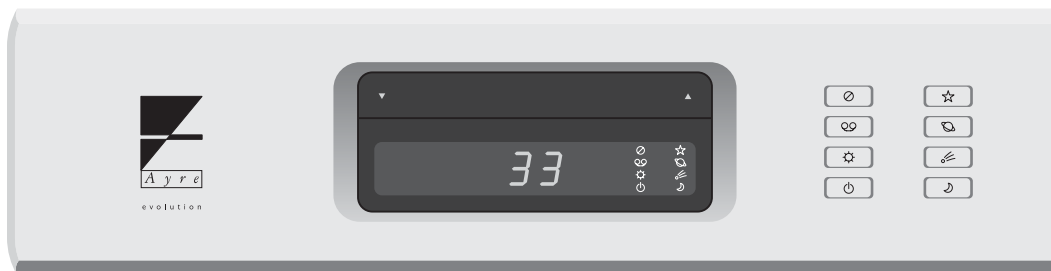


Ayre AX-7e

# Owner's Manual

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Integrated Amplifier

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Welcome to

# Ayre

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Your Ayre AX-7e offers a significant advance in the musical performance of high-fidelity equipment. The warmth and immediacy of a live performance are apparent from the first listening. The combination of superb resolution and a natural, relaxed quality will draw you into the music, time and time again.

This degree of performance has been implemented using the highest levels of workmanship and materials. You can be assured that the Ayre AX-7e will provide you a lifetime of musical enjoyment.



To our North American customers, please be sure to mail your warranty registration card and photocopy of your original sales receipt within 30 days in order to extend the warranty to five years.

# Installation

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The Ayre AX-7e is easy to connect and use. The following guidelines will ensure that the installation goes smoothly.

## Location

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*Be sure to provide at least three inches (75 mm) of air space above the unit.*

A good location for your integrated amplifier is in an open-backed cabinet or on a shelf. The AX-7e produces a moderate amount of heat during use.



**It is important to maintain an adequate supply of air flow to avoid overheating.**

*The infrared beam of the remote transmitter will also travel through glass.*

The receiver for the infrared remote control is mounted behind the display lens on the front panel. A direct line of sight from the listening position will ensure the maximum range.

## Inputs

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The Ayre AX-7e offers two pairs of balanced inputs and two pairs of unbalanced inputs. Balanced connections are made via three-pin XLR connectors,

while unbalanced connections are made via RCA connectors.



When you have a choice, a balanced connection will offer slightly higher sound quality than an unbalanced connection.

The FET switches used in the input selector circuitry offer transparent, noise-free switching, with no moving parts. Please be aware that they can be overloaded if the output voltage from the source component is too high.



**Do not use a source component that has an output level greater than 4 V rms unbalanced, or 8 V rms balanced.**

Using a source component with too great an output level will cause distortion.

*The input connectors on the rear panel are labeled to match the input selector buttons.*

In this modern era of diverse source components, it has become impractical to pre-label the inputs with the actual name of the source. Instead, the AX-7e has simple icons that allow you to easily remember the selector button associated with each source.

## Tape Outputs

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By connecting the “Tape Out” jacks on the rear of the AX-7e to a recorder with analog inputs, recordings may be made directly from the other source components connected to your amplifier. The tape outputs are switched on and off at the front panel. Please refer to the section “Controls and Operation” for further information.

*If a recorder is not installed in your system, the “Moon” input performs exactly like the other unbalanced inputs.*



If you are connecting a recorder to your system, be sure to connect its outputs to the “Moon” input of the AX-7e.

This will prevent the undesired possibility of creating a feedback loop when making a recording.

## Loudspeaker Outputs

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*The heavy-duty output terminals of the Ayre AX-7e work best with speaker cables using spade lugs.*

The Ayre AX-7e drives the loudspeakers with balanced outputs. Since none of the output terminals are grounded, connecting any of them to ground may result in damage to the amplifier.



**Do not connect the loudspeaker outputs to any speaker switch-box, accessory, or test equipment that has a common ground connection.**

## AC Power

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The AX-7e may be plugged directly into an unswitched wall outlet. Although proprietary RFI (radio-frequency interference) filtering is built into the amplifier, in some situations an AC power-line filter (such as those offered by Ayre) may provide additional sonic benefits.

*Removing the AC power from the unit will cause it to lose its memorized settings and revert to the default settings.*

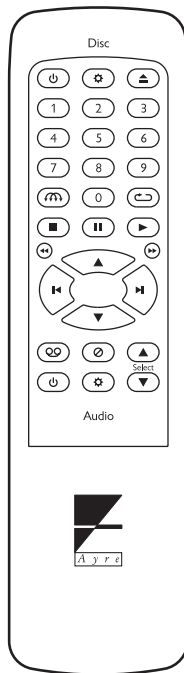
When the unit is first connected to AC power, the input selector will default to “Star”, the volume will be at “11”, the display will be “On”, and both the mute and record output will be “Off”.

## Controls and

# Operation

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The Ayre AX-7e integrated amplifier may be controlled using either the front panel buttons or the included remote control handset.



## Remote Control

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The supplied remote control handset can operate both the AX-7e integrated amplifier as well as an Ayre CD player. The controls to operate the CD player are grouped towards the top of the handset, while those for the integrated amplifier are grouped towards the bottom.

The remote control handset uses 2 x AAA batteries, which must be installed before use. Access to the battery compartment is achieved by sliding the cover on the rear of the unit.

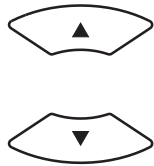
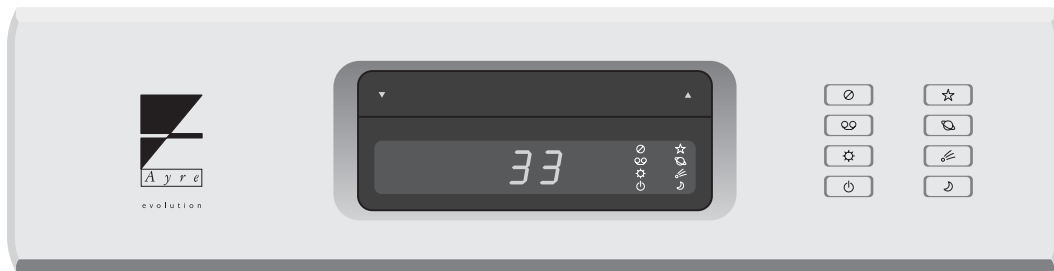
## Volume Control

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The Ayre AX-7e's exclusive volume control yields superlative sonic performance. Field-Effect Transistor (FET) switches combine with discrete



metal-film resistors to create a volume control with crystal-clear transparency and no moving parts. The volume control comprises 66 individual levels, each with a step size of 1.0 dB allowing for precise selection of the desired volume setting.



The volume level is changed by pressing the black bar above the front-panel display. The remote control may also be used to change the volume.

When the unit is first connected to AC power, the volume level defaults to “11”, a relatively low setting. After that, the current volume setting is retained in memory when changing inputs or when the unit is placed in “Standby”.



## Mute

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The mute button provides an easy way to temporarily turn the volume of the AX-7e to “zero”. The current volume control setting is retained in memory and appears on the display. When the unit is placed in “Standby”, the mute function is reset.



## Input Source Selection

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The input selector buttons are located at the right side of the unit. Icons that match the connector labels on the rear panel (Star, Planet, Comet, Moon) are used to denote the inputs.

When the unit is first connected to an AC power source, the “Star” input is selected by default. After that, the current input selection is retained in memory, even when the unit is placed in “Standby”.

The input selector utilizes sophisticated FET switches. Both the signal and ground connections to each source component are switched, so that any un-selected components are completely disconnected from the system. This avoids any problems with undesired ground loops.



## Tape Output

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*The “Tape Output” function does not operate on the “Moon” input. This avoids the undesired possibility of creating a feedback loop.*

When the “Tape Output” button is pressed, the indicator will light up and the signal from the currently selected source component will be routed to the “Tape Out” connectors. This allows a recording to be made.



Turn the “Tape Output” off unless a recording is being made. This will completely disconnect the recorder from the AX-7e (including the ground connection), avoiding the possibility of undesired ground loops.



## Display

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The display of the AX-7e may be turned off, if desired. A single blue light indicates that the display is turned off. When further commands are received, either from the front-panel buttons or the remote control, the display will be activated for a few seconds to confirm the command, and then turn off automatically. Pressing the “Display” button again will turn the display on.



## Standby

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The Ayre AX-7e is very energy-efficient, and only consumes about as much power as a standard light bulb when playing. If you wish to further reduce power consumption when not playing music, the unit may be placed in standby mode. In standby mode, the output stage is turned off and usage of electricity is minimized.

## Processor Pass-Through

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When using the Ayre AX-7e in a surround-sound system for home theater, it is desirable to use the “Processor Pass-Through” mode. This mode allows your two-channel music sources to be routed directly through the AX-7e, avoiding the sonic degradation of most processors, and at the same time allows the front two channels of the theater system to integrate with the AX-7e with the touch of a single button.

If you are using a surround-sound processor, connect the front left and front right outputs of the processor to one of the inputs on the AX-7e. Please note that the AX-7e can accept either balanced or unbalanced signals.

To activate the “Processor Pass-Through” mode for that input, remove the AC power from the AX-7e for at least 10 seconds. Then, while pressing the input selector button corresponding to the chosen surround-sound processor input, re-connect the AC power.



The chosen input is now programmed for “Processor Pass-Through” operation, disabling the now redundant volume control of the AX-7e. When that input is selected, the preamplifier section of the AX-7e is set to unity gain (0 dB), and the volume is controlled directly from the surround-sound processor. The volume indicator of the AX-7e will display “PP” to show that the “Processor Pass-Through” mode has been selected for that input.

To clear the “Processor Pass-Through” mode from an input and restore normal operation, remove the AC power from the AX-7e for at least 10 seconds. Then, while pressing the “Mute” button, re-connect the AC power.

## Break-In

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*100 to 500 hours of music  
played through the system will  
ensure full break-in.*

Due to the manufacturing processes used for the printed circuit boards, wires, and capacitors, a break-in period is necessary for the amplifier to reach its full performance potential.

## Numbers and

# Specifications

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<i>Power Output</i>	60 watts per channel continuous into 8 ohms 120 watts per channel continuous into 4 ohms
<i>Maximum Input Level</i>	4 V rms – unbalanced inputs 8 V rms – balanced inputs
<i>Input Impedance</i>	20 k $\Omega$ – unbalanced inputs 40 k $\Omega$ – balanced inputs (20 k $\Omega$ per phase)
<i>XLR Input Polarity</i>	Pin 1 = Ground Pin 2 = Non-inverting (Positive) Pin 3 = Inverting (Negative)
<i>Gain</i>	35 dB (maximum, at volume level of “66”)
<i>Frequency Response</i>	2 Hz - 200 kHz
<i>Power Consumption</i>	20 watts in standby mode 70 watts in operating mode, no signal
<i>Dimensions</i>	17- <sup>1</sup> / <sub>4</sub> " W x 13- <sup>3</sup> / <sub>4</sub> " D x 4- <sup>3</sup> / <sub>4</sub> " H 44 cm x 35 cm x 12 cm
<i>Weight</i>	25 pounds 11.5 kg

Statement of

# Warranty

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## North American Warranty

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Your Ayre AX-7e integrated amplifier is warranted against defects in workmanship and materials for a period of ninety days from the date of original purchase. This ninety-day coverage is automatic upon acceptance of delivery and no registration is required.

Additionally you have the option, at no cost, to extend the warranty for a period of five years from the date of purchase by returning the completed Warranty Registration Card and a photocopy of your original purchase receipt in the enclosed postage-paid envelope to Ayre within thirty days of product delivery. This optional warranty is only available within the thirty-day registration period.

## North American Warranty Statement

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1. If any defects are found in the materials or workmanship of this Ayre product within the warranty period, the unit will be repaired or replaced by Ayre Acoustics, Inc. (Ayre) or its authorized agent.

2. Purchaser must return the product, packed in the original shipping carton, freight prepaid to:

Ayre Acoustics, Inc.  
2300-B Central Avenue  
Boulder, Colorado 80301

or to Ayre's authorized agent. The product must be accompanied by a written description of the defect and a photocopy of your original purchase receipt. Ayre will not be responsible for any shipping damage and strongly recommends the purchase of shipping insurance.

3. Ayre reserves the right to inspect any product that is the subject of any warranty claim prior to repairing or replacing it. Final determination of warranty coverage lies solely with Ayre.

Out-of-warranty claims will be billed for labor, materials, return freight, and insurance as required. Any product for which a warranty claim is accepted will be returned to the purchaser and the cost of shipping and insurance will be factory prepaid within the boundaries of the USA. Units to be shipped outside of the USA will be shipped freight collect only.



4. Ayre strives to manufacture the finest possible equipment, and therefore reserves the right to make improvements on its products, without necessarily assuming any obligation to retrofit such changes upon its previously manufactured models.

5. The above warranty is the sole warranty given by Ayre, and is in lieu of all other warranties. All implied warranties, including warranties of merchantability or fitness for any particular purpose shall be strictly limited to the duration of the above warranty. Ayre shall have no further obligation of any kind, whether express or implied. Further, Ayre shall in no event be obligated for any incidental or consequential damages as a result of any defect or any warranty claim, whether express or implied.

6. Ayre does not authorize any third party, including any dealer or sales representative, to assume any liability of Ayre or make any warranty for Ayre. The unit must not have been altered or improperly serviced. The serial number on the unit must not have been altered or removed.

7. The remaining period of this warranty is only transferable to subsequent purchasers if the product is resold by an authorized Ayre dealer.

## International Warranty

Warranty terms outside of North America may vary. Please contact the authorized Ayre distributor in your country of purchase for the terms of warranty and also the service itself.

A Place for

# Notes

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*Serial Number:* \_\_\_\_\_

*Purchase Date:* \_\_\_\_\_

*Dealer:* \_\_\_\_\_

*Salesperson:* \_\_\_\_\_



*Ayre Acoustics, Inc.*  
*2300-B Central Avenue*  
*Boulder, Colorado 80301*

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*+1-303-442-7300*