

LCD Collection
User Manual

# Audeze LCD Headphones

Congratulations on your Audeze LCD headphone purchase. Combining leading-edge planar magnetic technology with innovative acoustic design, Audeze headphones deliver the absolute best sound quality available. To get the most out of your purchase, please take the time to carefully read through this manual.

Depending on your purchase, your package may contain:

- · LCD headphone
- Single-ended cable (1/4-inch connector)
- Balanced cable (4-pin XLR connector)
- 1/4 to 1/8-inch mini adapter
- · Wood care kit
- · Warranty and registration card
- Luxury wooden showcase or ruggedized travel case

# **▲** Volume

Volume level is subjective and individuals perceive it differently. Listening to music for long periods of time at excessive levels can cause irreparable damage to your ears.

Before listening to your headphones, please reduce the volume levels of the amplifier and/or audio device. Gradually increase the volume for your headphones until desired levels are reached. Enjoy your headphones and safe listening habits.



# **Amplification**

The LCD planar magnetic headphones are very efficient. They can be used with a variety of amplifiers and sources. While it is possible to

power them with an iPod/iPhone with a mini adapter, the performance is substantially improved when properly driven from an amplified source.

Audeze suggests an amplifier capable of providing at least 1 watt of output without clipping or excessive distortion.



The LCD collection enclosures are meticulously handcrafted from either anodized aluminum or a variety of woods.

For wooden parts the rings and cups benefit from an occasional polishing (approximately every six months). Your headphones come with a preserving wood care kit. Simply apply a few dabs of the supplied oil to the polyester cloth and wipe the rings firmly. Let the oil soak in for 20 minutes and then polish the wood with a dry, soft, lint-free cloth.

Both the wood rings and earpads need occasional care to keep them in pristine condition. Along with the wood care kit we have an optional leather care kit for sale on our website.

The LCD earpads are sloped creating the optimal positioning of the headphone drivers. This renders a very natural and life-like sound. The earpads are made of high-quality lambskin leather with very soft foam inserts. A leather-free alternative is available using our microsuede option.

Upon receipt of your headphones take a few moments to fluff up the ear pads.

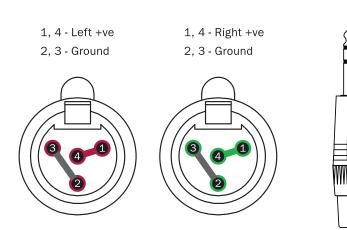


Left +ve

.Right +ve .Ground

The headband is made of spring steel and designed to provide an excellent fit and comfortable seal. When wearing the headphones adjust the height similarly on both sides so the headphones sit symmetrically on your head.

# Single-Ended 1/4-Inch Connector



The included cables have mini-XLR connectors. Look for the small R/L indicators on the cable and connect each end to its corresponding connector on the headphone. To remove the cable, push the small black button and pull firmly. The connectors are designed to lock flush with the socket.

The LCD-3, LCD-XC and LCD-X are also supplied with a high-quality balanced 4-pin connector cable as well as a single-ended 1/4-inch cable.



# Recycle



This symbol means that the product must either be sent for repairs and reused or sent for treatment and recycling through an approved disposal system. For recycling and waste disposal agents for Audeze products, contact us at support@audeze.com.

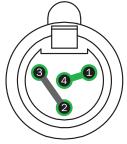
If you have any questions or issues, please contact us at support@audeze.com or visit support.audeze.com.

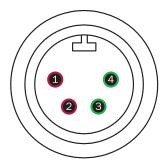
# Balanced 4-Pin Connector

- 1, 4 Left +ve
- 1, 4 Right +ve
- 1 Left +ve 3 Right +ve

- 2, 3 Left -ve
- 2, 3 Right -ve
- 2 Left -ve 4 Right -ve

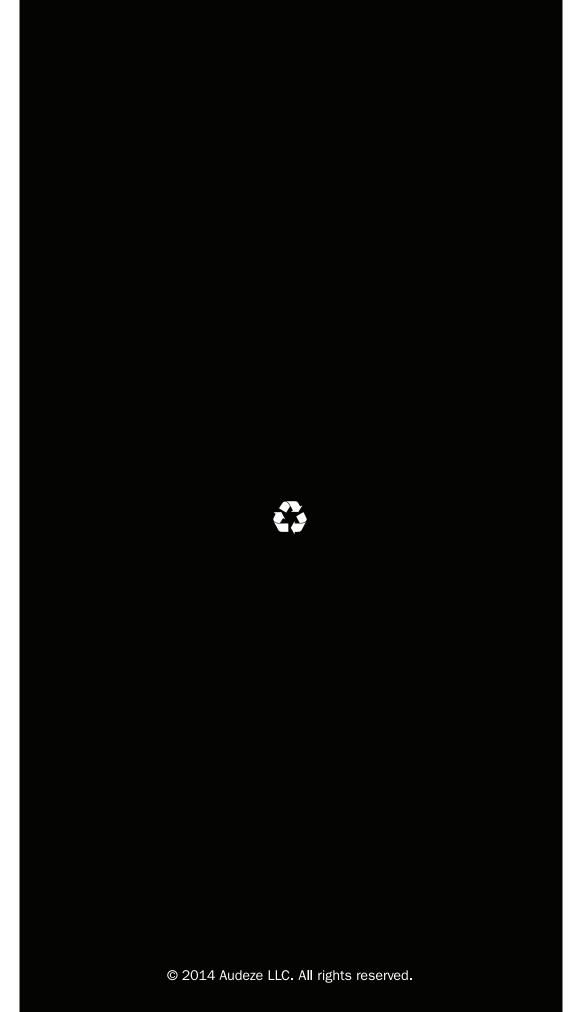








www.audeze.com







# A AUDEZE



# THE INTERSECTION OF ART AND TECHNOLOGY

At Audeze we remove the boundaries between artist and listener. Our products combine revolutionary acoustic engineering and beautiful craftsmanship to provide the finest listening experience.

Our headphones' best-in-class accuracy makes them an irreplaceable tool for those requiring the most transparent audio reproduction available. First discovered by audiophiles, now professional engineers and music producers are using our headphones as their new reference.

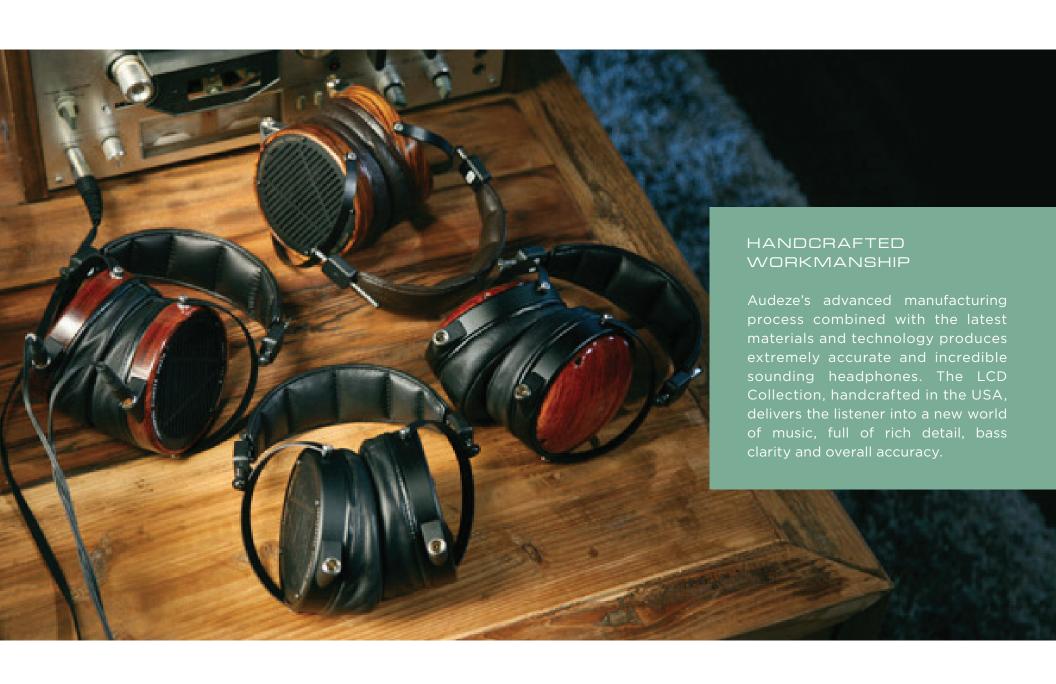
We're proud to present our product guide that briefly covers some of our technology and specifications. However, no product guide can ever do our products justice. The only way to truly appreciate our headphones is listening to them. To learn more please visit www.audeze.com



# DESIGN AND COMFORT

Our award-winning headphones are known for their signature sound created by our advanced transducer technology allied with the finest craftsmanship and hand-selected woods.

Employing unique design and advanced transducer technology, our headphones provide total comfort for hours on end. Combining legendary style with the world's most advanced planar magnetic technology, delivering the ultimate listening experience.



# THE WORLD LEADER IN PLANAR MAGNETIC HEADPHONE TECHNOLOGY

Implementing unique designs and patented technologies, Audeze is widely recognized as the industry leader, offering headphones with unparalleled performance. We achieve this by pushing the limits of technology, materials science, and engineering – always striving for sonic perfection.

The planar magnetic transducer is the heart of the Audeze headphone and has significant advantages over other designs:

- A flat, ultra-thin-film membrane creating amazing sound quality.
   We have the lowest THD (Total Harmonic Distortion) of any headphones available.
- Proprietary internal damping of transducers and headphone components effectively eliminates unwanted resonances for much clearer sound.
- Oversized magnetic structures deliver the greatest flux density of any headphone available. The greater the flux density, the better the planar membrane is driven resulting in better transient response.
- We match our drivers to within ±1 dB for the most accurate imaging and lower distortion.
- The impedance is purely resistive without fluctuation, making it an easy load for the amplifier or portable device for better performance.
- Audeze has the flattest, most accurate bass response of any headphones.





#### FLUXOR™ MAGNETIC STRUCTURE

With new, patent-pending Fluxor magnetic technology introduced in the EL-8, Audeze delivers nearly double the magnetic flux density of the highest-grade neodymium magnetic circuits. This remarkable achievement results in reduced weight with greater efficiency to work with mobile devices.

#### FAZOR™ ELEMENTS

Patent-pending Fazor technology, introduced in the LCD Collection, is also integrated into the EL-8. Fazors are special acoustical elements positioned on either side of the magnetic structure that enhances transparency by influencing sound waves generated by large planar diaphragms. Benefits include extended frequency response, improved high-frequency extension, phase response, and lowered distortion with better imaging.

#### UNIFORCE™ DIAPHRAGMS

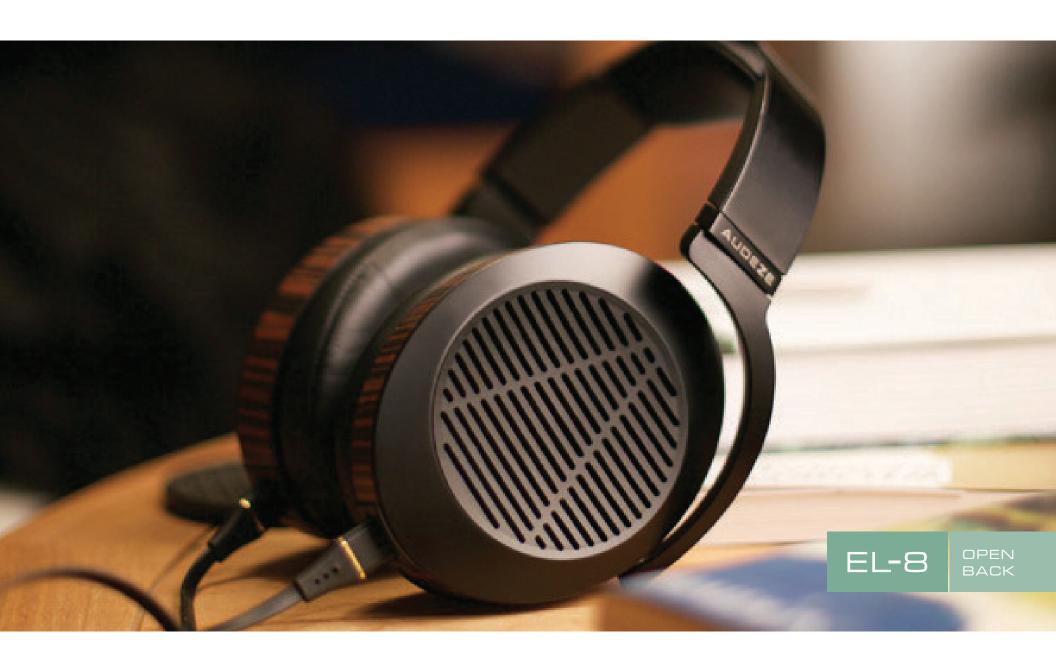
The EL-8's patent-pending Uniforce diaphragm employs an industry first; variable trace widths in the voice-coil that effectively capture variations in the magnetic field within the magnetic gaps by equalizing the forces of the individual traces, creating a uniform driving force across the diaphragm surface. This results in dramatically reduced distortion, higher resolution and improved imaging.



#### EL-8 COLLECTION

The EL-8s are a remarkable achievement in engineering, comfort and style. Its performance surpasses anything on the market in its price range. The iconic industrial design is by BMW DesignWorksUSA. The EL-8 features many of our technologies including Fluxor magnetics, Uniforce diaphragms and Fazor elements delivering deep bass, an engaging midrange, and a sweet, detailed top end. The closed-back model has all the sonic benefits of the open-back model and provides a quiet listening environment, even in noisy areas, to fully enjoy music with virtually no ambient noise. The EL-8 is sensitive enough to be driven directly by portable players and sounds even better with an external amplifier.





# SPECIFICATIONS

Open circumaural
Planar magnetic
Fluxor magnets
Neodymium
100 mm
15W (for 200ms)
>130dB
10Hz - 50kHz
<0.1% (1kHz, 1mW)
30 ohms
102dB/1mW
200mW - 4W
460g

# AUDEZE TECHNOLOGY

- Fazor elements
- Fluxor magnetic structure
- Uniforce diaphragms

# PACKAGE INCLUDES

- 2m (6.56 feet) Audeze headphone cable
- 3.5mm to 1/4in stereo adapter



# SPECIFICATIONS

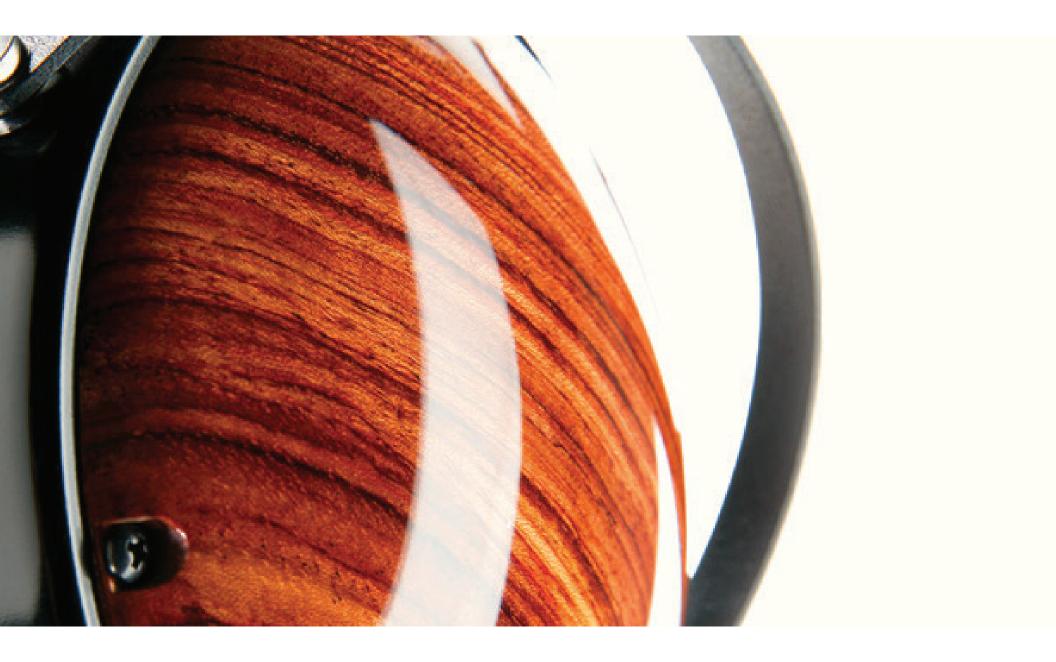
Style	Closed-back circumaural
Transducer type	Planar magnetic
Magnetic structure	Fluxor magnets
Magnet type	Neodymium
Transducer size	100 mm
Maximum power handling	15W (for 200ms)
Sound pressure level	>130dB
Frequency response	10Hz - 50kHz
Total harmonic distortion	<0.1% (1kHz, 1mW)
Impedance	30 ohms
Efficiency	100dB/1mW
Optimal power requirement	200mW - 4W
Weight	480g

# AUDEZE TECHNOLOGY

- Fazor elements
- Fluxor magnetic structure
- Uniforce diaphragms

# PACKAGE INCLUDES

- 2m (6.56 feet) Audeze headphone cable
- 3.5mm to 1/4in stereo adapter



# LCD COLLECTION

The award-winning LCD Collection, acknowledged by many as the best in the world, defined Audeze as the number one manufacturer of ultra-performance headphones. No competitor can match our powerful bass and flat response down to an amazing 20Hz, subtle dynamic gradations, ultimate detail without stridency, superb separation, or the enormous sense of space that sounds more like speakers in a room than drivers next to your ears.

Each LCD is individually tested and measured and, upon product registration, users may request their frequency response chart. Audeze headphones are handcrafted in the USA.



Our flagship headphone has been called the best in the world. At the pinnacle of our LCD Collection, the LCD-3 delivers the highest resolution music experience of all our headphones. It's sound is always musical, spacious, ultra-realistic, with powerful bass, a rich and engaging midrange, and a top end that pulls you into the music. For the best results Audeze recommends pairing the LCD-3 with a high quality external headphone amplifier.

#### SPECIFICATIONS

Style	Open circumaural	
Transducer type	Planar magnetic	
Magnetic structure	Proprietary push-pull design	
Magnet type	Neodymium	
Transducer size	106 mm	
Maximum power handling	15W (for 200ms)	
Sound pressure level	>130dB with 15W	
Frequency response	5Hz - 20kHz extended out to 50kHz	
Total harmonic distortion	<1% through entire frequency range	
Impedance	110 ohms	
Efficiency	102dB/1mW	
Optimal power requirement	1 - 4W	

#### AUDEZE TECHNOLOGY

- Fazor elements
- Large ultra thin-film diaphragms
- Double-sided magnetic structure

#### PACKAGE INCLUDES

- 2.5m 1/4in to dual 4-pin mini-XLR cable
- 2.5m 4-pin XLR to dual 4-pin mini-XLR cable
- 3.5mm to 1/4in stereo adapter
- Professional travel case

#### OPTIONS

 Lambskin or leather-free headband and earpads



The closed-back LCD-XC was created based on our core customers' feedback. It delivers all the benefits of the LCD-X while isolating the listener and reducing ambient noise for a private listening experience, a significant achievement due to the inherent challenges of enclosing our planar transducers. The LCD-XC is the finest closed-back planar available, sensitive enough to be driven directly by portable players and mobile devices, but a high quality external amplifier produces better sonic results.

#### SPECIFICATIONS

Style Closed-back circumaural	
Transducer type	Planar magnetic
Magnetic structure	Proprietary push-pull design
Magnet type	Neodymium
Transducer size	106 mm
Maximum power handling	15W (for 200ms)
Sound pressure level	>130dB with 15W
Frequency response	5Hz - 20kHz extended out to 50kHz
Total harmonic distortion	<1% through entire frequency range
Impedance	20 ohms
Efficiency	100dB/1mW
Optimal power requirement	1 - 4W

#### AUDEZE TECHNOLOGY

- Fazor elements
- Large ultra thin-film diaphragms
- Double-sided magnetic structure

#### PACKAGE INCLUDES

- 2.5m 1/4in to dual 4-pin mini-XLR cable
- 2.5m 4-pin XLR to dual 4-pin mini-XLR cable
- 3.5mm to 1/4in stereo adapter
- · Professional travel case

#### OPTIONS

 Lambskin or leather-free headband and earpads



The LCD-X is one of the most efficient headphones on the market and extracts the maximum drive out of low-powered amplifiers and portable devices. It's also the most neutral of all the LCD Collection explaining its popularity with audiophiles, recording engineers and musicians alike for its clarity and fast, accurate dynamics. With 20 ohms impedance the LCD-X is sensitive enough to be driven directly by a laptop or mobile device, however as with all headphones, a high quality external amplifier improves results.

#### SPECIFICATIONS

Style	Open circumaural	
Transducer type	Planar magnetic	
Magnetic structure	Proprieatary push-pull design	
Magnet type	Neodymium	
Transducer size	106 mm	
Maximum power handling	15W (for 200ms)	
Sound pressure level	>130dB with 15W	
Frequency response	5Hz - 20kHz extended out to 50kHz	
Total harmonic distortion	<1% through entire frequency range	
Impedance	20 ohms	
Efficiency	103dB/1mW	
Optimal power requirement	1 – 4W	

#### AUDEZE TECHNOLOGY

- Fazor elements
- Large ultra thin-film diaphragms
- Double-sided magnetic structure

#### PACKAGE INCLUDES

- 2.5m 1/4in to dual 4-pin mini-XLR cable
- 2.5m 4-pin XLR to dual 4-pin mini-XLR cable
- 3.5mm to 1/4in stereo adapter
- · Professional travel case

#### OPTIONS

 Lambskin or leather-free headband and earpads



The LCD-2 is the legendary headphone that made Audeze an industry leader. Continuous evolution and the addition of Fazor technology have enhanced its transparency and overall performance. Known for their tight, extended bass response, smooth, inviting midrange, and warm high frequencies, the LCD-2 headphones offer a listening experience that makes believers out of even casual music listeners. For the best performance The LCD-2 requires a high quality external headphone amplifier.

#### SPECIFICATIONS

Style	Open circumaural
Transducer type	Planar magnetic
Magnetic structure	Proprieatary push-pull design
Magnet type	Neodymium
Transducer size	106 mm
Maximum power handling	15W (for 200ms)
Sound pressure level	>130dB with 15W
Frequency response	5Hz - 20kHz extended out to 50kHz
Total harmonic distortion	<1% through entire frequency range
Impedance	70 ohms
Efficiency	101dB/1mW
Optimal power requirement	1 – 4W

#### AUDEZE TECHNOLOGY

- Fazor elements
- Large ultra thin-film diaphragms
- Unique magnetic structure

#### PACKAGE INCLUDES

- 2.5m 1/4in to dual 4-pin mini-XLR cable
- 3.5mm to 1/4in stereo adapter
- · Professional travel case

#### OPTIONS

- Lambskin or leather-free headband and earpads
- Bamboo composite enclosure standard or Caribbean Rosewood at additional cost



A powerhouse of a headphone amplifier combined with a high-performance DAC, the Deckard drives any headphone with power to spare. The DAC has impressive specs and handles 16 to 32-bits and sampling rates from 44.1kHz to 384kHz. There's a volume control and front-panel switches to choose gain and input so you can also use the Deckard as a great line-level preamp. The sound is exciting and dynamic with beautifully rendered tonal colors that make music come alive.

#### SPECIFICATIONS

LINE	OUT	
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Туре	Single-ended class-A
SNR	106dB A-weighted
THD+N	0.00045% at 1kHz 2VRMS A-weighted
Frequency response	5Hz - 100kHz, -1dB -0.03dB at 20Hz/-0.07dB at 20kHz
Line out impedance	50 ohms
HEADPHONE OUT	
SNR	106dB A-weighted
THD+N	>0.1%, 20Hz - 20kHz 4W with 20 ohms load A-weighted
Frequency response	5Hz - 100kHz, -1dB -0.03dB at 20Hz/-0.07dB at 20kHz
Headphone out impedance	3 ohms
Output power	4W at 20 ohms

### DAC

Sample rate	16 - 32-bit 44.1kHz 48kHz 88.2kHz 96kHz 176.4kHz 192kHz (352.8kHz, 384kHz Mac only)
System Support	Windows XP/Vista/7/8/8.1 USB2 driver requires installation Native support for Mac OS 10.6.4 and above
Gain	Low=0dB, Mid=10dB, High=20dB
AC input	AC100V: 90V - 110V AC110V: 100V - 120V (Factory default) AC230V: 210V - 230V
Dimensions	155mm x 290mm x 50mm

#### PACKAGE INCLUDES

- AC power cable
- USB interface cable





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LCD Collection
Warranty Documentation

# Audeze LCD Collection Warranty

Effective Date: September 2014

The Audeze products comprising the LCD collection below (each an "Audeze Product") are under warranty for the period listed, from the date of original retail purchase (the "Warranty Period"):

#### LCD Collection includes the following models:

LCD-2, LCD-3, LCD-X, LCD-XC

Components (applicable to each Audeze Pr	oduct
LCD Planar Drivers 3	years
Earpads/Headband1	year
Enclosure	year
Cable	year

See below for additional descriptions of the Audeze Products.

What is covered: Audeze warrants to the original purchaser that the Audeze Product will be free of defects related to manufacturing, parts, materials, and workmanship under normal and accepted use in accordance with Audeze's published guidelines. Audeze's guidelines include but are not limited to information contained in technical specifications, user manuals and service communications.

What is not covered: This warranty does not cover defects resulting from improper or unreasonable use or maintenance; cosmetic damage, including but not limited to scratches, dents and broken plastic; failure to follow operating instructions; accident; excess moisture; excess temperature; power surges; connections to improper voltage supply; unauthorized alteration or modification of original condition; damage caused by use with non-Audeze products; products purchased from unauthorized dealers; or defects incurred during transportation (claims must be presented to the carrier).

What we will do: During the Warranty Period, we will, at our sole discretion and to the extent permitted by law, repair or replace (using new or refurbished replacement parts) any defective parts within a reasonable period of time and free of charge, or (if the Audeze Product is returned during the first 30 days of the Warranty Period) refund the original purchase price for defective products.

What we will not do: Except as stated below, pay shipping, insurance or transportation charges from you to us, or any import fees, duties and taxes. If the Audeze Product is covered by this warranty and is provided to us within the first 30 days of the Warranty Period, then we will reimburse you for shipping charges. If the Audeze Product you send to us is not covered by this warranty, then we reserve the right to charge you the shipping costs, and a 15% restocking fee, for returns within the first 30 days. Product returns after 30 days from the original purchase date will not be accepted.

**Warranty eligibility statement:** In order to be eligible for service under this warranty, you must include with the repair item(s) a valid bill of sale from an authorized Audeze retailer detailing the following information:

Retailer's name
Original date of purchase
Model or SKU number of the product purchased

#### Additional product information and limitations:

**Planar drivers:** The Planar Drivers are the speaker components inside the headphones. Following the three (3) year Warranty Period, Audeze will charge for the replacement of the Planar Drivers.

**Earpads/headband:** Audeze uses non-leather microsuede or genuine leather in its products. Following the one (1) year Warranty Period on manufacturing defects on earpads and headbands, Audeze will charge for their replacement as applicable. Normal wear and tear from use over time is not covered under warranty.

**Enclosure (aluminum rings, wood rings and wood cups):** Please note that any removal of the wood cups will render the warranty provided hereunder null and void. Following the one (1) year Warranty Period, Audeze will charge for the standard cost of replacement. Variation in grain and color used in Audeze products is the nature of the wood and is natural and acceptable. Additionally, as wood ages the finished color may change. These changes in color and finish are natural wood characteristics and are not covered under this warranty.

**Cable:** Following the one (1) year Warranty Period for the cable accompanying the Audeze Product, Audeze will charge for the replacement item.

Warranty replacements: Audeze strives to improve the performance of our products, and therefore reserves the right to make changes to our design/specifications/materials at any time without notification. Audeze may, at its discretion, choose to replace the Audeze Product completely with a new or remanufactured product. In the event of product obsolescence, a suitable replacement will be chosen based upon the features, the intended use (as determined by Audeze) and the retail price of the original Audeze Product. Due to the variations found in different batches of wood, Audeze will try to match, but cannot guarantee the same color or aesthetic attributes as the original Audeze Product. All warranty replacements are guaranteed for 90 days or until the conclusion of the Warranty Period of the original Audeze Product, whichever period is greater.

**Advance product replacements:** Audeze does not provide advance replacements for Audeze Products.

**Determining authority:** Audeze will be the final determining authority for all potential warranty claims for service and/or replacement.

Other conditions/rights: EXCEPT AS PROVIDED IN THIS WARRANTY AND TO THE MAXIMUM EXTENT PERMITTED BY LAW, AUDEZE IS NOT RESPONSIBLE FOR DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR CONDITION, OR UNDER ANY OTHER LEGAL THEORY, INCLUDING BUT NOT LIMITED TO LOSS OF USE; LOSS OF REVENUE; LOSS OF ACTUAL OR ANTICIPATED PROFITS; LOSS OF GOODWILL; LOSS OF, DAMAGE TO, COMPROMISE OR CORRUPTION OF DATA; OR ANY INDIRECT OR CONSEQUENTIAL LOSS OR DAMAGE HOWSOEVER CAUSED INCLUDING THE REPLACEMENT OF EOUIPMENT AND PROPERTY.

THE FOREGOING LIMITATION SHALL NOT APPLY TO DEATH OR PERSONAL INJURY CLAIMS, OR ANY STATUTORY LIABILITY FOR INTENTIONAL AND GROSS NEGLIGENT ACTS AND/OR OMISSIONS.

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

TO THE EXTENT PERMITTED BY LAW, THIS WARRANTY AND THE REMEDIES SET FORTH ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER ORAL, WRITTEN, STATUTORY, EXPRESS OR IMPLIED. AUDEZE DISCLAIMS ALL STATUTORY AND IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND WARRANTIES AGAINST HIDDEN OR LATENT DEFECTS, TO THE EXTENT PERMITTED BY LAW. IN SO FAR AS SUCH WARRANTIES CANNOT BE DISCLAIMED, AUDEZE LIMITS THE DURATION AND REMEDIES OF SUCH WARRANTIES TO THE DURATION OF THIS EXPRESS WARRANTY AND, AT AUDEZE'S OPTION, THE REPAIR OR REPLACEMENT SERVICES DESCRIBED HEREIN. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY (OR CONDITION) MAY LAST, SO THE LIMITATION DESCRIBED ABOVE MAY NOT APPLYTO YOU.

Audeze LLC http://support.audeze.com

# Warranty Registration

\*This form may also be completed online at http://www.audeze.com/warranty

Name:	 	
Address:		
Email:		
Telephone:		
Date of purchase:		
Purchased from (Dealer / Third Party):		
Serial number:		
Please mail this form to:		

Audeze LLC. 1559 Sunland Lane, Costa Mesa, CA 92626



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