

**lexicon**<sup>®</sup>

*ZX-7 / RX-7 Power Amplifier  
User Guide*

## 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 another apparatus (including amplifiers) that produces 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 are 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. Main Plug is considered to be the disconnect device for this product and shall remain readily operable.
12. Only use attachments/accessories specified by the manufacturer.
13. Use only with the 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.
14. Unplug this apparatus during lightning storms or when unused for long periods of time.
15. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as when a 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.
  - Refer to the manufacturer's operating instructions for power requirements. Be advised that different operating voltages may require the use of different line cord and/or attachment plug.
  - Do not install the unit in an unventilated rack, or directly above heat-producing equipment such as power amplifiers. Observe the



maximum ambient operating temperature listed in the product specification.

- Never attach audio power amplifier outputs directly to any of the unit's connectors.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and radiates radio frequency energy and, if not installed and used in accordance with the instructions, may 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:

- Re-orient or relocate the receiving antenna.
- Increase the separation between the equipment and the 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 electronic technician for help.

### WARNING

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. Do not place objects containing liquid, such as vases, on this apparatus.

This triangle, which appears on your component, alerts you to the presence of uninsulated, dangerous voltage inside the enclosure - voltage that may be sufficient to constitute a risk of shock.



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



This triangle, which appears on your component, alerts you to important operating and maintenance instructions in this accompanying literature.



**H** A Harman International Company

Lexicon Inc.  
3 Oak Park Drive  
Bedford, MA 01730-1413 USA  
Tel 781-280-0300  
Fax 781-280-0490  
[www.hsgav.com](http://www.hsgav.com)

Customer Service  
Telephone: 781-280-0300  
Fax: 781-280-0499  
email: [csupport@hsgav.com](mailto:csupport@hsgav.com)

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## DOCUMENTATION CONVENTIONS

This document contains general safety, installation and operation instructions for the RX-7 and ZX-7 Power Amplifiers. It is important to read this user guide before attempting to use the product. Pay particular attention to safety instructions.

The following symbols are used in the document:



Appears on the component to indicate the presence of uninsulated, dangerous voltage inside the enclosure – voltage that may be sufficient to constitute a risk of shock.



Appears on the component to indicate important operating and maintenance instructions in the accompanying literature.

**WARNING**

Calls attention to a procedure, practice, condition or the like that, if not correctly performed or adhered to, could result in injury or death.

**CAUTION!**

Calls attention to a procedure, practice, condition or the like that, if not correctly performed or adhered to, could result in damage or destruction to part or all of the product.

**Note:**

Calls attention to information that is essential to highlight.

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# 1

## *Getting Started*

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## ABOUT THE ZX-7 AND RX-7

Congratulations and thank you for purchasing your new Lexicon Power Amplifier. This is a reference-quality amplifier designed to meet the highest standards of power and performance under the most extreme operating conditions. Equipped with advanced thermal, current, DC, and speaker protection, your new amplifier delivers reliable and exceptional performance with most loudspeakers, including mismatched, reactive, and unusual loads. With embedded protection against short circuits, component failures, mis-wiring, and internal faults, the incredible power and wide-ranging flexibility of the ZX-7 and RX-7 amplifiers confirm that they are at home in the most sophisticated and demanding home theaters.

Both the ZX-7 and RX-7 are fully balanced power amplifiers from input to output with completely symmetrical circuit design. In other words, each channel consists of two complete amplifier circuits; one driving the positive input signal and the other driving the negative input signal. With 7 channels, this translates into 14 separate amplifier circuits per chassis. The advantage of this topology over single-ended designs is that it exhibits lower noise, lower distortion, immunity from stray electronic fields and anomalies in the input signal from outside interference. This results in significant audible benefits including increased overall clarity and more pronounced differences between soft and loud passages. Internally, the ZX-7 and RX-7 both utilize two massive toroidal transformers and lots of filter capacitance to ensure rock-solid low-frequency reproduction and ample power reserves.

The ZX-7 delivers 300 Watts per channel into 8 Ohms, while the RX-7 delivers 200 Watts per channel into 8 Ohms.

Equipped with gold-plated speaker output connectors, the rear panel includes balanced or unbalanced audio input via RCA and XLR connectors. A trigger input connector allows the amplifiers to

be controlled with associated components such as the MC-12HD or MC-8 Digital Controllers. The ZX-7 and RX-7 amplifiers include advanced optically coupled protection for each channel.

In order to receive the maximum peak performance from your Lexicon amplifier, please take a few minutes and completely read this manual. This important information will help you make certain that these Lexicon amplifiers are properly configured for operation with the rest of the equipment within your system.

## PRODUCT REGISTRATION

Please register your new amplifier within 15 days of purchase. Register online at [www.harman specialtygroup.com/registration](http://www.harman specialtygroup.com/registration) or complete and return the product registration card attached to the back cover of this user guide. Retain the sales receipt as proof of warranty coverage.

## HIGHLIGHTS

- ZX-7: 300 Watts per channel @ 8 Ohms  
RX-7: 200 Watts per channel @ 8 Ohms
- Dual oversized toroidal power transformers with extraordinarily low DC resistance and thermal protection
- High-power supply voltage for extra headroom at the outputs
- Stable with mismatched, reactive, or unusual loads
- Thermal protection against overheating
- Speaker protection against DC and frequencies below 10Hz
- Protection against short circuits, device failures, mis-wiring, and internal faults
- Trigger input for power control from an external device
- RCA and XLR inputs
- Gold plated input and output connectors
- Rack-mount option available
- Noise elimination
- Delayed audio turn-on to eliminate noises from driving equipment
- Completely symmetrical circuit design which ensures optimal audio sonality
- Hefty power supplies with lots of filter capacity ensures rock-solid bass
- High damping factor (no output relays) ensure realistic, impressive bass transients
- Advanced protection circuitry ensures reliability under any sort of user abuse

## INSTALLATION CONSIDERATIONS

To ensure optimal performance, pay particular attention to the instructions below and to other precautions that appear throughout this user guide.

**Do** be careful when moving the amplifier, as it is very heavy.

**Do** install the ZX-7/RX-7 on a solid, flat, level surface such as a table or shelf. The ZX-7/RX-7 can also be installed in a standard 19-inch equipment rack using an optional rack-mount kit available from an authorized Lexicon dealer.

**Do** select a dry, well-ventilated location out of direct sunlight.

**Do Not** install the ZX-7/RX-7 on a surface that is unstable or unable to support all four feet.

**Do Not** expose the ZX-7/RX-7 to high temperatures, humidity, steam, smoke, dampness or excessive dust. Avoid installing the amplifier near radiators and other heat-producing appliances.

**Do Not** install the ZX-7/RX-7 near unshielded TV or FM antennas, cable TV decoders, or other RF-emitting devices that might cause interference.

**Do Not** place the ZX-7/RX-7 on a thick rug or carpet, or cover the ventilation holes in the chassis, as this might prevent proper cooling.

**Do Not** place the ZX-7/RX-7 on a windowsill or any location exposed to direct sunlight.

**Do Not** stack the ZX-7/RX-7 directly above heat-producing equipment such as another power amplifier.



# 2

## *Basic Operation*

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## FRONT-PANEL OVERVIEW

The ZX-7 front panel is shown below. The RX-7 front panel is shown on page 2-3. The standby button (1) is the only front-panel control on both amplifier models.



## STANDBY BUTTON

Activates and deactivates standby mode when the ZX-7/RX-7 amplifier is powered on with the rear panel power switch. The standby button (1) performs no function when the amplifier is powered off with the rear panel power switch.

When the amplifier is on, pressing the standby/on button activates standby mode and deactivates the power amplifier. While in standby mode, the front panel LED is red. Power is still supplied to the ZX-7/RX-7 when it is in standby mode.

When the unit is in standby, pressing the standby/on button deactivates standby mode and activates the power amplifier. While the ZX-7/RX-7 is activated, the front panel LED is blue.

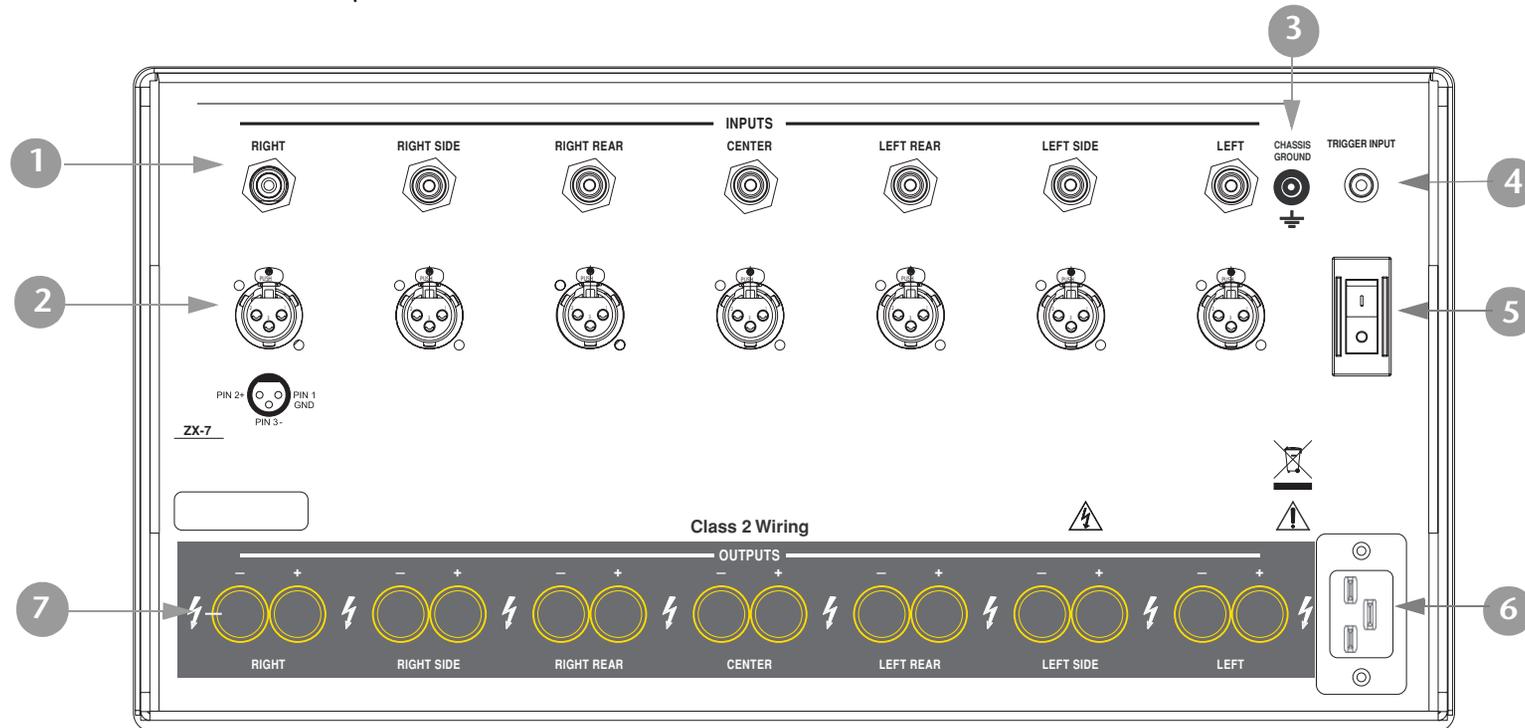
*Note:*

*When the status of the ZX-7/RX-7 changes or is powered up, there may be a delay in audio output and relay clicks may be audible. This is normal operation.*



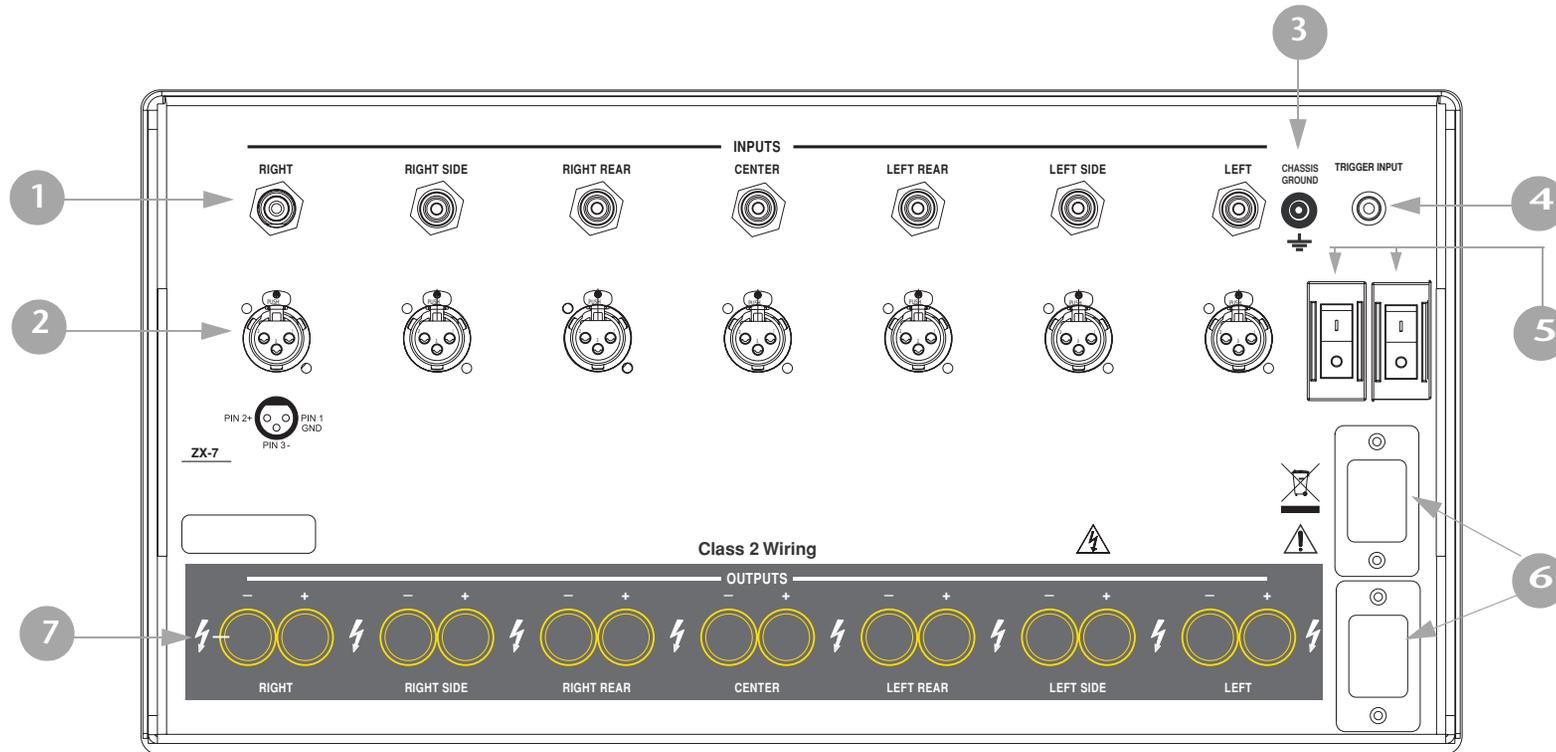
## REAR-PANEL ZX-7 230 VAC OVERVIEW

The ZX-7 230 VAC rear panel is shown below. The ZX-7 120 VAC rear panel is shown on page 2-5. The numbers in the rear-panel illustrations correspond with the numbered description items.



- |                                  |  |
|----------------------------------|--|
| 1. Unbalanced Input Connectors   | 5. Master Power Switch/Circuit Breaker |
| 2. XLR Balanced Input Connectors | 6. AC Power Connector                  |
| 3. Chassis Ground                | 7. Speaker Output Connectors           |
| 4. Remote Trigger                |  |

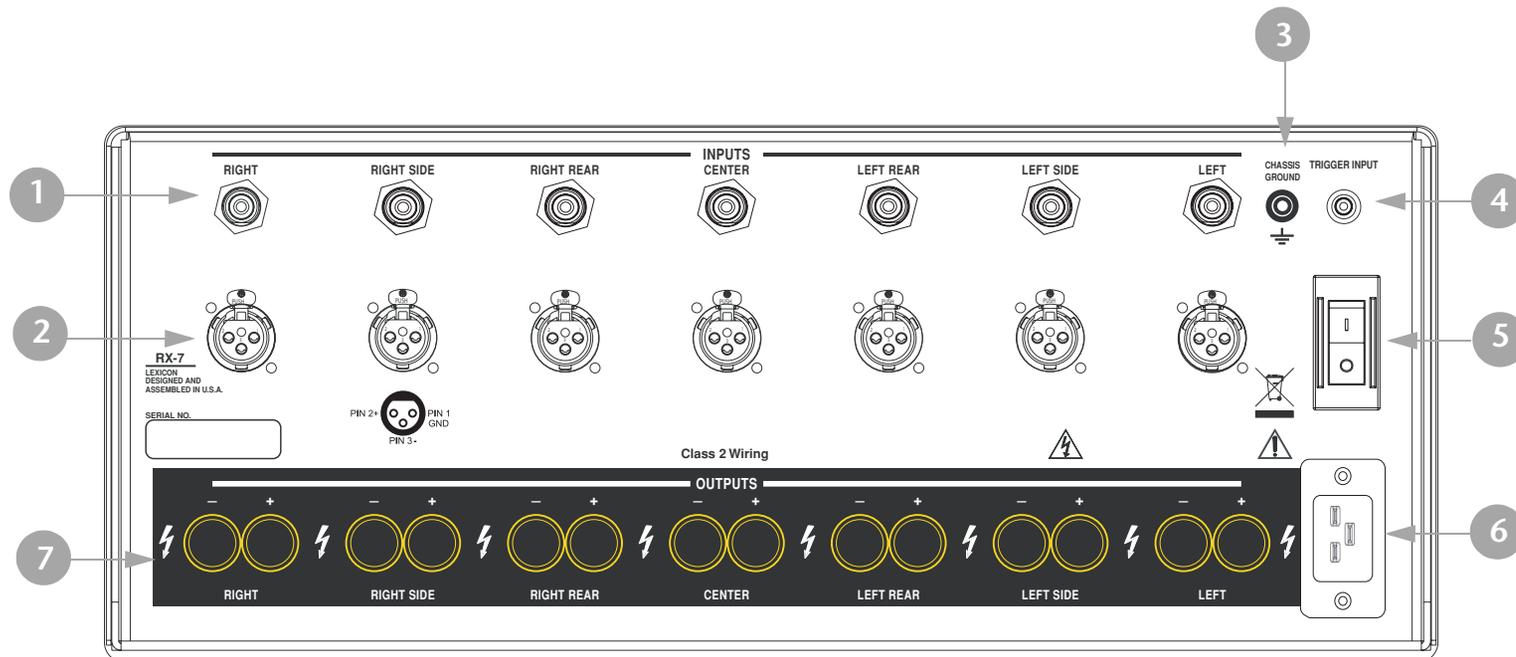
### REAR-PANEL ZX-7 120 VAC OVERVIEW



1. Unbalanced Input Connectors
2. XLR Balanced Input Connectors
3. Chassis Ground
4. Remote Trigger

5. Master Power Switch/Circuit Breaker
6. AC Power Connector
7. Speaker Output Connectors

## REAR-PANEL RX-7 OVERVIEW

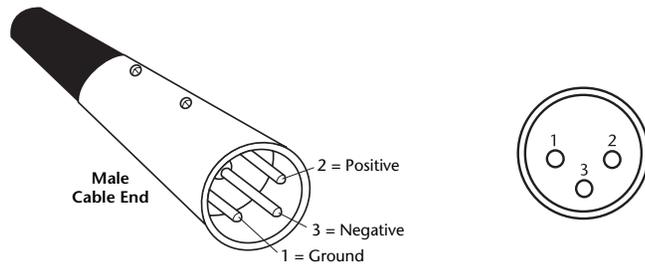


- |                                  |  |
|----------------------------------|--|
| 1. Unbalanced Input Connectors   | 5. Master Power Switch/Circuit Breaker |
| 2. XLR Balanced Input Connectors | 6. AC Power Connector                  |
| 3. Chassis Ground                | 7. Speaker Output Connectors           |
| 4. Remote Trigger                |  |

### 1 & 2 UNBALANCED/BALANCED INPUT 1 TO 7 CONNECTORS

Provides audio input for the speakers connected through the unbalanced (RCA) inputs or balanced (XLR) inputs.

The illustration below shows the appropriate cable pin-out for XLR connectors.



#### Caution!

**Never make or break connections to the ZX-7/RX-7 unless the ZX-7/RX-7 and all associated components are powered off.**

#### WARNING

**Do not connect the outputs of one channel to the outputs of other channels or to other amplifiers.**

### 3 CHASSIS GROUND

Provides a means of grounding the power amplifier to another component within your configuration in order to eliminate ground loop.

### 4 REMOTE TRIGGER INPUT

Enables the ZX-7/RX-7 to be controlled by the MC-12HD/MC-8 or other external devices with a 3.3V DC minimum to 24V DC maximum trigger output. Connect the trigger output of the external device to the TRIGGER INPUT of the ZX-7/RX-7 amplifier. The ZX-7/RX-7 will automatically respond when the external device is powered on and off. When the controlling device is turned on, the amplifier will turn on after a delay. This delay is intentional and serves to protect the speakers while the unit stabilizes. During start-up, you may hear relay clicking. This is normal operation

### 5 MASTER POWER SWITCH

Connects and disconnects power from the AC Input Connector to the Amplifier Power Supply. When this switch is on, the front panel standby/on LED illuminates. When it is off, the front panel standby/on button will not function. Set this switch to off when making or breaking connections to the amplifier. The Master Power Switch also serves as a breaker.

To power on the ZX-7/RX-7, press the rear panel master power switch. The ZX-7 120V AC includes 2 power switches. You must power both switches on or off. When powered on, the front panel LED will light. There will be a delay from the time the power is turned on until the power is applied to the speakers. This is normal operation and protects the speakers from potential damage while the unit stabilizes. You may hear a relay click during start-up, which is also normal operation.

Your power amplifier is supplied with a heavy-duty magnetic circuit breaker. With the ZX-7 120V AC unit, there are 2 heavy duty magnetic circuit breakers. If power to the amplifier is interrupted, inspect the circuit breaker on the rear of the unit. If the circuit breaker is in the OFF position you can reset it to the ON position to

restore AC power. If the circuit breaker immediately trips to the OFF position, unplug the amplifier from the AC power source and contact Lexicon Customer Service.

**Note:**

*The Class 2 Wiring label is required for any unit in which the audio output power exceeds 10W per channel under normal operating conditions or if the unit is intended to be installed or connected by a skilled person.*

**CAUTION!**

**When the ZX-7/RX-7 master power switch is switched off or there is a power outage, the state of the unit remains the same when power is restored. If in standby mode (red LED) when the power is removed, it will remain in standby mode when power is restored. If the unit is in active mode (blue LED) and power is removed, it will remain activated when power is restored. It is recommended that the ZX-7/RX-7 be set to standby mode before being powered off to prevent potential damage to the unit or your speakers. If the ZX-7/RX-7 is not trigger-connected to a controlling device, such as the MC-12HD/MC-8 which comes out of power loss and recovery in standby mode with a known volume setting, there is a potential for damage to the speakers if power is lost and restored with the ZX-7/RX-7 in active mode.**

## 6 AC POWER CONNECTOR

The AC input connector provides power to the unit with the supplied power cord. The 120 VAC version of the RX-7 is supplied with a 20 Amp power cord with a NEMA-5-20P plug on one end. The 120 VAC version of the ZX-7 is supplied with a two 15 Amp power cords with standard NEMA-5-15P plugs on one end. The NEMA 5-20P power cord has a different prong configuration than the average typical 15A household plug.

**WARNING**

**The 120 VAC version of the RX-7 requires a dedicated circuit with a single 20 Amp outlet installed. The 20 Amp outlet has a different prong configuration from the 15 Amp outlet. Dedicated circuits typically are connected directly to the service entrance of the building.**

**The 120 VAC version of the ZX-7 has two power cords. Each power cord must be plugged in to a separate 15 Amp circuit. Separate circuits typically are connected to different circuit breakers at the service entrance of the building.**

**Do not attempt these wiring changes by yourself, instead hire a licensed qualified electrician.**

**CAUTION!**

**Never make or break connections to the ZX-7/RX-7 unless the ZX-7/RX-7 and all associated components are powered off.**

## 7 SPEAKER OUTPUT CONNECTORS

Provide audio output for the speakers. Output connectors can accept bare speaker wires, or most spade connectors. When using bare speaker wires, loosen the connector, insert the wire into the top of the receptacle, then tighten the connector. The same procedure should be used for spade connectors.

Use heavy gauge speaker cable to ensure low-impedance connections between the amplifier and the speakers. Observe correct speaker polarity.

## POWER CONTROL CONNECTIONS

The ZX-7/RX-7 features a built-in remote power-on system that will automatically switch the amplifier on when another device in the system is switched on.

### REMOTE TRIGGER POWER ON

**How to make connections for remote power-on using components equipped with a DC trigger jack:**

Using an accessory cable with a 1/8" mono mini-plug and the correct connector specified for your source device, follow the procedure below to connect the trigger-output jack on the rear of the source device to the ZX-7/RX-7 rear panel TRIGGER INPUT.

**To install the Trigger Cable:**

- Power the controlling source and amplifier off.
- Connect the trigger cable to the controlling source and the amplifier.
- After the connections are made, power on the controlling source and then the amplifier. After the source unit is fully powered up, the LED on the amplifier should be in the **ON** state, **BLUE**. If the amplifier is in the standby mode, **RED**, press the standby/on button on the front panel until the amplifier is in the **ON** state, **BLUE**.
- Verify the trigger is working by putting the source unit into standby mode. The amplifier after a short delay will also go into the standby mode, **RED** LED.
- Once you have verified that the trigger cable is working, only use the source unit to power on and off your amplifier.

**WARNING**

**When installing the trigger cable, never have the controlling source or amplifier powered on. Doing so will cause the trigger device to work improperly and could cause damage to both the source and amplifier.**

*NOTE:*

*The trigger cable supplied has a 1/8" connector on both ends. In order for this cable to be used with the MC-12HD or MC-8, you must modify the cable. The cable has an insulated center conductor with a braided shield surrounding it. These are protected by the outer black jacket. The inner conductor is the positive (+) lead and the braided shield is the negative (-) lead. Snip the connector off one end of the trigger cable and remove about 3/4" of the outer black jacket. Be careful not to nick or cut the braided shield strands. Carefully unweave the braided shield and twist the loose strands into a tight group. Strip about 1/4" of the insulation off the center conductor. Insert this into the (+) terminal of the powered source. Insert the twisted group of shield braid wires into the (-) terminal of the powered source. Fasten securely. You should also use an electrical meter if possible.*

## REMOTE POWER ON WITH EXTERNAL AC TO DC POWER CONVERTER

If your preamplifier, processor or receiver does not have a dedicated trigger jack, it is still possible to activate the unit for automatic power on when a switched outlet is available on the source device rear panel. To control the ZX-7/RX-7 in this instance, a small AC to DC power converter capable of delivering a 3.3V DC minimum to 24V DC maximum signal is required. The DC voltage should terminate in a standard 1/8" mini-plug.

**How to make connections for remote power-on using external AC to DC Power converter:**

1. Plug the AC adapter into a switched outlet that will be activated when you wish to have the amplifier power on. This may be the switched outlet at the rear of another A/V product.
2. Connect the 1/8 mini-plug from the adapter to the ZX-7/RX-7 rear panel TRIGGER INPUT. The ZX-7/RX-7 will now turn on and off automatically, depending on the status of the controlling device.

## POWER CONNECTION SAFETY

After all audio and system connections have been made, connect the power cord to an AC power source. Be sure that the ZX-7/RX-7 is powered off and that the device connected to the remote trigger input is off when connecting the power cord and plugging it into an AC outlet.

### WARNING

**Do not plug the ZX-7/RX-7 directly into the "Switched Accessory" outlet of another device! These outlets are intended for use with low current draw products such as tuners, CD players or cassette decks. These outlets are not designed to handle the high current draw of a power amplifier. Using these outlets for a power amplifier is a significant safety hazard.**

## SOURCE COMPONENT CONNECTIONS & OUTPUT SETTINGS

Make all connections before powering on the ZX-7/RX-7. It is also recommended that you power on the source components and processor in your system before powering on the ZX-7/RX-7. This avoids the possibility of any pops or transients from other components being amplified and sent to the speakers. Always start with a low volume level on the controller or preamplifier to avoid potential damage to the speakers.

All volume and level adjustments are made on your preamplifier, controller or surround processor. When using the ZX-7/RX-7 for the first time, you should re-set the output levels of the channels on your processor.

## **PROTECTION MODE**

The ZX-7/RX-7 is equipped to protect itself against potentially damaging conditions such as overheating, mis-wiring and electrical failures. Under such conditions, the ZX-7/RX-7 will enter a protection mode. When this occurs, the unit will mute to protect itself and speakers from potential damage.

### **If the ZX-7/RX-7 enters protection mode (mutes itself):**

1. Immediately power off the unit with the rear panel master power switches and disconnect all AC power cords.
2. Examine all speaker connections to ensure there are no shorts.

Power on the ZX-7/RX-7. If the unit remains in a muted state, contact Lexicon customer service for assistance.



# 3

## *Troubleshooting & Maintenance*

Troubleshooting.....3-2

Maintenance.....3-3

## TROUBLESHOOTING

### The amplifier does not power on.

1. Check the rear panel circuit breakers. Ensure breakers have not been tripped.
2. Attempt to power on the amplifier with the front panel **Standby** button.
3. Make sure all rear panel power switches are set to the I (on) position.
4. Examine the power cords to ensure a good connection between the rear panel AC input connector and the wall outlet.
5. Check the wall outlet.

### The TRIGGER INPUT is connected to an external device, but the amplifier does not power on and off with the external device.

1. Verify the trigger cable is connected at both ends and verify that the trigger cable is connected to the right device. Also re-verify the trigger installation instructions as instructed in Section 2.
2. Verify the trigger level.

### One or more channels is not passing audio.

1. Reduce system volume level.
2. Power the amplifier off.
3. Check input connections.
4. Check speaker connections.

5. Allow the amplifier to cool before powering it on again.

### Audio sounds out-of-phase.

Check to ensure proper speaker wiring.

### Audio levels differ.

Check the settings on your preamp, processor or controller.

### Audio plays, then cuts off.

Check speaker connections for short circuits at the amplifier and speaker.

### A humming sound is present in the audio.

Audible hum, or a discernible low frequency noise is one of the most common problems within audio/video systems. This problem, even when the volume is at a low level, is usually caused by a common problem known as "ground loops." A ground loop occurs when there is a difference in ground voltages between two or more components that are connected electrically.

In most cases, one or more of the following suggestions below will solve the hum problem.

1. If a cable TV connection is present, disconnect the cable from the wall outlet. If this eliminates the humming sound, a ground loop isolation device is required. Contact your dealer or cable provider for assistance.
2. Disconnect components one at a time to isolate the problem. Once the problem is identified, make sure the associated

component is properly grounded and connected to the same electrical ground as the ZX-7/RX-7.

3. Turn off all components within your system, and then disconnect the input cable on the amplifier. Turn the amplifier back on. If the hum disappears the fault may be with the input cable that is being used. Make sure the cables are properly shielded or use a cable that has better shielding. Make sure the cable is not running or laying on top of any AC power cords.
4. Ground loop problems may also be caused by poor grounding of the electrical system within your home or may be caused by faulty earth grounds in your home's electrical system. To isolate the problem, try unplugging components with three prong grounded power cords one at a time to see if one or all are causing the problem.

In the past, cold water pipes and other utilities were often used for grounds. These items may not be still valid because of corrosion of the existing pipes and the installation and use of PVC piping. Please check with a licensed electrician for further evaluation.

**If all else fails. . .**

1. Contact an authorized Lexicon dealer.
2. Contact Lexicon Customer Service at 781-280-0300
3. Visit [www.lexicon.com](http://www.lexicon.com) for frequently asked questions and additional troubleshooting information.

**Note:**

Visit the knowledge base at <http://www.lexicon.com/kbase> for answers to frequently asked questions and additional troubleshooting information.

## **MAINTENANCE**

Routine maintenance should be performed on a periodic basis. Clean the exterior surfaces of the unit with a soft, dry, lint-free cloth. Do not use alcohol, benzene, acetone-based cleaners, or strong commercial cleaners. Do not use a cloth made with steel wool or metal polish. If the unit is exposed to a dusty environment, a low-pressure blower may be used to remove dust from its exterior.



# A

## *Appendix*

Specifications ..... A-2

Declaration of Conformity ..... A-3

## SPECIFICATIONS

Specifications are subject to change without notice.

Audio Input Connectors	
ZX-7 / RX-7	7 RCA, 7 XLR

Audio Output Connectors	
ZX-7 / RX-7	7 pairs of gold-plated binding posts

ZX-7 Performance	
Output Power	300W RMS per channel into 8 Ohms from 20 Hz -20 kHz
Power Requirements	Two circuits each rated 120 VAC 12A or one circuit rated 230 VAC 8A 50/60 Hz
Frequency Response	20Hz to 20 kHz +0.1dB / -0.2 dB
THD	Less than 0.05% at full rated FTC power 20 Hz - 20 kHz Less than 0.005% at full FTC power at 1 kHz
Signal-to-Noise Ratio	Greater than -110 dB below rated full rated power A-Weighted
IM Distortion	Less then 0.03% at full rated power
Crosstalk	Greater than -80 dB @ 1 KHz (30k Hz bandwidth)
Damping Factor	Greater than 200 @ 20 Hz (ref 8 Ohms)
Input Sensitivity	2 volts for 300W out into 8 Ohms
Input Impedance	Minimum 10K Ohms
Gain	28 dB $\pm$ 0.5 dB

RX-7 Performance	
Output Power	200W RMS per channel into 8 ohms from 20 Hz - 20 kHz
Power Requirements	120 VAC 14A 60 Hz / 230 VAC 6A 50/60 Hz
Frequency Response	20 Hz to 20 kHz +0.1 / -0.2 dB
THD	Less than 0.05% at full rated FTC power 20 Hz - 20k Hz Less than 0.005% at full FTC power at 1 kHz
Signal-to-Noise Ratio	Greater than -105 dB below rated full rated power A-Weighted
IM Distortion	Less than .03% at full rated power
Crosstalk	Greater than -80 dB @ 1 KHz (30 kHz bandwidth)
Damping Factor	Greater than 200 @ 20 Hz (ref 8 Ohms)
Input Sensitivity	1.6 volts for 200W out into 8 Ohms
Input Impedance	Minimum 10K Ohms
Gain	28 dB $\pm$ 0.5 dB

Other	
Trigger Input	3.3V minimum- 24V maximum DC
Weight	ZX-7: 145 lbs (65.2 kg) RX-7: 105 lbs (47.2 kg)
Rack Mounting	Optional brackets are available for mounting either amplifier in standard 19-inch equipment rack.
Height	ZX-7 9.7 inches (246mm) (with feet) ZX-7 8.7 inches (221mm) (without feet) RX-7 7.95 inches (202mm) (with feet) RX-7 6.95 inches (177mm) (without feet)
Width	ZX-7 and RX-7 17.3 inches (439mm)
Depth	ZX-7 20.3 inches (516mm) (Overall with Handles) RX-7 18.5 inches (470mm) (Overall with Handles)

**DECLARATION OF CONFORMITY****Application of Council Directive(s):**

2004/108/EEC and 73/23/EEC as amended by 93/68/EEC

**Standard(s) to Which Conformity is Declared:**

EN55013:2001 + A1:2003,  
EN55020:2002 + A1:2003 + A2:2005,  
EN61000-3-3:1995 + A1:2001,  
EN60065:2002

**Manufacturer:** Harman Specialty Group  
3 Oak Park Drive  
Bedford, MA 01730-1413 USA

The equipment identified here conforms to the Directive(s)  
and Standard(s) specified above.

**Type of Equipment:** Power Amplifier

**Model:** Lexicon ZX-7 and RX-7

**Date:** March 2007

**Harman Specialty Group  
Vice President of Engineering  
3 Oak Park Drive  
Bedford, MA 01730-1413 USA  
Tel: 781-280-0300  
Fax: 781-280-0490**



# LIMITED WARRANTY

The Harman Specialty Group offers the following warranty on this product:

A valid serial number is required for warranty coverage. This warranty protects the original retail purchaser for a period of five (5) years (parts and labor) from any failure as a result of original manufacturing defects so long as:

1. The product was purchased within the 50 United States, its territories, or Canada.
2. The dealer from whom the this product was purchased was authorized to sell such products at the time of the original purchase.
3. The original, dated Bill of Sale is presented whenever service is required during the warranty period.

The balance of this warranty is transferable only if the used product is purchased from an authorized Lexicon dealer. This warranty is only valid for service within the United States, its territories, and Canada and does not apply to products purchased elsewhere. Outside of the United States, its territories, and Canada, please contact an authorized Lexicon dealer for warranty and service information.

Any Lexicon product not performing satisfactorily may be returned to the factory for evaluation. Return authorization must first be obtained by either calling or writing Customer Service before shipping the product. The customer is responsible for shipping charges to the factory. Customer Service will pay return shipping charges within the United States only in the event that the product is found to be defective as mentioned above. There are other stipulations that may apply to shipping charges.

There is no other express warranty on this product. Neither this warranty nor any other warranty, express or implied, including implied warranties of merchantability and fitness, shall extend beyond the warranty period. No responsibility is

assumed for any incidental or consequential damages. Some states do not allow limitations on how long an implied warranty lasts and other states do not allow the exclusion or limitation of incidental or consequential damages, so that the above exclusion or limitation may not apply.

Except as specified below, the Lexicon warranty covers all defects in material and workmanship. The following are not covered:

Damage caused by accident, misuse, abuse, product modification or neglect; damage occurring during shipment; damage from failure to follow instructions contained in the instruction manual; damage resulting from the performance of repairs by someone not authorized by Lexicon; damage caused by installation of parts that do not conform to Lexicon specifications; units used for other than home use; units not used for their intended purpose; any claims based on misrepresentations by the seller; products sold on an "as-is" or final sale basis; or the cost of installing, removing, or reinstalling the unit. Lexicon's liability is limited to the repair or replacement, at our option, of any defective product and shall not include incidental or consequential damages. Lexicon reserves the right to replace a discontinued model with a comparable model. Any replacement units or parts may be new or rebuilt.

NOTE: Repair of our product must be done by an authorized dealer or service center. Unauthorized repair will void the warranty and is done at the risk of the consumer.

This warranty provides specific legal rights. Other states may provide additional rights. This warranty is applicable in the United States, its territories, and Canada. Outside of the United States, its territories, and Canada, please contact an authorized Lexicon distributor for warranty and service information.

## Obtaining Service

We take great pride in selling Lexicon products through a network of well-trained dealers who are dedicated to customer satisfaction. These professionals are ideally suited to design, install, and, if the need arises, facilitate the service of high-performance electronic home entertainment systems.

Customer Service assists authorized Lexicon dealers in solving problems effectively. When purchasing Lexicon products, customers make a substantial investment in audio/video equipment of exceptional quality. In the event that service is needed, Customer Service intends to provide assistance that matches that investment.

If this Lexicon product requires service, contact an authorized Lexicon dealer for assistance. The dealer will contact Customer Service to determine the best way to rectify the situation and, if needed, to obtain return authorization in the event that the product must be returned to the factory for repair. Alternatively, customers may contact Customer Service directly to obtain return authorization. However, return authorization must be obtained before any product is shipped to the factory. Products returned without prior authorization will be refused.

When obtaining return authorization, please be prepared to provide the model, serial number, and a complete, explicit description of the problem. A copy of the original, dated Bill of Sale must be included to confirm warranty status.

Please always retain the original packing materials. This product must be properly packaged (in its original packing materials whenever possible). Improper packaging can lead to unnecessary freight damage that is not covered by either the freight carrier or the warranty. The proper return authorization must be on the outer carton for easy identification.



## PRODUCT REGISTRATION

Please register this product within 15 days of purchase. To do so, complete and return this card or register online at [www.lexicon.com](http://www.lexicon.com). Retain the original, dated Bill of Sale as proof of warranty coverage.

- Mr.       Mrs.       Ms.       Miss  
 Single       Married       Divorced       Widowed

First Name \_\_\_\_\_ Last Name \_\_\_\_\_

Company \_\_\_\_\_ Title \_\_\_\_\_

Mailing Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Telephone Number \_\_\_\_\_ Fax Number \_\_\_\_\_

Email Address \_\_\_\_\_

Product Model \_\_\_\_\_ Purchase Date \_\_\_\_\_

Version \_\_\_\_\_ Serial Number \_\_\_\_\_

Where did you purchase this product? \_\_\_\_\_

- |                                |                                       |  |
|--------------------------------|---------------------------------------|--|
| Age                            | Education                             | Household Income                           |
| <input type="radio"/> Under 18 | <input type="radio"/> High School     | <input type="radio"/> Under \$20,000       |
| <input type="radio"/> 18-24    | <input type="radio"/> College         | <input type="radio"/> \$20,000 to \$34,999 |
| <input type="radio"/> 25-34    | <input type="radio"/> Graduate School | <input type="radio"/> \$35,000 to \$49,000 |
| <input type="radio"/> 35-49    | <input type="radio"/> Certificate     | <input type="radio"/> \$50,000 to \$74,999 |
| <input type="radio"/> 50-64    |                                       | <input type="radio"/> \$75,000 to \$99,000 |
| <input type="radio"/> 65+      |                                       | <input type="radio"/> \$100,000+           |

- How did you learn about this product? Choose one:
- |                                 |  |  |
|---------------------------------|--|--|
| <input type="radio"/> Friend    | <input type="radio"/> Store salesperson  | <input type="radio"/> Advertisement              |
| <input type="radio"/> Colleague | <input type="radio"/> Store display      | <input type="radio"/> Magazine Article           |
| <input type="radio"/> Teacher   | <input type="radio"/> Received as a gift | <input type="radio"/> Own other Lexicon products |

Which of the following were most important in the selection of this product?

- |                                |                                 |                                       |                                  |
|--------------------------------|---------------------------------|---------------------------------------|----------------------------------|
| <input type="radio"/> Sound    | <input type="radio"/> Quality   | <input type="radio"/> Value for price | <input type="radio"/> Durability |
| <input type="radio"/> Features | <input type="radio"/> Brandname | <input type="radio"/> Other:          |                                  |

What are your three favorite magazines?  
 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_

What are your three favorite websites?  
 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_

What features would you like to see added to this product in the future?  
 \_\_\_\_\_

ZX-7 / RX-7 03/07



A Harman International Company

Harman Specialty Group  
 3 Oak Park Drive  
 Bedford, MA 01730-1413  
 USA

Tel 781-280-0300  
 Fax 781-280-0490  
[www.lexicon.com](http://www.lexicon.com)

Customer Service  
 Tel 781-280-0300  
 Fax 781-280-0495 (Sales)  
 Fax 781-280-0499 (Service)



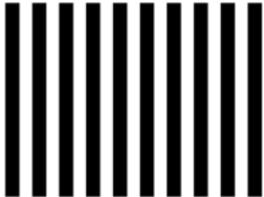
**BUSINESS REPLY MAIL**  
FIRST-CLASS MAIL PERMIT NO. 67 BEDFORD MA

POSTAGE WILL BE PAID BY ADDRESSEE

PRODUCT REGISTRATION  
HARMAN SPECIALTY GROUP  
3 OAK PARK  
BEDFORD MA 01730-9863



NO POSTAGE  
NECESSARY  
IF MAILED  
IN THE  
UNITED STATES



**Lexicon**<sup>®</sup>

A Harman International Company

3 Oak Park Drive  
Bedford, MA 01730-1413 USA  
Tel 781-280-0300  
Fax 781-280-0490  
[www.harmanspecialtygroup.com](http://www.harmanspecialtygroup.com)

Customer Service  
Telephone: 781-280-0300  
Sales Fax: 781-280-0495  
Service Fax: 781-280-0499

Product Shipments  
900 Middlesex, Bldg #6  
Billerica, MA 01821-0017 USA

Part No. 070-18130 | Rev 0