Integrated Processing Features

### PureBand™ Crossover System:

The PureBand™ Crossover System provides a variable state Linkwitz-Riley 24dB/octave filter allowing you to choose a point between 50Hz and 3kHz on 1/12th octave centers. The following points are available for choice:

> 50Hz, 53Hz, 56Hz, 59Hz, 63Hz, 66Hz, 70Hz, 74Hz, 79Hz, 83Hz, 88Hz, 94Hz, 99Hz, 105Hz, 111Hz, 118Hz, 125Hz, 132Hz, 140Hz, 149Hz, 157Hz, 167Hz, 177Hz, 187Hz, 198Hz, 210Hz, 223Hz, 236Hz, 250Hz, 265Hz, 281Hz, 297Hz, 315Hz, 334Hz, 354Hz, 375Hz, 397Hz, 420Hz, 472Hz, 500Hz, 530Hz, 561Hz, 595Hz, 630Hz, 667Hz, 707Hz, 749Hz, 794Hz, 841Hz, 891Hz, 944Hz, 1.00kHz, 1.06kHz, 1.12kHz, 1.19kHz, 1.26kHz, 1.33kHz, 1.41kHz, 1.50kHz, 1.59kHz, 1.68kHz, 1.78kHz, 1.89kHz, 2.00kHz, 2.12kHz, 2.24kHz, 2.38kHz, 2.52kHz, 2.67kHz, 2.83kHz, 3.00kHz

Along with your choice in crossover frequency, the PureBand™ Crossover System also provides you with four modes to choose from:

> Crossover Mode (CH1=LPF, CH2=HPF): When selected, this mode enables a LowPass Filter on Channel 1 and a HighPass Filter on Channel 2 at the frequency that you have chosen.
>
> **Note:** This mode will automatically put the input mode into "Input Y".
>
> LowPass Mode (CH1=LPF, CH2 = LPF): When selected, this mode enables a LowPass Filter on both Channel 1 and Channel 2 at the frequency that you have chosen.
>
> HighPass Mode (CH1 = HPF, CH2 = HPF): When selected, this mode enables a HighPass Filter on both Channel 1 and Channel 2 at the frequency that you have chosen.
>
> Bridge Mode (either LPF or HPF): When bridge-mono mode is selected, the crossover system still allows you to select a LowPass or HighPass filter at the frequency that you have chosen.

For instructions on setting up the different crossover system settings, please see the "Get Started" section at the beginning of this manual.

### $Peak_x$™ Limiters

The $Peak_x$ Clip Limiters provide your amplifier and system with higher performance and better protection. They are specifically tuned to work with this amplifier design and power-supply to achieve higher SPL with less audible artifacts while protecting your loudspeaker investment. The limiters can easily be turned on or off from the front panel.

**Note:** The $Peak_x$ Limiters are shipped in the "On" configuration from the factory.

Instructions for Engaging/Disengaging the $Peak_x$™ Limiters:

1. Hold the "Mode/Menu" button down for 3 sec until the LCD screen displays "Amp Mode <More>"
2. Press the "Next" button – The LCD screen displays "CH1 Clip <More>".
3. Press the "Mode/Menu" button and use the "Next" button to toggle between on/off.
4. Once you have made your selection, press the "Mode/Menu" button to confirm. When you confirm CH1 Clip configuration, you are automatically taken to Ch2 Clip to configure either on or off. Once again, make your selection and press "Mode/Menu" to confirm.

DEUTSCH

# **XLS Serie** Bedienungsanleitung




**XLS 1000**

**XLS 1500**

**XLS 2000**

**XLS 2500**

**Weitere Sprachversionen:** Um Informationen über die Nutzung dieses Produktes in anderen Sprachen zu erhalten, wenden Sie sich bitte an Ihren örtlichen Crown-Händler. Wenn Sie Hilfe dabei benötigen, Ihren örtlichen Händler ausfindig zu machen, kontaktieren Sie Crown bitte unter 574-294-8000.

Dieses Handbuch enthält nicht alle Einzelheiten zu Design, Herstellung oder Varianten des Gerätes. Es deckt auch nicht jeden möglichen Fall ab, der während Installation, Betrieb oder Wartung auftreten könnte.

Die in diesem Handbuch enthaltenen Informationen waren bei Erscheinungsdatum zutreffend. Es können jedoch Aktualisierungen zu diesen Informationen vorliegen. Um die neueste Version dieses Handbuchs zu erhalten, besuchen Sie bitte die Crown-Webseite auf www.crownaudio.com.

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**Einige Modelle können unter dem Namen Amcron® exportiert werden.**

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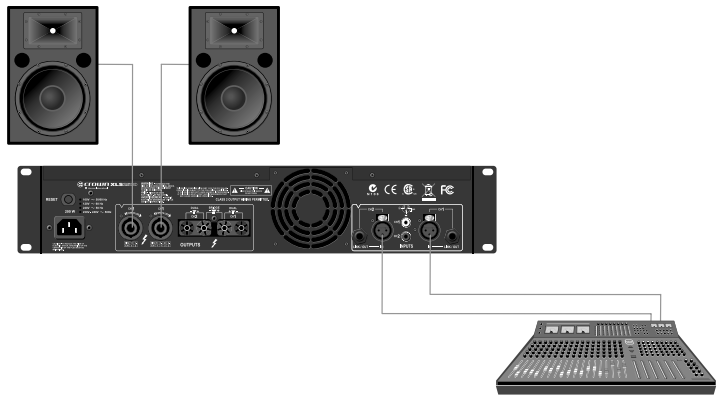
# Einrichtung

### Stereo Bypass-Modus

Dies ist der Standard-Modus, auf den der Verstärker eingestellt ist, wenn er aus der Fabrikationsstätte kommt. Der Verstärker wird für den Stereo-Modus mit dem PureBand™ Crossover System Bypass konfiguriert.

1. Verbinden Sie die linke/rechte Signalquelle mithilfe der XLR-, ¼ Zoll- oder RCA-Anschlüsse mit Kanal 1 und Kanal 2.
2. Verbinden Sie einen Lautsprecher mithilfe von Speakon®-Steckern, Bananensteckern oder Blankdraht mit jedem Kanalausgang.

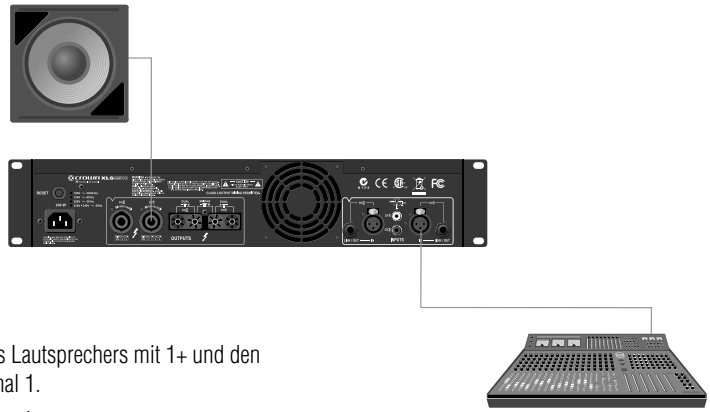


### Bridge-Mono-Modus

Der Bridge-Mono-Modus wandelt die Leistung beider Kanäle des Verstärkers in eine ***einzige*** 8 oder 4 Ohm Last um.

Bevor Sie den Verstärker benutzen, stellen Sie bitte sicher, dass Sie:

1. die Signalquelle **nur** mithilfe der XLR-, ¼ Zoll-, oder RCA-Anschlüsse mit Kanal 1 verbinden.
2. den Lautsprecher wie dargestellt anschließen.
   a. Falls Sie die Schraubklemmenausgänge verwenden, verbinden Sie den Pluspol des Lautsprechers mit dem Pluspol von Kanal 1 und den Minuspol des Lautsprechers mit dem Pluspol von Kanal 2.
   b. Falls Sie einen Speakon®-Anschluss verwenden, verbinden Sie den Pluspol des Lautsprechers mit 1+ und den Minuspol mit 2+. Stecken Sie die Steckverbindung nur in den Ausgang von Kanal 1.



Folgen Sie diesen kurzen Schritten, um den Verstärker für den "Bridge-Modus" zu konfigurieren:

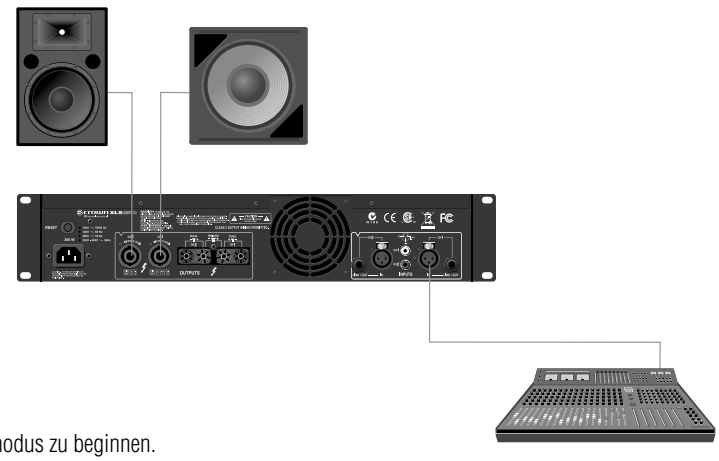
1. Halten Sie den “Mode/Menu”-Knopf 3 Sekunden lang gedrückt, bis die LCD-Anzeige “Amp Mode <More>” anzeigt.
2. Drücken Sie den “Mode/Menu”-Knopf, um mit der Konfigurierung des Verstärkermodus zu beginnen.
3. Drücken Sie den “Next”-Knopf, bis die LCD-Anzeige “Mode: Bridge” anzeigt.
4. Drücken Sie den “Mode/Menu”-Knopf, um Ihre Wahl zu bestätigen.
5. Drücken Sie nun den “Next”-Knopf, bis die LCD-Anzeige “Bypass" anzeigt. Drücken Sie den “Mode/Menu”-Knopf, um Ihre Wahl zu bestätigen. Die LCD-Anzeige sollte nun “Bridge Bypass” anzeigen.

### Crossover-Modus

Bei der Verwendung des "Crossover-Modus" ist der Verstärker so konfiguriert, dass dieser ein Tiefpassfilter für Kanal 1 und ein Hochpassfilter für Kanal 2 verwendet.

Bevor Sie den Verstärker benutzen, stellen Sie bitte sicher, dass Sie:

1. die Signalquelle **nur** mithilfe der XLR-, ¼ Zoll-, oder RCA-Anschlüsse mit Kanal 1 verbinden.
2. einen Lautsprecher mithilfe von Speakon®-Steckern, Bananensteckern oder Blankdraht mit jedem Kanalausgang verbinden.

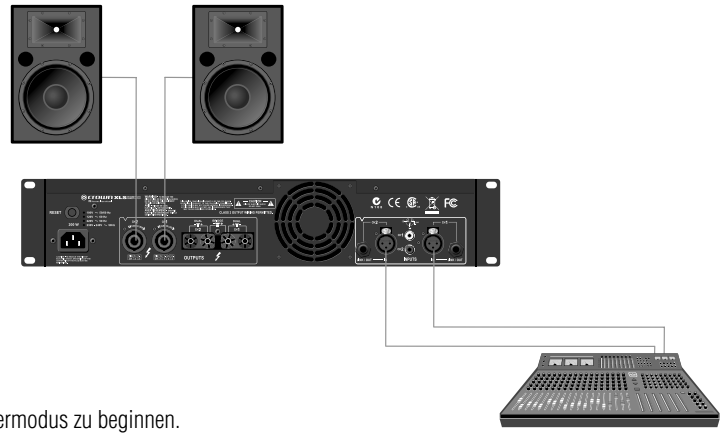


Folgen Sie diese kurzen Schritten, um den Verstärker für den "Crossover-Modus" zu konfigurieren:

1. Halten Sie den “Mode/Menu”-Knopf 3 Sekunden lang gedrückt, bis die LCD-Anzeige “Amp Mode <More>” anzeigt.
2. Drücken Sie den “Mode/Menu”-Knopf, um mit der Konfigurierung des Verstärkermodus zu beginnen.
3. Drücken Sie den “Next”-Knopf, bis die LCD-Anzeige “Input Y" anzeigt. Drücken Sie nun den “Mode/Menu”-Knopf zur Bestätigung.
4. Drücken Sie nun den “Next”-Knopf, bis die LCD-Anzeige "XOVER” anzeigt, und drücken Sie den “Mode/Menu”-Knopf zur Bestätigung.
5. Verwenden Sie nun den “Previous”- oder “Next”-Knopf, um Ihren gewünschten Crossover-Punkt auszuwählen.
6. Wenn Sie den Crossover-Punkt gewählt haben, drücken Sie den “Mode/Menu”-Knopf, um Ihre Wahl zu bestätigen. Die LCD-Anzeige sollte nun “Input Y XOVER” anzeigen.

# Einrichtung

### Hochpass-Modus



Bei der Verwendung des "Hochpass-Modus" ist der Verstärker so konfiguriert, dass dieser ein Hochpass-Filter für Kanal 1 und Kanal 2 auf der ausgewählten Frequenz verwendet.

Bevor Sie den Verstärker benutzen, stellen Sie bitte sicher, dass Sie:

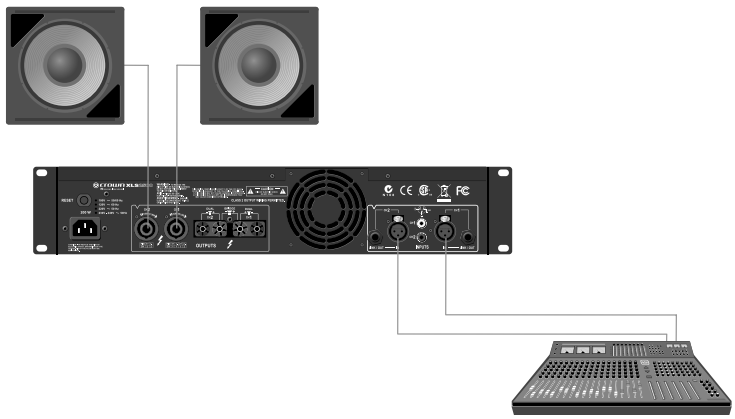
1. die linke/rechte Signalquelle mithilfe der XLR-, ¼ Zoll- oder RCA-Anschlüsse mit Kanal 1 und Kanal 2 verbinden.
2. einen Lautsprecher mithilfe von Speakon®-Steckern, Bananensteckern oder Blankdraht mit jedem Kanalausgang verbinden.

Folgen Sie diesen kurzen Schritten, um den Verstärker für den "Hochpass-Modus" zu konfigurieren:

1. Halten Sie den “Mode/Menu”-Knopf 3 Sekunden lang gedrückt, bis die LCD-Anzeige “Amp Mode <More>” anzeigt.
2. Drücken Sie den “Mode/Menu”-Knopf, um mit der Konfigurierung des Verstärkermodus zu beginnen.
3. Drücken Sie den “Next”-Knopf, bis die LCD-Anzeige “Stereo" anzeigt. Drücken Sie nun den “Mode/Menu”-Knopf zur Bestätigung.
4. Drücken Sie nun den “Next”-Knopf, bis die LCD-Anzeige "HighPass” anzeigt, und drücken Sie den “Mode/Menu”-Knopf zur Bestätigung.
5. Verwenden Sie nun den “Previous”- oder “Next”-Knopf, um Ihren gewünschten Crossover-Punkt auszuwählen.
6. Wenn Sie den Crossover-Punkt gewählt haben, drücken Sie den “Mode/Menu”-Knopf, um Ihre Wahl zu bestätigen. Die LCD-Anzeige sollte nun “Stereo HighPass” anzeigen.

---

### Tiefpass-Modus



Bei der Verwendung des "Tiefpass-Modus" ist der Verstärker so konfiguriert, dass dieser ein Tiefpass-Filter für Kanal 1 und Kanal 2 auf der ausgewählten Frequenz verwendet.

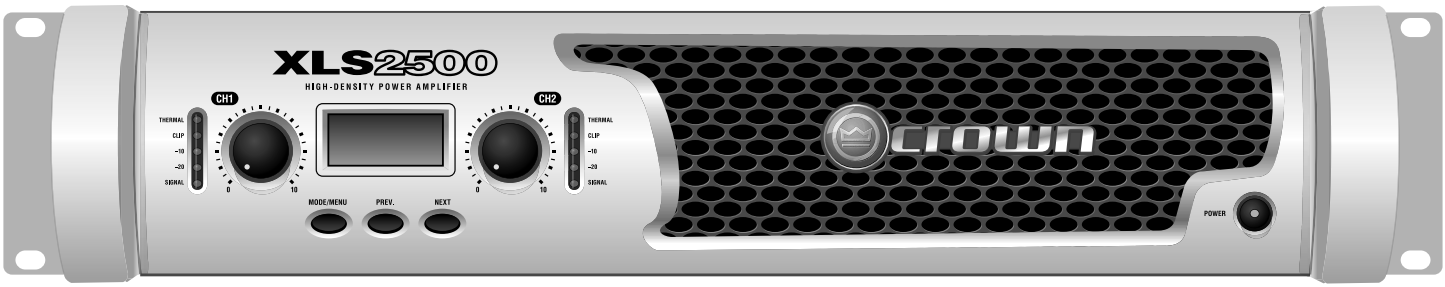
Bevor Sie den Verstärker benutzen, stellen Sie bitte sicher, dass Sie:

1. die linke/rechte Signalquelle mithilfe der XLR-, ¼ Zoll- oder RCA-Anschlüsse mit Kanal 1 und Kanal 2 verbinden.
2. einen Lautsprecher mithilfe von Speakon®-Steckern, Bananensteckern oder Blankdraht mit jedem Kanalausgang verbinden.

Folgen Sie diesen kurzen Schritten, um den Verstärker für den "Tiefpass-Modus" zu konfigurieren:

1. Halten Sie den “Mode/Menu”-Knopf 3 Sekunden lang gedrückt, bis die LCD-Anzeige “Amp Mode <More>” anzeigt.
2. Drücken Sie den “Mode/Menu”-Knopf, um mit der Konfigurierung des Verstärkermodus zu beginnen.
3. Drücken Sie den “Next”-Knopf, bis die LCD-Anzeige “Stereo" anzeigt. Drücken Sie nun den “Mode/Menu”-Knopf zur Bestätigung.
4. Drücken Sie nun den “Next”-Knopf, bis die LCD-Anzeige "LowPass” anzeigt, und drücken Sie den “Mode/Menu”-Knopf zur Bestätigung.
5. Verwenden Sie nun den “Previous”- oder “Next”-Knopf, um Ihren gewünschten Crossover-Punkt auszuwählen.
6. Wenn Sie den Crossover-Punkt gewählt haben, drücken Sie den “Mode/Menu”-Knopf, um Ihre Wahl zu bestätigen. Die LCD-Anzeige sollte nun “Stereo LowPass” anzeigen.

# Herzlich Willkommen




Die Verstärker der XLS Serie von Crown setzen die Standards für tragbare kostengünstige Lautsprecheranlagen mit unübertroffener Leistung und Technologie, von der Sie Tag für Tag profitieren können. XLS ist dank seiner integrierten Crossover- und Peak$_X$™-Limiter äußerst flexibel. Die XLS-Verstärker wiegen weniger als 11 Pfund (4,99 kg), wohingegen die Verstärker der Konkurrenz bis zu 40 Pfund (18,14 kg) wiegen.

Einfach ausgedrückt: Der XLS-Verstärker ist der leistungsstärkste, flexibelste und effizienteste Verstärker, der in seiner Klasse erhältlich ist.

Moderne Endstufen sind hochwertige technische Geräte, die in der Lage sind, extrem hohe Leistungspegel zu erreichen. Sie müssen mit Respekt behandelt und ordnungsgemäß installiert werden, um die langjährige, zuverlässige Leistung zu erbringen, für die sie konzipiert wurden.

Die Verstärker der XLS Serie weisen zudem eine Reihe von Eigenschaften auf, die einiger Erklärung bedürfen, um aus den vielen Vorteilen des Verstärkers den größtmöglichen Nutzen zu ziehen.

Bitte nehmen Sie sich Zeit, dieses Handbuch sorgfältig durchzulesen, so dass Ihr Verstärker die bestmögliche Leistung erbringen kann.

### Eigenschaften

- Hohe Leistung, leichter Klasse-D-Verstärker mit DriveCore™-Technologie
- Das integrierte PureBand™ Crossover-System gewährleistet einen nahtlosen Übergang von Niederfrequenz- zu Hochfrequenztreibern
- Integrierte Peak$_X$™-Limiter sichern eine maximale Ausgangsleistung und schützen Ihre Lautsprecher.
- XLR-Eingänge, ¼SDSq-Stecker und RCA-Eingänge gewährleisten die Kompatibilität mit sämtlichen Quellen.
- ¼"-Eingänge können als Durchschleifungen verwendet werden, um das Signal an zusätzliche Verstärker zu leiten.
- Die verschuldensunabhängige, völlig übertragbare dreijährige Garantie deckt Ihre Investition vollständig ab.

### Verwendung dieses Handbuchs

Dieses Handbuch stellt Ihnen die nötigen Informationen für eine sichere und ordnungsgemäße Einrichtung sowie einen sicheren und einwandfreien Betrieb Ihres Verstärkers zur Verfügung. Es deckt jedoch nicht sämtliche Aspekte der Installation, Einrichtung oder des Betriebs, die in einzelnen Fällen auftreten können, ab. Falls Sie weitere Informationen benötigen, lesen Sie sich bitte den Anwendungsleitfaden für Verstärker von Crown (online auf www.crownaudio.com verfügbar) durch, oder kontaktieren Sie die technische Kundenbetreuung von Crown, Ihren Systemtechniker oder -händler.

Wir empfehlen Ihnen ausdrücklich, sämtliche Anweisungen, Warnungen und Sicherheitshinweise dieses Handbuchs durchzulesen. Schicken Sie uns zu Ihrer Sicherheit Ihre Garantiekarte heute noch zu. Heben Sie bitte Ihren Kaufvertrag auf — dies ist Ihr offizieller Kaufbeleg.

# Funktionen der Frontplatte

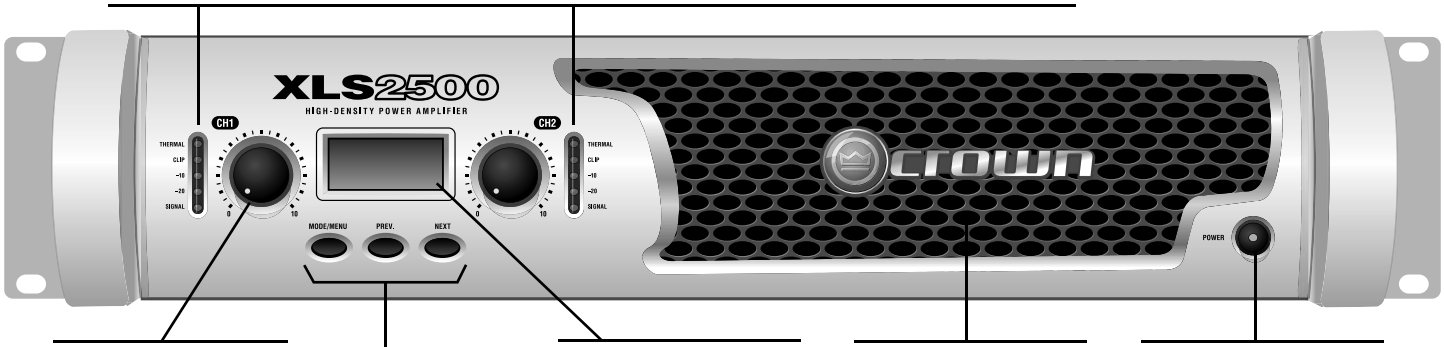
**Anzeigen:**
**Signalanzeige:** Zwei grüne LEDs, eine für jeden Kanal, leuchten auf, wenn das Eingangssignal des Kanals -40 dBu überschreitet.

**-10-Anzeige:** Grüne LED blinkt, wenn das Ausgangssignal -10 dB unter Clip überschreitet.

**-20-Anzeige:** Grüne LED blinkt, wenn das Ausgangssignal -20 dB unter Clip überschreitet.

**Clip-Anzeige:** Zwei rote LEDs, eine für jeden Kanal, leuchten auf, wenn das Ausgangssignal des Kanals übersteuert wird.

**Wärmeanzeige:** Zwei rote LEDs, eine für jeden Kanal, leuchten auf, wenn die thermische Kompression einsetzt.




**Verstärkungs (Pegel)-Steller:**
Zwei schwarze drehbare Pegelsteller, einer für jeden Kanal.

**Menu/Prev/Next:**
Drei Knöpfe in der Nähe der LCD-Anzeige, die verwendet werden, um die integrierte Verarbeitung zu konfigurieren

**LCD-Anzeige:**
Die hinterleuchtete LCD-Anzeige ermöglicht die Crossover-Konfiguration, die Konfiguration des Verstärker-modus und des Limiters.

**Lüftungsöffnungen für Kühlung:**
Zwangsbelüftung von vorne nach hinten.

**An-/Aus-Schalter:**
Schaltet Stromzufuhr des Verstärkers an und aus. Blaue LED leuchtet auf, wenn der Verstärker eingeschaltet ist.

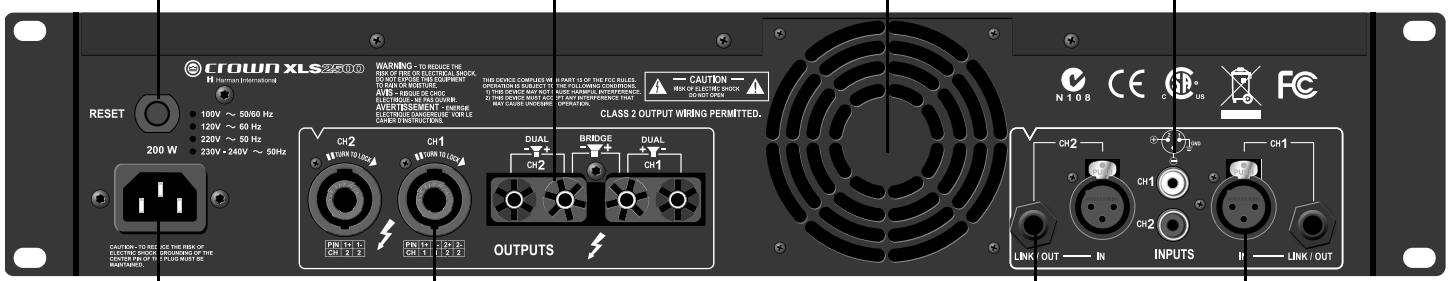
# Funktionen der Rückplatte

**Buchsen der Schraubklemmenausgänge:**
Ein Paar pro Kanal, kompatibel mit Bananensteckern oder Blankdraht. Anmerkung: Schraubklemmenaus-gänge bei europäischen Modellen sind mit Schukosteckern versehen, um zu verhindern, dass europäische Netzstecker angeschlossen werden. An den Anschlüssen an der Seite sollten europäische Modelle angeschlossen werden.

**Leistungsschalter:**
Bietet Überlastschutz.

**Lüfter:**
Zwangsbelüftung von vorne nach hinten.

**RCA (Phono)-Eingänge:**
Es sind zwei RCA-Eingänge vorhanden (einer pro Kanal).




**AC-Netzanschluss**

**4-polige Speakon® -Ausgänge:**
Diese beiden Anschlüsse sind mit 2-poligen oder 4-poligen Speakon-Anschlüssen kompatibel. Der Anschluss für Kanal 1 ist für beide Kanäle verkabelt, so dass er für eine Bridge-Mono-Verkabelung oder eine Stereo-Verkabelung von zwei Lautsprechern mit einem einzigen Speakon-Anschluss verwendet werden kann.

**¼ Zoll-Anschlüsse:**
2 ¼ Zoll-Anschlüsse sind vorhanden (einer pro Kanal). Diese Eingänge können ebenfalls als Durchschleifungen verwendet werden, um das Signal an zusätzliche Verstärker zu leiten.

**Symmetrische XLR-Eingänge:**
Zwei 3-Pin XLR-Eingänge sind vorhanden (einer pro Kanal).

# Integrierte Verarbeitungsfunktionen

### PureBand™ Crossover-System:

Das PureBand™ Crossover-System besitzt ein zustandsvariables Linkwitz-Riley-Filter (24dB/Oktave) für 1/12 Oktavmittenfrequenzen, das Ihnen ermöglicht, einen Crossover-Punkt zwischen 50Hz und 3kHz auszuwählen. Die folgenden Crossover-Punkte stehen zur Auswahl:

> 50Hz, 53Hz, 56Hz, 59Hz, 63Hz, 66Hz, 70Hz, 74Hz, 79Hz, 83Hz, 88Hz, 94Hz, 99Hz, 105Hz, 111Hz, 118Hz, 125Hz, 132Hz, 140Hz, 149Hz, 157Hz, 167Hz, 177Hz, 187Hz, 198Hz, 210Hz, 223Hz, 236Hz, 250Hz, 265Hz, 281Hz, 297Hz, 315Hz, 334Hz, 354Hz, 375Hz, 397Hz, 420Hz, 472Hz, 500Hz, 530Hz, 561Hz, 595Hz, 630Hz, 667Hz, 707Hz, 749Hz, 794Hz, 841Hz, 891Hz, 944Hz, 1,00kHz, 1,06kHz, 1,12kHz, 1,19kHz, 1,26kHz, 1,33kHz, 1,41kHz, 1,50kHz, 1,59kHz, 1,68kHz, 1,78kHz, 1,89kHz, 2,00kHz, 2,12kHz, 2,24kHz, 2,38kHz, 2,52kHz, 2,67kHz, 2,83kHz, 3,00kHz

Zusätzlich zur Auswahlmöglichkeit der Crossover-Frequenz, bietet das PureBand™ Crossover-System vier Auswahlmöglichkeiten bezüglich der Modi:

> Crossover-Modus (CH1=LPF, CH2=HPF): Dieser Modus aktiviert ein Tiefpassfilter für Kanal 1 und ein Hochpassfilter für Kanal 2 auf der von Ihnen ausgewählten Frequenz.
>
> **Hinweis:** Durch diesen Modus wird der Eingangsmodus automatisch auf "Input Y" umgestellt.
>
> Tiefpass-Modus (CH1=LPF, CH2 = LPF): Dieser Modus aktiviert ein Tiefpassfilter sowohl für Kanal 1 als auch für Kanal 2 auf der von Ihnen ausgewählten Frequenz.
>
> Hochpass-Modus (CH1 = HPF, CH2 = HPF): Dieser Modus aktiviert ein Hochpassfilter sowohl für Kanal 1 als auch für Kanal 2 auf der von Ihnen ausgewählten Frequenz.
>
> Bridge-Modus (entweder LPF oder HPF): Wenn der Bridge-Modus ausgewählt ist, können Sie über das Crossover-System immer noch einen Tiefpass- oder Hochpassfilter auf der von Ihnen ausgewählten Frequenz auswählen.

Falls Sie Anweisungen zur Einrichtung der verschiedenen Einstellungen des Crossover-Systems benötigen, lesen Sie sich bitte den Abschnitt "Einrichtung" am Anfang dieses Handbuchs durch.

### $Peak_X$™-Limiter

Durch die $Peak_X$-Clip-Limiter erreichen Ihr Verstärker sowie das System eine höhere Leistung und werden besser geschützt. Diese sind speziell auf dieses Verstärkermodell und dessen Netzspannung abgestimmt, um höhere Schalldruckpegel mit weniger akustischen Artefakten zu erzielen und Ihren Lautsprecher zu schützen. Die Limiter können ganz leicht über die Frontplatte ein- und ausgeschaltet werden.

**Hinweis:** Die Fabrikationsstätte liefert die $Peak_X$-Limiter in der "On"-Konfiguration.

Anweisungen für die Aktivierung/Deaktivierung der $Peak_X$™-Limiter:

1. Halten Sie den “Mode/Menu”-Knopf 3 Sekunden lang gedrückt, bis die LCD-Anzeige “Amp Mode <More>” anzeigt.
2. Drücken Sie den “Next”-Knopf – die LCD-Anzeige zeigt “CH1 Clip <More>” an.
3. Drücken Sie den “Mode/Menu”-Knopf, und verwenden Sie den "Next"-Knopf, um zwischen ein/aus hin- und herzuschalten.
4. Wenn Sie Ihre Auswahl getroffen haben, drücken Sie den “Mode/Menu”-Knopf zur Bestätigung. Wenn Sie die Clip-Konfiguration für Kanal 1 bestätigen, werden Sie automatisch zu dem Kanal 2-Clip geleitet, um entweder "ein" oder "aus" auszuwählen. Treffen Sie wiederum Ihre Auswahl, und drücken Sie "Mode/Menu" zur Bestätigung.

ESPAÑOL

# **Serie XLS** Manual de Operación




**XLS 1000**

**XLS 1500**

**XLS 2000**

**XLS 2500**

**Obtención de Versiones en otro Idioma:** para obtener información en otro idioma sobre el uso de este producto, por favor póngase en contacto con su Distribuidor local de Crown. Si necesita ayuda para ubicar a un distribuidor local, por favor póngase en contacto con Crown al 574-294-8000.

Este manual no incluye todos los detalles del diseño, fabricación o variaciones del equipo. Así como tampoco incluye todas las posibles situaciones que pueden surgir en el momento de la instalación, operación o mantenimiento.

Este manual posee información que en el momento de la publicación se consideró certera. No obstante, esta información puede haberse actualizado. Para conseguir la última versión de este manual, por favor visite la página Web de Crown www.crownaudio.com.

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**Algunos modelos pueden ser exportados bajo el nombre Amcron®**

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Harman International

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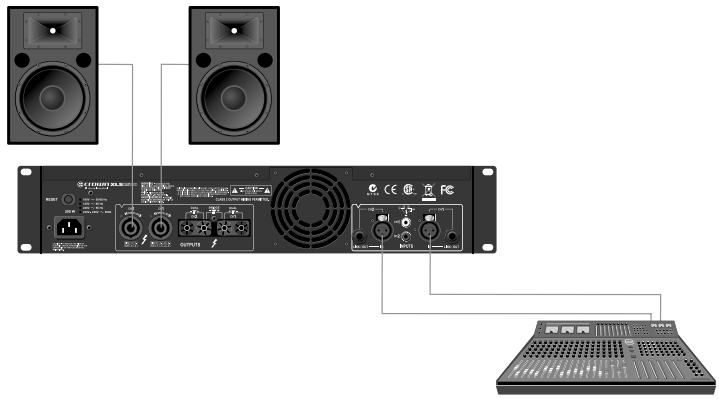
# Comenzar

### Modo Estéreo Bypass



Este es el modo que viene en el amplificador por defecto de fábrica. El amplificador está configurado para modo estéreo con el PureBand™ Crossover System Bypassed.

1. Conectar la fuente de señal Izquierda/Derecha con el canal 1 y con el canal 2 utilizando cualquiera de los conectores XLR, ¼ Pulgada, o RCA.
2. Conectar un altavoz a cada canal de salida utilizando un conector Speakon®, Enchufes Banana, o cable pelado.

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### Modo Mono-Puente



El Modo Mono-Puente emite la potencia de ambos canales del amplificador a ***una sola carga de*** 8 o 4 ohmios.

Antes de comenzar asegurarse de:

1. Conectar la fuente de señal al Canal 1 **sólo** utilizando cualquiera de los conectores XLR, ¼ Pulgada, o RCA .
2. Conectar el altavoz como se muestra.
   a. Si se utiliza las salidas de posición vinculante, conectar la terminal positiva del altavoz con la terminal positiva del Canal 1 y la terminal negativa del altavoz con la terminal positiva del Canal 2.
   b. Si se utiliza un conector Speakon® ,conectar la terminal positiva del altavoz con el 1+ y la terminal negativa con el 2+. Enchufar el conector en la salida del Canal 1 solo.

Seguir estos sencillos pasos para configurar el amplificador en "Modo Puente":

1. Mantener presionado el botón "Modo/Menú" por 3 segundos hasta que en la pantalla LCD aparezca "Modo Amp <Más>".
2. Presionar el botón "Modo/Menú" para comenzar la configuración del Modo Amplificador.
3. Presionar el botón "Siguiente" hasta que en la pantalla LCD se lea "Modo: Puente".
4. Presionar el botón "Modo/Menú" para confirmar la selección.
5. Presionar el botón "Siguiente" hasta que en la pantalla LCD aparezca "Bypass". Presionar el botón "Modo/Menú" para confirmar la selección. Ahora en la pantalla LCD debería aparecer "Bypass Puente".

---

### Modo Crossover



Cuando se utiliza el "Modo Crossover", el amplificador está configurado para usar un Filtro Lowpass en el Canal 1 y un Filtro HighPass en el Canal 2.

Antes de comenzar asegurarse de:

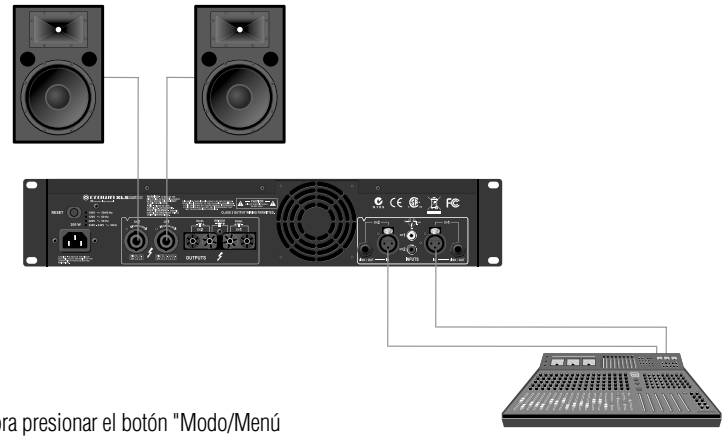
1. Conectar la fuente de señal al Canal 1 **sólo** utilizando cualquiera de los conectores XLR, ¼ Pulgada, o RCA .
2. Conectar un altavoz a cada canal de salida utilizando un conector Speakon®, Enchufes Banana, o cable pelado.

Seguir estos sencillos pasos para configurar el amplificador en "Modo Crossover":

1. Mantener presionado el botón "Modo/Menú" por 3 segundos hasta que en la pantalla LCD aparezca "Modo Amp <Más>".
2. Presionar el botón "Modo/Menú" para comenzar la configuración del Modo Amplificador.
3. Presionar el botón "Siguiente" hasta que en la pantalla LCD aparezca "Entrada Y". Ahora presionar el botón "Modo/Menú para confirmar.
4. Ahora presionar el botón "Siguiente" hasta que en la pantalla LCD aparezca "XOVER" y presionar el botón "Modo/Menú" para confirmar.
5. Ahora utilizar el botón "Anterior" o "Siguiente" para seleccionar el punto crossover deseado.
6. Una vez que se seleccionó el punto crossover, presionar el botón "Modo/Menú" para confirmar la selección. Ahora en la panatalla LCD debería decir "Entrada Y XOVER".

# Comenzar

### Modo HighPass



Cuando se utiliza el "Modo HighPass", el amplificador está configurado para usar un Filtro HighPass en el Canal 1 y en el Canal 2 en la frecuencia seleccionada.

Antes de comenzar asegurarse de:

1. Conectar la fuente de señal Izquierda/Derecha con el canal 1 y con el canal 2 utilizando cualquiera de los conectores XLR, ¼ Pulgada, o RCA.
2. Conectar un altavoz a cada canal de salida utilizando un conector Speakon®, Enchufes Banana, o cable pelado.

Seguir estos sencillos pasos para configurar el amplificador en "Modo HighPass":

1. Mantener presionado el botón "Modo/Menú" por 3 segundos hasta que en la pantalla LCD aparezca "Modo Amp <Más>".
2. Presionar el botón "Modo/Menú" para comenzar la configuración del Modo Amplificador.
3. Presionar el botón "Siguiente" hasta que en la pantalla LCD aparezca "Estéreo". Ahora presionar el botón "Modo/Menú para confirmar.
4. Ahora presionar el botón "Siguiente" hasta que en la pantalla LCD aparezca "HighPass" y presionar el botón "Modo/Menú" para confirmar.
5. Ahora utilizar el botón "Anterior" o "Siguiente" para seleccionar el punto crossover deseado.
6. Una vez que se seleccionó el punto crossover, presionar el botón "Modo/Menú" para confirmar la selección. En la pantalla LCD ahora debería aparecer "HighPass Estéreo".

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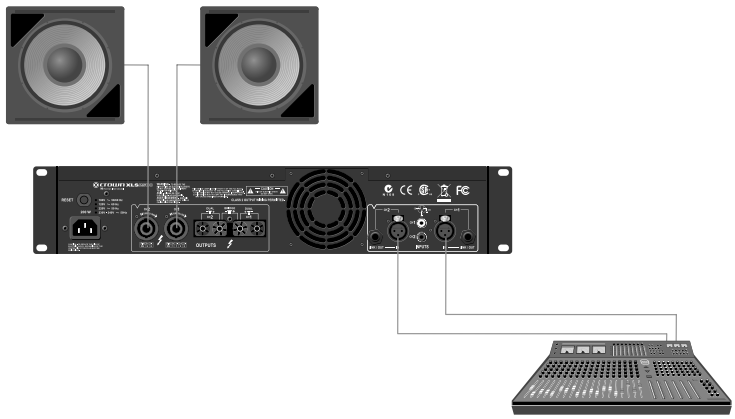
### Modo LowPass



Cuando se utiliza el "Modo LowPass", el amplificador está configurado para usar un Filtro LowPass en el Canal 1 y en el Canal 2 en la frecuencia seleccionada.

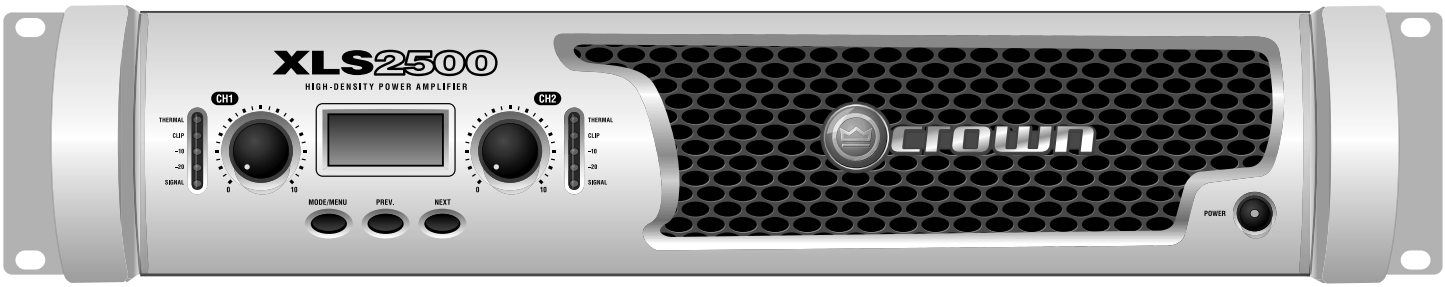
Antes de comenzar asegurarse de:

1. Conectar la fuente de señal Izquierda/Derecha con el canal 1 y con el canal 2 utilizando cualquiera de los conectores XLR, ¼ Pulgada, o RCA.
2. Conectar un altavoz a cada canal de salida utilizando un conector Speakon®, Enchufes Banana, o cable pelado.

Seguir estos sencillos pasos para configurar el amplificador en "Modo HighPass":

1. Mantener presionado el botón "Modo/Menú" por 3 segundos hasta que en la pantalla LCD aparezca "Modo Amp <Más>".
2. Presionar el botón "Modo/Menú" para comenzar la configuración del Modo Amplificador.
3. Presionar el botón "Siguiente" hasta que en la pantalla LCD aparezca "Estéreo". Ahora presionar el botón "Modo/Menú para confirmar.
4. Ahora presionar el botón "Siguiente" hasta que en la pantalla LCD aparezca "LowPass" y presionar el botón "Modo/Menú" para confirmar.
5. Ahora utilizar el botón "Anterior" o "Siguiente" para seleccionar el punto crossover deseado.
6. Una vez que se seleccionó el punto crossover, presionar el botón "Modo/Menú" para confirmar la selección. Ahora en la pantalla LCD debería aparecer "LowPass Estéreo".

# Bienvenido




Los amplificadores Crown Serie XLS definen un modelo para sistemas portátiles PA con tecnología, viabilidad y funcionamiento incomparables que sin esfuerzo entregan el producto noche tras noche. Empacamos los XLS con mucha flexibilidad, gracias a su Crossover integrado y$_X$™ Limitadores Peak. El XLS pesa menos de 11 libras (4,99 kg.), comparado con sus competidores que pesan 40 libras (18,14 kg.).

Simplemente, el XLS es el amplificador más potente, flexible y eficiente de su clase.

**Los amplificadores de potencia modernos son piezas sofisticadas de ingeniería capaz de producir niveles de potencia extremadamente altos. Se los debe tratar con respeto e instalarlos correctamente si han sido diseñados para ofrecer varios años de servicio confiable. Además, los amplificadores Serie XLS incluyen un número de características que requieren explicación antes de poder utilizar sus máximas ventajas.Por favor tomarse el tiempo necesario para estudiar este manual para poder obtener el mejor servicio posible del amplificador.**

### Características

- Alto rendimiento, ligero amplificador Clase-D impulsado por DriveCore™ Tecnología
- Sistema Crossover integrado PureBand ™ que asegura la transición sin fisuras de baja frecuencia a conductores de alta frecuencia
- Los limitadores integrados Peak $_X$™proporcionan máxima salida y a la vez protegen los altavoces.
- XLR, ¼SDSq, RCA entradas que aseguran la compatibilidad con cualquier fuente
- ¼" Las entradas pueden ser utilizadas como "loop-thrus" para distribuir señal a otros amplificadores
- La garantía total Crown de 3 años enteramente transferible protege la inversión por completo.

### Cómo Utilizar este Manual

Este manual le brinda la información necesaria para una instalación y funcionamiento corrrectos y seguros del amplificador. No cubre todos los aspectos de instalación, puesta en marcha o funcionamiento que pudieran ocurrir bajo cualquier condición. Para mayor información, ponerse en contacto con el Guía de Aplicación de Amplificadores de Crown (disponible en línea en la página Web www.crownaudio.com), Apoyo Técnico de Crown, el instalador de sistema o vendedor minorista.

Recomendamos leer todas las instrucciones, advertencias y precauciones que posee este manual. Además, por seguridad, por favor enviar hoy la carta de certificación de garantía. Y conservar la factura de venta – es el comprobante oficial de la compra.

# Funciones del Panel Frontal

**Indicadores:**

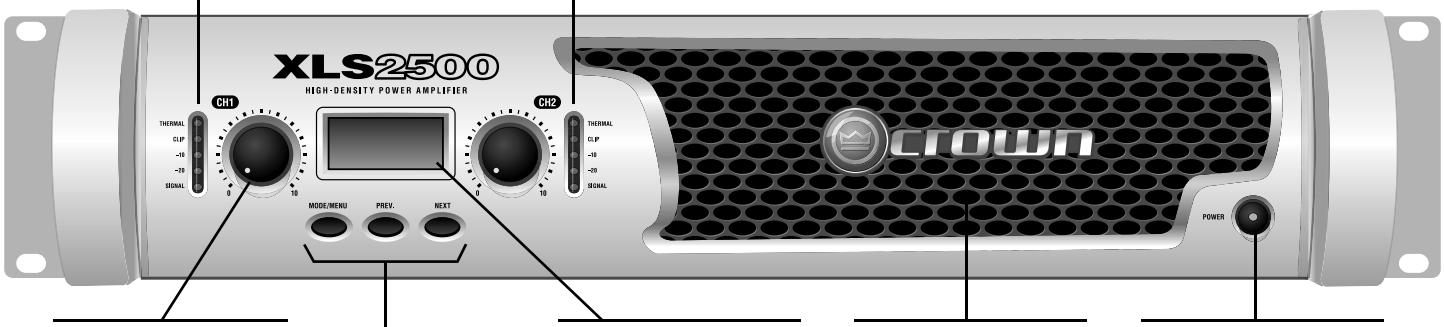
**Indicador de presencia de señal:** Dos LEDs verdes, uno para cada canal, se iluminan cuando la señal del canal de entrada

**-10 Indicador:** El LED verde parpadea cuando la señal de salida excede -10dB por debajo del clip

**-20 Indicador:** El LED verde parpadea cuando la señal de salida excede -20dB por debajo del clip.

**Indicador Clip:** Dos LEDs rojos, uno para cada canal, se iluminan cuando la salida del canal está saturada.

**Indicador Termal:** Dos LEDs rojos, uno para cada canal, se iluminan cuando comienza la compresión termal.




**Controles (nivel):**
Dos controles de nivel giratorios negros, uno para cada canal.

**Menú/Anterior/Siguiente**
Tres botones ubicados cerca de la pantalla LCD que se utilizan para configurar y acceder al proceso integrado.

**La pantalla LCD:**
La iluminación desde atrás de la pantalla permite la configuración crossover, la configuración del modo amplificador, y la configuración del limitador.

**Rejillas de Ventilación:**
Flujo de aire forzado de adelante hacia atrás.

**Botón de Encendido**
Enciende y apaga el amplificador. El LED azul se iluminará cuando está encendido.

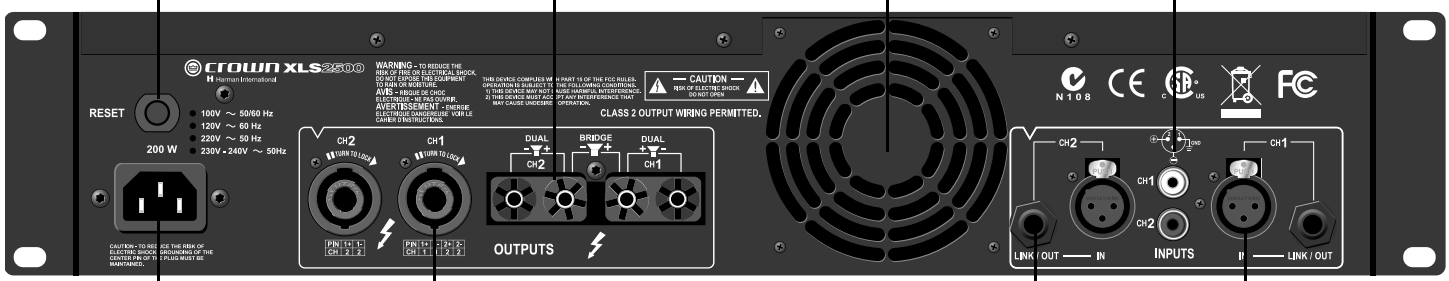
# Funciones del Panel Trasero

**Disyuntor:**
Porporciona protección contra sobrecarga.

**Tomas de salida con posición vinculante:**
Uno por canal, acepta enchufes banana o cable pelado. Nota: las salidas con posición vinculante en los odelos europeos vienen con enchufes de seguridad instalados para prevenir que se coloquen enchufes de energía europea. Las posiciones de entrada para estos conectores deberían usarse con modelos europeos.

**Ventiladores:**
Porporcionan aire forzado de adelante hacia atrás por refrigeración.

**Entradas RCA (teléfono):**
Posee dos entradas RCA (una por canal).




**Energía CA Conector**

**Conectores de salida 4-Pole Speakon®:**
Estos dos conectores aceptan conectores Speakon de 2-polo o 4-polo El conector del canal 1 está conectado para ambos canales entonces puede usarse para cableado modo-puente o cableado estéreo de dos altavoces a un solo Speakon.

**Entradas ¼ Pulgada:**
se proporcionan conectores de entrada de 2 - ¼ Pulgada (uno por canal). Estas entradas también pueden ser utilizadas para señal "loop-thru" para otros amplificadores.

**Entradas niveladas XLR:**
Posee dos conectores de entrada 3-pin XLR (uno por canal)

# Funciones del Proceso Integrado

### Sistema PureBand™ Crossover:

El Sistema PureBand™ Crossover proporciona una variable de estado del filtro Linkwitz-Riley 24dB/octava que le permite seleccionar un punto entre 50Hz y 3kHz sobre centros de octava 1/12th. Los siguientes puntos están disponibles para la selección:

50Hz, 53Hz, 56Hz, 59Hz, 63Hz, 66Hz, 70Hz, 74Hz, 79Hz, 83Hz, 88Hz, 94Hz, 99Hz, 105Hz, 111Hz, 118Hz, 125Hz, 132Hz, 140Hz, 149Hz, 157Hz, 167Hz, 177Hz, 187Hz, 198Hz, 210Hz, 223Hz, 236Hz, 250Hz, 265Hz, 281Hz, 297Hz, 315Hz, 334Hz, 354Hz, 375Hz, 397Hz, 420Hz, 472Hz, 500Hz, 530Hz, 561Hz, 595Hz, 630Hz, 667Hz, 707Hz, 749Hz, 794Hz, 841Hz, 891Hz, 944Hz, 1.00kHz, 1.06kHz, 1.12kHz, 1.19kHz, 1.26kHz, 1.33kHz, 1.41kHz, 1.50kHz, 1.59kHz, 1.68kHz, 1.78kHz, 1.89kHz, 2.00kHz, 2.12kHz, 2.24kHz, 2.38kHz, 2.52kHz, 2.67kHz, 2.83kHz, 3.00kHz

Junto con la selección de frecuencia crossover, el Sistema PureBand™ Crossover también ofrece la elección de cuatro modos:

Modo Crossover (CH1=LPF, CH2=HPF): Cuando es seleccionado, este modo permite un Filtro LowPass en el Canal 1 y un Filtro HighPass en el Canal 2 en la frecuencia que se ha seleccionado.

**NOTA:** Este modo automáticamente se pondrá en el modo "Entrada Y".

Modo LowPass (CH1=LPF, CH2 = LPF): Cuando es seleccionado, este modo permite un Filtro LowPass en el Canal 1 y en el Canal 2 en la frecuencia que se ha seleccionado.

Modo HighPass (CH1 = HPF, CH2 = HPF): Cuando es seleccionado, este modo permite un Filtro HighPass en el Canal 1 y en el Canal 2 en la frecuencia que se ha seleccionado.

Modo Puente (cualquiera de los dos LPF o HPF): Cuando se selecciona el modo puente, el sistema crossover aún permite seleccionar un Filtro LowPass o HighPass en la frecuencia que se ha seleccionado.

Para obtener instrucciones sobre la configuración de los diferentes ajustes del sistema crossover, por favor, consulte la sección "Comenzar" al principio de este manual.

### Limitadores $Peak_X$™

Los Limitadores Clip $Peak_X$ le proporcionan al amplificador y al sistema mayor funcionamiento y mejor protección. Están específicamente adecuados para trabajar con este diseño de amplificador y con esta fuente de alimentación para alcanzar mayor SPL con artefactos menos perceptíbles mientras se protege la inversión del altavoz. Los limitadores se pueden prender o apagar fácilmente desde el panel frontal.

**NOTA:** Los Limitadores $Peak_X$son enviados con la configuración "encendido" desde la fábrica.

Instrucciones para el Enganche/Desenganche de los Limitadores: $Peak_X$™

1. Mantener presionado el botón "Modo/Menú" por 3 segundos hasta que en la pantalla LCD aparezca "Modo Amp <Más>".
2. Presionar el botón "Siguiente" – La pantalla LCD muestra "CH1 Clip <Más>".
3. Presionar el botón "Modo/Menú y utilizar el botón "Siguiente" para alternar entre encendido/apagado.
4. Una vez que se seleccionó, presionar el botón "Modo/Menú" para confirmar. Cuando se confirma la configuración Clip CH1, automáticamente está en Clip CH2 para configurar encendido o apagado. Una vez más, realizar la selección y presionar "Modo/Menú para confirmar.

FRANÇAIS

# Manuel d'utilisation **de la série XLS**




**XLS 1000**

**XLS 1500**

**XLS 2000**

**XLS 2500**

**Obtenir d'autres versions traduites :** Pour obtenir des informations dans une autre langue concernant l'utilisation de ce produit, veuillez contacter votre distributeur local Crown. Si vous avez besoin d'aide pour localiser votre distributeur local, veuillez contacter Crown au 574-294-8000.

Ce manuel ne présente pas toutes les spécifications de conception, de production ou de variations du matériel. Il ne couvre pas non plus toute situation potentielle pouvant surgir lors de l'installation, de l'utilisation ou de l'entretien.

Les informations communiquées dans ce manuel sont considérées être justes à la date de publication. Néanmoins, ces informations peuvent être mises à jour. Pour obtenir la dernière version de ce manuel, veuillez vous rendre sur le site Internet de Crown, www.crowaudio.com.

**Avis de marque déposée :** Crown, Crown Audio et Amcron sont des marques déposées de Crown International. Les autres marques sont la propriété de leurs propriétaires respectifs.
Les plus récentes versions de ce manuel ainsi que les informations supplémentaires concernant ce produit peuvent être disponibles sur le site Internet de Crown, www.crownaudio.com.

**Certains modèles peuvent être exportés sous le nom d'Amcron®**

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Harman International

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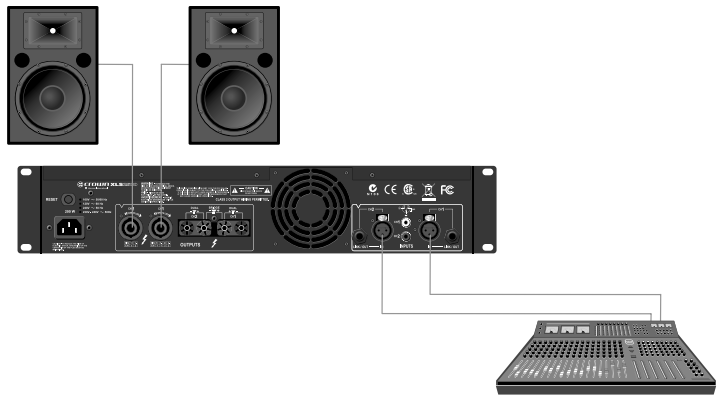
# Commencez

### Mode Stereo Bypass / neutralisation de la stéréo

L'amplificateur est réglé par défaut en usine. L'amplificateur est configuré pour le mode stéréo, le système PureBand™ étant neutralisé.

1. Raccordez la source droite/gauche des signaux au canal 1 et 2 à l'aide de la prise XLR, ¼ po, ou des prises RCA.
2. Raccordez un haut-parleur à chaque canal de sortie à l'aide du Speakon®, d'une fiche Banane ou d'un fil nu.

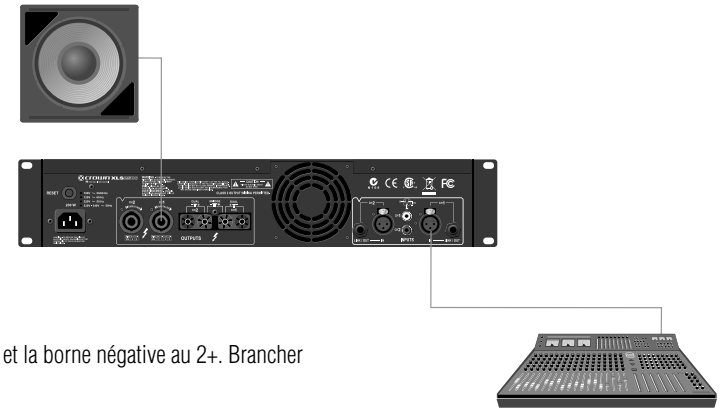


### Mode Bridge-Mono (Pont - Mono)

Ce mode permet d'exploiter la puissance des deux canaux d'amplification en la faisant sortir sous une résistance ***unique*** de 8 ou 4 ohms.

Avant de commencer assurez-vous :

1. De brancher la source des signaux au Canal 1 en n'utilisant **qu'** une prise XLR de 1/4 de pouce ou des prises RCA.
2. De brancher le haut-parleur comme indiqué.
   a. Si vous utilisez des sorties sur bornes de connexion, raccordez la borne + du haut-parleur à la borne + du canal 1 puis, la borne - du haut-parleur à la borne + du canal 2.
   b. Si vous utilisez une prise Speakon®, branchez la borne + du haut-parleur au 1+ et la borne négative au 2+. Brancher uniquement la prise dans la sortie du canal 1.



Suivez ces étapes rapides pour configurer l'amplificateur concernant le "Bridge Mode" :

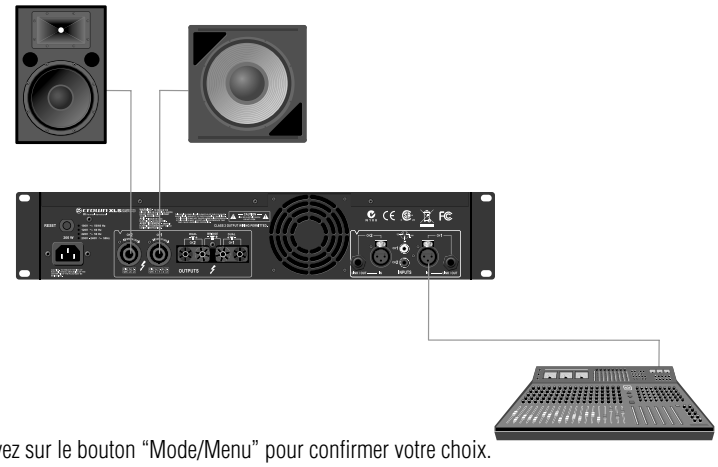
1. Maintenez le bouton "Mode/Menu" enfoncé pendant 3 secondes jusqu'à ce que l'écran LCD affiche "Amp Mode <More>".
2. Appuyez sur le bouton “Mode/Menu” pour commencer à configurer le mode Amp.
3. Appuyez sur le bouton "Next" jusqu'à ce que l'écran LCD indique "Mode" : Bridge”.
4. Appuyez sur le bouton “Mode/Menu” pour confirmer votre choix.
5. Appuyez maintenant sur le bouton "Next" jusqu'à ce que l'écran LCD indique "Bypass" : Appuyez sur le bouton “Mode/Menu” pour confirmer votre choix. L'écran LCD devrait maintenant indiquer “Bridge Bypass”.

### Mode Crossover

En mode "Crossover", l'amplificateur est configuré pour utiliser un filtre LowPass sur le canal 1 et un filtre HighPass sur le canal 2.

Avant de commencer assurez-vous :

1. De brancher la source des signaux au Canal 1 en n'utilisant **qu'**une prise XLR de 1/4 de pouce ou des prises RCA.
2. De raccorder un haut-parleur à chaque canal de sortie à l'aide du Speakon®, d'une fiche Banane ou d'un fil nu.

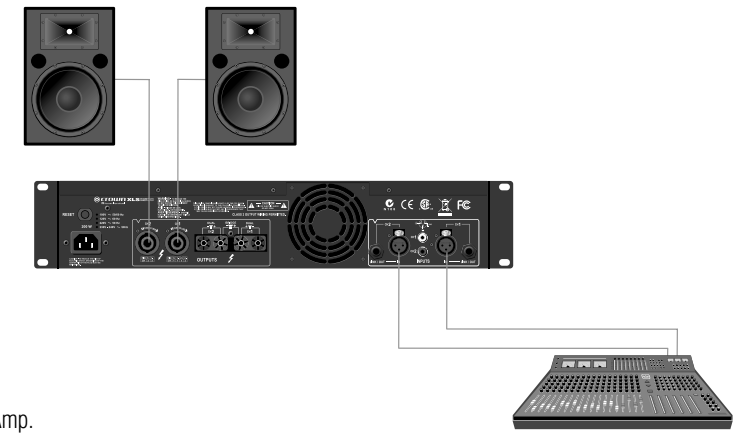


Suivez ces étapes rapides pour configurer l'amplificateur concernant le "Mode CrossOver" :

1. Maintenez le bouton "Mode/Menu" enfoncé pendant 3 secondes jusqu'à ce que l'écran LCD affiche "Amp Mode <More>".
2. Appuyez sur le bouton “Mode/Menu” pour commencer à configurer le mode Amp.
3. Appuyez sur le bouton "Next" jusqu'à ce que l'écran LCD indique "Input Y" : Appuyez sur le bouton “Mode/Menu” pour confirmer votre choix.
4. Appuyez maintenant sur le bouton "Next" jusqu'à ce que l'écran LCD affiche "XOVER" et appuyez sur le bouton "Mode/Menu" pour confirmer.
5. Utilisez maintenant le bouton "Previous" ou "Next" pour choisir le point de crossover désiré.
6. Une fois celui-ci choisi, appuyez sur le bouton "Mode/Menu" pour confirmer. L'écran LCD devrait maintenant indiquer “Input Y XOVER”.

# Commencez

### Mode HighPass



En mode "HighPass", l'amplificateur est configuré pour utiliser un filtre HighPass sur le canal 1 et 2, à la fréquence choisie.

Avant de commencer assurez-vous de/d' :

1. Raccorder la source droite/gauche des signaux au canal 1 et 2 à l'aide de la prise XLR, ¼ po, ou des prises RCA.
2. Raccorder un haut-parleur à chaque canal de sortie à l'aide du Speakon®, d'une fiche Banane ou d'un fil nu.

Suivez ces étapes rapides pour configurer l'amplificateur concernant le "HighPass Mode" :

1. Maintenez le bouton "Mode/Menu" enfoncé pendant 3 secondes jusqu'à ce que l'écran LCD affiche "Amp Mode <More>".
2. Appuyez sur le bouton “Mode/Menu” pour commencer à configurer le mode Amp.
3. Appuyez sur le bouton "Next" jusqu'à ce que l'écran LCD indique "Stereo" : Appuyez sur le bouton “Mode/Menu” pour confirmer votre choix.
4. Appuyez maintenant sur le bouton "Next" jusqu'à ce que l'écran LCD affiche "HighPass" et appuyez sur le bouton "Mode/Menu" pour confirmer.
5. Utilisez maintenant le bouton "Previous" ou "Next" pour choisir le point de crossover désiré.
6. Une fois celui-ci choisi, appuyez sur le bouton "Mode/Menu" pour confirmer. L'écran LCD devrait maintenant indiquer “Stereo HighPass”.

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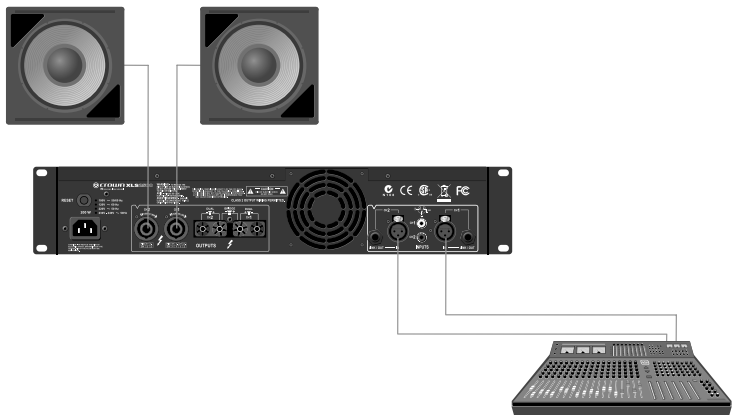
### Mode LowPass



En mode "LowPass", l'amplificateur est configuré pour utiliser un filtre LowPass sur le canal 1 et 2, à la fréquence choisie.

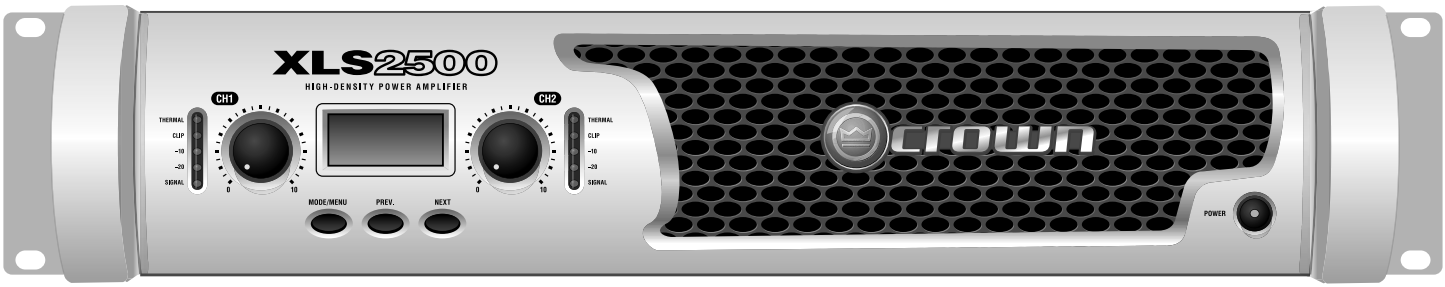
Avant de commencer assurez-vous de/d' :

1. Raccorder la source droite/gauche des signaux au canal 1 et 2 à l'aide de la prise XLR, ¼ po, ou des prises RCA.
2. Raccorder un haut-parleur à chaque canal de sortie à l'aide du Speakon®, d'une fiche Banane ou d'un fil nu.

Suivez ces étapes rapides pour configurer l'amplificateur concernant le "HighPass Mode" :

1. Maintenez le bouton "Mode/Menu" enfoncé pendant 3 secondes jusqu'à ce que l'écran LCD affiche "Amp Mode <More>".
2. Appuyez sur le bouton “Mode/Menu” pour commencer à configurer le mode Amp.
3. Appuyez sur le bouton "Next" jusqu'à ce que l'écran LCD indique "Stereo" : Appuyez sur le bouton “Mode/Menu” pour confirmer votre choix.
4. Appuyez maintenant sur le bouton "Next" jusqu'à ce que l'écran LCD affiche "LowPass" et appuyez sur le bouton "Mode/Menu" pour confirmer.
5. Utilisez maintenant le bouton "Previous" ou "Next" pour choisir le point de crossover désiré.
6. Une fois celui-ci choisi, appuyez sur le bouton "Mode/Menu" pour confirmer. L'écran LCD devrait maintenant indiquer “Stereo LowPass”.

# Bienvenue




Les amplificateurs Crown de la série XLS sont des produits phares du domaine de la sonorisation et ceci grâce à leurs performances inégalées, leur technologie et coût ; soirée après soirée, ils ne sont que bénéfices ! Nous avons assemblé le XLS en respect d'une grande polyvalence grâce à son Crossover et à ses limiteurs de pics $_{X}$™intégrés. Sont poids est inférieur à 5,5 Kg comparé aux 20 de ses concurrents.

Pour restez concis, le XLS est un ampli puissant, polyvalent, efficace et unique dans sa catégorie.

Les amplificateurs sont des oeuvres d'art sophistiquées de l'ingénierie capables de produire des volumes sonores extrêmement élevés. Ils doivent être manipulés délicatement et correctement installés si l'on veut les conserver pendant de nombreuses années ; ce pour quoi ils ont été conçus.

En outre, les amplificateurs de la série XLS possèdent un certain nombre de caractéristiques devant être expliquées avant de pouvoir les utiliser à leur plein potentiel.

Veuillez prendre le temps d'étudier ce manuel afin que vous puissiez tirer le maximum de possibilités de votre amplificateur.

### Caractéristiques

- Grandes performances, d'un poids léger de catégorie D utilisant la technologie DriveCore™
- Le système à Crossovers PureBand™ intégrés garantit des transitions régulières provenant des excitateurs hautes et basses fréquences.
- Les limiteurs intégrés de pics $_{X}$™ génèrent une puissance en sortie maximale tout en protégeant vos haut-parleurs.
- Les entrées des prises XLR, ¼SDSq, RCA garantissent toute compatibilité avec les sources.
- Les entrées en ¼" peuvent être utilisées en tant que câble (jack) pour faire passer le signal vers les autres amplificateurs.
- La garantie Crown de 3 ans, transférable et garantissant toute exemption de vice ou de panne, est là pour protéger votre investissement.

### Comment se servir de ce manuel

Ce manuel met à votre disposition les informations nécessaires pour bien installer et utiliser votre amplificateur en toute sécurité. Il n'aborde pas tous les aspects de l'installation, des réglages ou de l'utilisation correspondant à toutes les circonstances. Pour de plus amples informations veuillez consulter le guide d'utilisation des amplificateurs Crown (disponible sur le lien www.crownaudio.com), l'assistance technique Crown, votre installateur ou votre revendeur.

Nous vous conseillons vivement de lire toutes les instructions, avertissements et précautions de ce manuel. A titre de protection, veuillez envoyer votre carte d'inscription de garantie dès aujourd'hui. Conserver votre acte de vente car il est la preuve officielle de votre achat.

# Fonctions du panneau avant

**Indicators :**

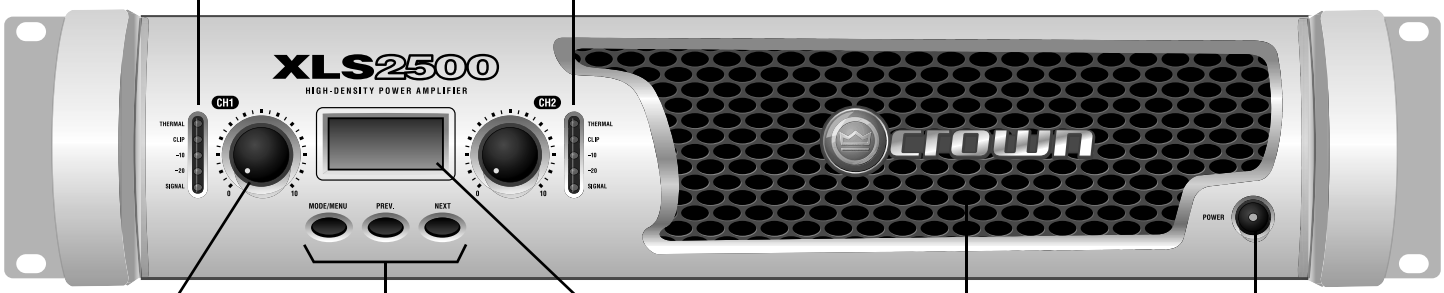
**Indicateur de présence de signaux :** Deux LED, une pour chaque canal, s'allument lorsque le signal d'entrée de canal dépasse -40cBu.

**-Indicateur 10 :** La LED verte clignote lorsque le niveau des signaux en sortie dépasse -10 dB en dessous de la crête.

**-Indicateur 20 :** La LED verte clignote lorsque le niveau des signaux en sortie dépasse -2 dB en dessous de la crête.

**Indicateurs de crêtes :** Deux LED vertes, une pour chaque canal, s'allument lorsque la sortie d'un canal est surchargée.

**Indicateur thermique :** Deux LED rouges, une pour chaque canal, s'allument lorsque la compression thermique commence.




**Potentiomètres de gain (niveau) :**
Deux boutons rotatifs noirs et de niveau, un pour chaque canal.

**Menu/Prev/Next :**
Trois boutons se trouvant près de l'écran LCD sont utilisés pour configurer et accéder au procédé intégré.

**Écran LCD :**
L'écran LCD rétroéclairant permet de configurer les crossovers, le mode de l'amplificateur et le limiteur.

**Refroidissement par aération :**
Débit d'air forcé de l'avant vers l'arrière.

**Bouton d'alimentation**
Met en marche et éteint l'amplificateur. La LED bleue s'allumera une fois allumée.

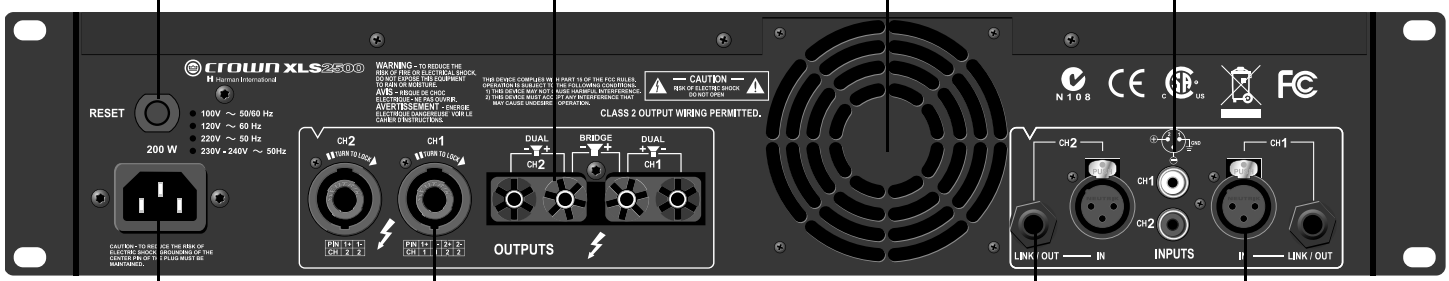
# Fonctions du panneau arrière

**Disjoncteur :**
Une protection contre les surcharges

**Prises de sortie pour bornes de connexion :**
Une paire par canal, accepte les prises banane ou un fil nu. Note : Les sorties pour bornes de connexion des modèles européens sont livrées avec des prises de sécurité installées afin d'empêcher de faire pénétrer un objet quelconque dans les prises d'alimentation européennes. Il est possible d'utiliser les entrées latérales pour ces connecteurs sur les modèles européens.

**Ventilateurs :**
Garantissent un débit d'air forcé d'avant en arrière à titre de refroidissement.

**Entrées RCA (son) :**
Deux entrées RCA sont à votre disposition (une par canal).




**Prise d'alimentation CA**

**Prises de sortie 4 pôles Speakon® :**
Ces deux prises acceptent les prises Speakon 2 ou 4 pôles. La prise Speakon du canal 1 est câblée pour les deux canaux afin qu'il puisse être utilisé pour le câblage Bridge-mono ou Stéréo des deux haut-parleurs pour un seul Speakon.

**Entrée en ¼ de pouce :**
Des prises d'entrée en 2-1/4 de pouce sont à votre disposition (une par canal). Ces entrées peuvent aussi être utilisées pour un signal envoyé par câble vers d'autres amplificateurs.

**Entrées XLR équilibrées :**
Deux prises d'entrée au format XLR, à 3 broches, sont à votre disposition (une par canal).

# Fonctions du procédé intégré

### Système crossover PureBand™ :

Le système PureBand™ met à votre disposition un filtre à octave Linkwitz-Riley 24dB vous permettant de choisir un point entre 50 Hz et 3 KHz sur des centres de 1/12ème d'octave. Les points suivants sont à votre disposition :

50Hz, 53 Hz, 56 Hz, 59 Hz, 63 Hz, 66 Hz, 70 Hz, 74 Hz, 79 Hz, 83 Hz, 88 Hz, 94 Hz, 99 Hz, 105 Hz, 111 Hz, 118 Hz, 125 Hz, 132 Hz, 140 Hz, 149 Hz, 157 Hz, 167 Hz, 177 Hz, 187 Hz, 198 Hz, 210 Hz, 223 Hz, 236 Hz, 250 Hz, 265 Hz, 281 Hz, 297 Hz, 315 Hz, 334 Hz, 354 Hz, 375 Hz, 397 Hz, 420 Hz, 472 Hz, 500 Hz, 530 Hz, 561 Hz, 595 Hz, 630 Hz, 667 Hz, 707 Hz, 749 Hz, 794 Hz, 841 Hz, 891 Hz, 944 Hz, 1 kHz, 1,06k Hz, 1,12 kHz, 1,19 kHz, 1,26 kHz, 1,33 kHz, 1,41 kHz, 1,50 kHz, 1,59 kHz, 1,68 kHz, 1,78 kHz, 1,89 kHz, 2 kHz, 2,12 kHz, 2,24 kHz, 2,38 kHz, 2,52 kHz, 2,67 kHz, 2,83 kHz, 3 kHz

En plus du choix de fréquences des crossovers, le système PureBand™ de crossovers met à votre disposition quatre modes pouvant être choisis :

Mode Crossover (Can 1 = LPF, Can 2 = HPF) : Une fois sélectionné, ce mode active un filtre LowPass sur le canal 1 et un HighPass sur le canal 2 à la fréquence que vous aurez choisie.

**Note :** Ce mode mettra automatiquement le mode d'entrée sur "Input Y".

Mode LowPass (Can 1 = LPF, Can 2 = LPF) : Une fois sélectionné, ce mode active un filtre LowPass sur le canal 1 et 2 à la fréquence que vous aurez choisie.

Mode HighPass (Can 1 = HPF, Can 2 = HPF) : Une fois sélectionné, ce mode active un filtre HighPass sur les canaux 1 et 2 à la fréquence que vous aurez choisie.

Mode Bridge (LPF ou HPF) : En mode Bridge-mono, le système de crossovers vous permet de choisir un filtre LowPass ou HighPass à la fréquence que vous avez choisie .

Pour obtenir des instructions concernant le réglage du système de crossovers, veuillez consulter la section "Commencez" au début de ce manuel.

### Limiteurs de pics $_X$™

Les limiteurs par écrétage de pics$_X$ donnent à votre amplificateur et au système toute leur puissance ainsi qu'une meilleure protection. Ils sont spécialement réglés pour fonctionner avec cet ampli et en fonction de l'alimentation afin d'obtenir une SPL plus élevée sans sonorités bizarres tout en protégeant vos haut-parleurs. Les limiteurs peuvent être facilement éteints ou allumés depuis le panneau avant.

**Note :** Les limiteurs de pics $_X$ sont réglés sur "ON" depuis l'usine.

Instructions pour l'enclenchement/désenclenchement des limiteurs de pics $_X$™ :

1. Maintenez le bouton "Mode/Menu" enfoncé pendant 3 secondes jusqu'à ce que l'écran LCD affiche "Amp Mode <More>".
2. Appuyez sur le bouton "Next" - l'écran LCD indique “CH1 Clip <More>”.
3. Appuyez sur le bouton "Mode/Menu" et utilisez le bouton "Next" pour passer de On à Off.
4. Une fois choisi, appuyez sur le bouton "Mode/Menu" pour confirmer. Une fois la configuration CH1 Clip faite, vous passez automatiquement sur Ch2 Clip pour mettre sur On ou Off. Une fois de plus, choisissez et appuyez sur "Mode/Menu" pour confirmer.

# XLS Specifications

### Performance

Sensitivity (for full rated power at 8 ohms): 1.4 Vrms.

### Frequency Response

(at 1 watt, 20 Hz to 20 kHz): +0 dB, –1 dB.

### Signal-to-Noise Ratio

Rated as dBr to full rated 8Ω power output (A-Weighted):
XLS 1000 > 97 dB
XLS 1500, XLS 2000, XLS 2500 > 103 dB

**Total Harmonic Distortion (THD):** < 0.5%.

**Intermodulation Distortion (IMD):** (60 Hz and 7 kHz at 4:1) from full rated output to –30 dB: < 0.3%.

**Damping Factor (8 ohm) 10 Hz to 400 Hz:** >600.

**Crosstalk (below rated 8 ohm power):**
At 1kHz: >70dB
At 20kHz: >50dB

**Input Impedance (nominal):**
20 kilohms balanced, 10 kilohms unbalanced.

**Load Impedance:**
2 to 8 ohms per channel in Stereo, 4 to 8 ohms in Bridge Mono.

### AC Line Voltage and Frequency

**Configurations Available (±10%):** 120 VAC 60 Hz, 100 VAC 50/60 Hz, 220 VAC 50 Hz, 230 VAC 50 Hz, and 240 VAC 50 Hz.

### Controls

**Level:** Two front-panel rotary level controls, one for each channel.

**LCD Screen:** Back-lit LCD allows for crossover configuration, amp mode configuration and clip compressor configuration.

**Menu/Prev/Next:** Three buttons located near the LCD screen that are used to configure and access the integrated processing.

**Power:** Front-panel switch; on when in the IN position. Blue LED will illuminate when on.

**Circuit Breaker:** Back-panel breaker provides overload protection.

### Integrated Processing

**PureBand™ Crossover System**

**Crossover Filter:** Linkwitz-Riley 24dB per octave.

**Crossover Mode:** Crossover (CH1=LPF, CH2=HPF), Low Pass (both channels LPF), High Pass (both channels HPF), Bridge (LPF or HPF)

**Peak$_x$™ Limiters:** Channel independent clip limiter designed to provide maximum output while protecting your loudspeakers.

### Indicators

**Signal Presence Indicators:** Two green LEDs, one for each channel, illuminate when the channel's input signal exceeds –40 dBu.

# XLS Specifications

**–20 Indicator:** Green LED flashes when output signal level exceeds –20 dB below clip.

**–10 Indicator:** Green LED flashes when output signal exceeds –10 dB below clip.

**Clip Indicators:** Two red LEDs, one for each channel, illuminate when the channel's output is being overdriven.

**Thermal Indicator:** Two red LEDs, one for each channel, illuminate when thermal compression begins.

### Input/Output

**Input Connectors:** XLR (one per channel), ¼ inch (one per channel), and RCA (one per channel). ¼ inch connectors can be used as loop-thrus to distribute signal to additional amplifiers.

**Output Connectors:** Two 4-Pole Speakon® Output Connectors accept 2-pole or 4-pole Speakon® connectors. The Channel 1 Speakon® connector is wired for both channels so it can be used for bridge-mono wiring or for stereo wiring of two speakers to a single Speakon® connector.

One pair of back-panel binding posts per channel; accepts banana plugs or bare wire. (European models do not accept banana plugs.)

### Protection

XLS Series amplifiers provide extensive Protection, including output current limiting, DC protection, circuit breaker, and thermal protection.

### Construction

**Ventilation:** Flow-through ventilation from front to back.

**Cooling:** Internal heat sinks with forced-air cooling for rapid, uniform heat dissipation.

**Air Volume Requirements (per minute per unit):** 80.15 $ft^3$ (2.27 $m^3$).

**Dimensions:** EIA Standard 19-inch (48.3-cm) rack mount width (EIA RS-310-B), 3.5-inch (8.9-cm) height.

XLS 1000/XLS 1500: 8.12-Inch (20.62cm) depth

XLS 2000/XLS 2500: 10.35-Inch (26.29cm) depth

### Weight

**Net Weight:**

XLS 1000: 8.6 lb (3.9kg)

XLS 1500: 8.6 lb (3.9kg)

XLS 2000: 10.8 lb (4.9kg)

XLS 2500: 10.8 lb (4.9kg)

**Shipping Weight:**

XLS 1000: 13.6 lb (6.2 kg)

XLS 1500: 13.6 lb (6.2 kg)

XLS 2000: 15.8 lb (7.1 kg)

XLS 2500: 15.8 lb (7.1 kg)

# Service

Crown amplifiers are quality units that rarely require servicing. Before returning your unit for servicing, please contact Crown Technical Support to verify the need for servicing.

*Warranty is only valid within the country in which the product was purchased.*

This unit has very sophisticated circuitry which should only be serviced by a fully trained technician. This is one reason why each unit bears the following label:



**CAUTION: To prevent electric shock, do not remove covers. No user serviceable parts inside. Refer servicing to a qualified technician.**

Complete the Crown Audio Factory Service Information form, in the back of this manual, when returning a Crown product to the factory or authorized service center. The form must be included with your product inside the box or in a packing slip envelope securely attached to the outside of the shipping carton. Do not send this form separately.

### Worldwide Service

Service may be obtained from an authorized service center. (Contact your local Crown/Amcron representative or our office for a list of authorized service centers.) To obtain service, simply present the bill of sale as proof of purchase along with the defective unit to an authorized service center. They will handle the necessary paperwork and repair.

Remember to transport your unit in the original factory pack.

### US and Canada Service

Service may be obtained in one of two ways: from an authorized service center or from the factory. You may choose either. It is important that you have your copy of the bill of sale as your proof of purchase.

### Service at a US or Canada Service Center

This method usually saves the most time and effort. Simply present your bill of sale along with the defective unit to an authorized service center to obtain service. They will handle the necessary paperwork and repair. Remember to transport the unit in the original factory pack. A list of authorized service centers in your area can be obtained from Crown Factory Service, or online from http://www.crownaudio.com/support/servcent.htm.

### Factory Service

Crown accepts no responsibility for non-serviceable product that is sent to us for factory repair. It is the owner's responsibility to ensure that their product is serviceable prior to sending it to the factory. Serviceable product list is available at http://crownweb.crownintl.com/crownrma/.

For more information, please contact us direct.

A Service Return Authorization (SRA) is required for product being sent to the factory for repair. An SRA can be completed online at www.crownaudio.com/support/factserv.htm. If you do not have access to the web, please call Crown's Customer Service at 574.294.8200 or 800.342.6939 extension 8205 in North America, Puerto Rico and the Virgin Islands only.

For warranty service, we will pay for ground shipping both ways in the United States. Contact Crown Customer Service to obtain prepaid shipping labels prior to sending the unit. Or, if you prefer, you may prepay the cost of shipping, and Crown will reimburse you. Send copies of the shipping receipts to Crown to receive reimbursement.

Your repaired unit will be returned via UPS ground. Please contact us if other arrangements are required.

### Factory Service Shipping Instructions:

1. Service Return Authorization (SRA) is required for product being sent to the factory for service. Please complete the SRA by going to www.crownaudio.com/support/factserv.htm. If you do not have access to our website, call 1.800.342.6939, extension 8205 and we'll create the SRA for you.
2. See packing instructions that follow.

# Service

3. Ship product to:
   CROWN AUDIO FACTORY SERVICE
   1718 W MISHAWKA RD.
   ELKHART, IN 46517
4. Use a bold black marker and write the SRA number on three sides of the box.
5. Record the SRA number for future reference. The SRA number can be used to check the repair status.

### Packing Instructions

Important: These instructions must be followed. If they are not followed, Crown Audio, Inc. assumes no responsibility for damaged goods and/or accessories that are sent with your unit.

1. Fill out and include the Crown Audio Factory Service Information sheet in the back of this manual.
2. Do not ship any accessories (manuals, cords, hardware, etc.) with your unit. These items are not needed to service your product. We will not be responsible for these items.
3. When shipping your Crown product, it is important that it has adequate protection. We recommend you use the original pack material when returning the product for repair (Figure 9.1). If you do not have the original box, please call Crown at 800.342.6939 or 574.294.8210 and order new pack material. (Do not ship your unit in a wood or metal cabinet.)
4. If you provide your own shipping pack, the minimum recommended requirements for materials are as follows:
   a. 275 P.S.I. burst test, Double-Wall carton that allows for 2-inch solid Styrofoam on all six sides of unit or 3 inches of plastic bubble wrap on all six sides of unit.
   b. Securely seal the package with an adequate carton sealing tape.
   c. Do not use light boxes or “peanuts”. Damage caused by poor packaging will not be covered under warranty.

Enclose the completed Crown Audio Factory Service Information form (or securely attach it to the outside of carton) and re-seal the shipping pack with a sturdy carton sealing tape.

### Estimate Approval

Approval of estimate must be given within 30 days after being notified by Crown Audio Inc. Units still in the possession of Crown after 30 days of the estimate will become the property of Crown Audio Inc.

### Payment of Non-Warranty Repairs

Payment on out-of-warranty repairs must be received within 30 days of the repair date. Units unclaimed after 30 days become the property of Crown Audio Inc.

If you have any questions, please contact Crown Factory Service.

**Crown Factory Service**
1718 W. Mishawaka Rd.,
Elkhart, Indiana 46517 U.S.A.

**Telephone:**
574-294-8200
800-342-6939 (North America, Puerto Rico, and Virgin Islands only)

**Facsimile:**
574-294-8301 (Technical Support)
574-294-8124 (Factory Service)

**Web site:**
http://www.crownaudio.com

# Warranty — UNITED STATES & CANADA




### SUMMARY OF WARRANTY

Crown International, 1718 West Mishawaka Road, Elkhart, Indiana 46517-4095 U.S.A. warrants to you, the ORIGINAL PURCHASER and ANY SUBSEQUENT OWNER of each NEW Crown product, for a period of three (3) years from the date of purchase by the original purchaser (the "warranty period") that the new Crown product is free of defects in materials and workmanship. We further warrant the new Crown product regardless of the reason for failure, except as excluded in this Warranty.

*Warranty is only valid within the country in which the product was purchased.*

### ITEMS EXCLUDED FROM THIS CROWN WARRANTY

This Crown Warranty is in effect only for failure of a new Crown product which occurred within the Warranty Period. It does not cover any product which has been damaged because of any intentional misuse, accident, negligence, or loss which is covered under any of your insurance contracts. This Crown Warranty also does not extend to the new Crown product if the serial number has been defaced, altered, or removed.

### WHAT THE WARRANTOR WILL DO

We will remedy any defect, regardless of the reason for failure (except as excluded), by repair, replacement, or refund. We may not elect refund unless you agree, or unless we are unable to provide replacement, and repair is not practical or cannot be timely made. If a refund is elected, then you must make the defective or malfunctioning product available to us free and clear of all liens or other encumbrances. The refund will be equal to the actual purchase price, not including interest, insurance, closing costs, and other finance charges less a reasonable depreciation on the product from the date of original purchase. Warranty work can only be performed at our authorized service centers or at the factory. We will remedy the defect and ship the product from the service center or our factory within a reasonable time after receipt of the defective product at our authorized service center or our factory. All expenses in remedying the defect, including surface shipping costs in the United States, will be borne by us. (You must bear the expense of shipping the product between any foreign country and the port of entry in the United States including the return shipment, and all taxes, duties, and other customs fees for such foreign shipments.)

### HOW TO OBTAIN WARRANTY SERVICE

You must notify us of your need for warranty service within the warranty period. All components must be shipped in a factory pack, which, if needed, may be obtained from us free of charge. Corrective action will be taken within a reasonable time of the date of receipt of the defective product by us or our authorized service center. If the repairs made by us or our authorized service center are not satisfactory, notify us or our authorized service center immediately.

### DISCLAIMER OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

YOU ARE NOT ENTITLED TO RECOVER FROM US ANY INCIDENTAL DAMAGES RESULTING FROM ANY DEFECT IN THE NEW CROWN PRODUCT. THIS INCLUDES ANY DAMAGE TO ANOTHER PRODUCT OR PRODUCTS RESULTING FROM SUCH A DEFECT. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATIONS OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

### WARRANTY ALTERATIONS

No person has the authority to enlarge, amend, or modify this Crown Warranty. This Crown Warranty is not extended by the length of time which you are deprived of the use of the new Crown product. Repairs and replacement parts provided under the terms of this Crown Warranty shall carry only the unexpired portion of this Crown Warranty.

### DESIGN CHANGES

We reserve the right to change the design of any product from time to time without notice and with no obligation to make corresponding changes in products previously manufactured.

### LEGAL REMEDIES OF PURCHASER

THIS CROWN WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE. No action to enforce this Crown Warranty shall be commenced after expiration of the warranty period.

THIS STATEMENT OF WARRANTY SUPERSEDES ANY OTHERS CONTAINED IN THIS MANUAL FOR CROWN PRODUCTS.
12/09

# Warranty — WORLDWIDE EXCEPT USA & CANADA




## SUMMARY OF WARRANTY

Crown International, 1718 West Mishawaka Road, Elkhart, Indiana 46517-4095 U.S.A. warrants to you, the ORIGINAL PURCHASER and ANY SUBSEQUENT OWNER of each NEW Crown[1] product, for a period of three (3) years from the date of purchase by the original purchaser (the "warranty period") that the new Crown product is free of defects in materials and workmanship, and we further warrant the new Crown product regardless of the reason for failure, except as excluded in this Warranty.

*Warranty is only valid within the country in which the product was purchased.*

[1]**Note:** If your unit bears the name "Amcron," please substitute it for the name "Crown" in this warranty.

## ITEMS EXCLUDED FROM THIS CROWN WARRANTY

This Crown Warranty is in effect only for failure of a new Crown product which occurred within the Warranty Period. It does not cover any product which has been damaged because of any intentional misuse, accident, negligence, or loss which is covered under any of your insurance contracts. This Crown Warranty also does not extend to the new Crown product if the serial number has been defaced, altered, or removed.

## WHAT THE WARRANTOR WILL DO

We will remedy any defect, regardless of the reason for failure (except as excluded), by repair, replacement, or refund. We may not elect refund unless you agree, or unless we are unable to provide replacement, and repair is not practical or cannot be timely made. If a refund is elected, then you must make the defective or malfunctioning product available to us free and clear of all liens or other encumbrances. The refund will be equal to the actual purchase price, not including interest, insurance, closing costs, and other finance charges less a reasonable depreciation on the product from the date of original purchase. Warranty work can only be performed at our authorized service centers. We will remedy the defect and ship the product from the service center within a reasonable time after receipt of the defective product at our authorized service center.

## HOW TO OBTAIN WARRANTY SERVICE

You must notify your local Crown importer of your need for warranty service within the warranty period. All components must be shipped in the original box. Corrective action will be taken within a reasonable time of the date of receipt of the defective product by our authorized service center. If the repairs made by our authorized service center are not satisfactory, notify our authorized service center immediately.

## DISCLAIMER OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

YOU ARE NOT ENTITLED TO RECOVER FROM US ANY INCIDENTAL DAMAGES RESULTING FROM ANY DEFECT IN THE NEW CROWN PRODUCT. THIS INCLUDES ANY DAMAGE TO ANOTHER PRODUCT OR PRODUCTS RESULTING FROM SUCH A DEFECT.

## WARRANTY ALTERATIONS

No person has the authority to enlarge, amend, or modify this Crown Warranty. This Crown Warranty is not extended by the length of time which you are deprived of the use of the new Crown product. Repairs and replacement parts provided under the terms of this Crown Warranty shall carry only the unexpired portion of this Crown Warranty.

## DESIGN CHANGES

We reserve the right to change the design of any product from time to time without notice and with no obligation to make corresponding changes in products previously manufactured.

## LEGAL REMEDIES OF PURCHASER

No action to enforce this Crown Warranty shall be commenced after expiration of the warranty period.

THIS STATEMENT OF WARRANTY SUPERSEDES ANY OTHERS CONTAINED IN THIS MANUAL FOR CROWN PRODUCTS.
12/09

# PRODUCT REGISTRATION

Crown Audio, Inc.
1718 W. Mishawaka Rd.
Elkhart, IN 46517-9439
Phone: 574-294-8000
Fax: 574-294-8329
www.crownaudio.com

Online registration is also available at http://crownweb.crownintl.com/webregistration.

*Warranty is only valid within the country in which the product is purchased.*

When this form is used to register your product, it may be mailed or faxed.

Crown Audio, Inc.
1718 W Mishawaka Rd
Elkhart IN 46517

Fax: 574-294-8329

Please note that some information is required. Incomplete registrations will not be processed. * Indicates required information.

**OWNER'S INFORMATION – PLEASE PRINT**

* First name:_____ Middle initial:_____ * Last name:_____

Company: _____

* Mailing address:_____

* City: _____ * State:_____ * Zip Code:_____

* Country: _____ E-mail address:_____

* Phone # (include area code): _____ Fax #:_____

CUT ON THIS LINE

**PRODUCT INFORMATION**

| * MODEL<br>e.g. IT8000, CDi1000, PCC16 | * SERIAL #<br>e.g. 800000000 | * PURCHASE DATE<br>mo/day/yr |
|---|---|---|
| _____ | _____ | ____/____/____ |
| _____ | _____ | ____/____/____ |
| _____ | _____ | ____/____/____ |
| _____ | _____ | ____/____/____ |

Product purchased from: *(Business/Individual) _____ Country:_____

Comments: _____

_____

_____

# Crown Audio Factory Service Information

Shipping Address: Crown Audio Factory Service, 1718 W. Mishawaka Rd., Elkhart, IN 46517

**PLEASE PRINT CLEARLY**

SRA #:_____ (If sending product to Crown factory service.)

Model:_____ Serial Number: _____ Purchase Date:_____

**PRODUCT RETURN INFORMATION**

Individual or Business Name: _____

Phone #: _____ Fax #:_____ E-Mail:_____

Street Address (please, no P.O. Boxes): _____

City: _____ State/Prov:_____ Postal Code: _____ Country:_____

Nature of problem: _____

_____

_____

_____

_____

Other equipment in your system: _____

If warranty is expired, please provide method of payment. Proof of purchase may be required to validate warranty.

**PAYMENT OPTIONS**

☐ I have open account payment terms. Purchase order required. PO#: _____ ☐ COD

☐ Credit Card (Information below is required; however if you do not want to provide this information at this time, we will contact you when your unit is repaired for the information.)

Credit card information:

Type of credit card: ☐ MasterCard ☐ Visa ☐ American Express ☐ Discover

Type of credit card account: ☐ Personal/Consumer ☐ Business/Corporate

Card # _____ Exp. date:_____ *Card ID #:_____

*Card ID # is located on the back of the card following the credit card #, in the signature area. On American Express, it may be located on the front of the card. This number is required to process the charge to your account. If you do not want to provide it at this time, we will call you to obtain this number when the repair of your unit is complete.

Name on credit card: _____

Billing address of credit card: _____

_____

_____

# Notes


crown
Harman International