

Ayre K-5xe<sup>MP</sup>

# Owner's Manual

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Preamplifier

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Welcome to

# Ayre

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Your Ayre K-5xe<sup>MP</sup> 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 level of performance has been implemented using the highest level of workmanship and materials. You can be assured that the Ayre K-5xe<sup>MP</sup> 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 K-5xe<sup>MP</sup> preamplifier is easy to connect and use. The following guidelines will ensure that the installation goes smoothly.

## Location

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

A good location for your preamplifier is in an open-backed cabinet or on a shelf. 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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*When you have a choice, a balanced connection will offer slightly higher sound quality than an unbalanced connection.*

The Ayre K-5xe<sup>MP</sup> 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.

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 K-5xe<sup>MP</sup> has simple alpha-numeric labels that allow you to easily remember the selector button associated with each source component.

## Tape Outputs

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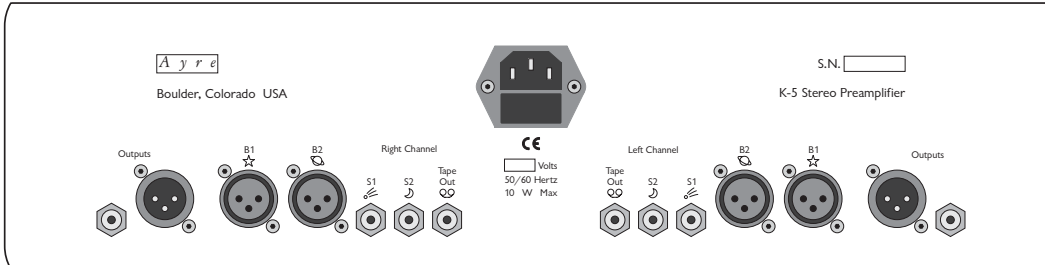
By connecting the “Tape Out” jacks on the rear of the K-5xe<sup>MP</sup> to a recorder with analog inputs, recordings may be made directly from the other source components connected to your preamplifier. The tape outputs are switched on and off at the front panel or via the remote. Please refer to the section “Controls and Operation” for further information.

*If a recorder is not installed in your system, the “S2” 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 “S2” input of the K-5xe<sup>MP</sup>.**

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



## Main Outputs

*The balanced outputs use XLR connectors, while the unbalanced outputs use RCA connectors.*

The Ayre K-5xe<sup>MP</sup> offers one pair of balanced outputs and one pair of unbalanced outputs. Both pairs of outputs may be used simultaneously. However, please note that the level of the unbalanced outputs will be 6 dB lower than the balanced outputs.

## AC Power

Connect the Ayre K-5xe<sup>MP</sup> to an unswitched power source. When the unit is first connected to the AC power, the input selector will default to “B1”, the volume control will default to “11”, the display will be set to “On”, and both the mute and record output will be set to “Off”. Removing the AC power from the unit will cause it to lose its current settings and revert to the default settings.



Although proprietary RFI (radio-frequency interference) filtering is built into the preamplifier, in some situations an AC power-line filter (such as those offered by Ayre) may provide additional sonic benefits.

## Controls and

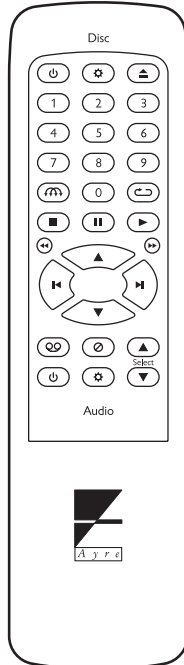
# Operation

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The Ayre K-5xe<sup>MP</sup> preamplifier may be controlled using either the front panel buttons or the included remote control handset. Basic functions are available at both locations, while additional functions are available only at the remote control handset.

## Remote Control

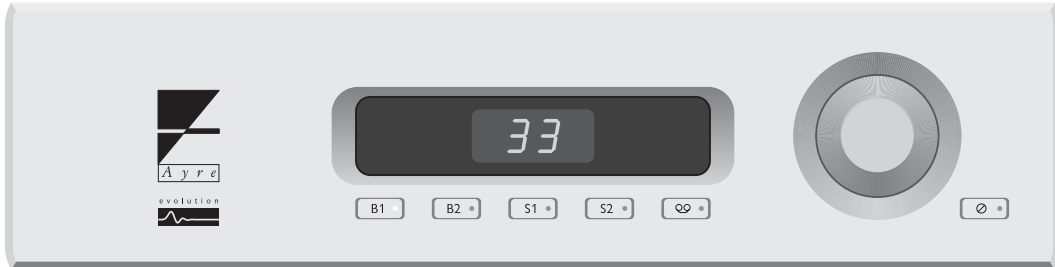
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The supplied remote control handset can operate both the K-5xe<sup>MP</sup> preamplifier as well as an Ayre CD player. The controls to operate the CD player are grouped towards the top of the handset, while those for the preamplifier are grouped towards 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.

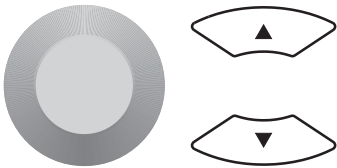




## Basic Functions

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The following functions are accessible via both the front panel buttons and the remote control handset.

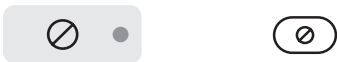


### Volume Control

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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.

When the unit is first connected to an AC power source, the volume level defaults to “11”, a relatively low setting. After that, the current volume setting is retained in memory, and will remain constant when changing inputs.



### Mute

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The mute button provides an easy way to temporarily turn the volume of the K-5xe<sup>MP</sup> to “zero”. The current volume control setting is retained in memory and appears on the display.

B1 •

B2 •

S1 •

S2 •



## Input Source Selection

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The input selector buttons are located below the display. Alpha-numeric labels that match the connector labels on the rear panel (B1, B2, S1, S2) are used to denote the inputs. When the unit is first connected to an AC power source, the “B1” input is selected by default.

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## Tape Output

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*The “Tape Output” function does not operate on the “S2” 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 K-5xe<sup>MP</sup> (including the ground connection), avoiding the possibility of undesired ground loops.

## Additional Functions

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The following function is available only via the remote control handset.



## Display

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The display of the K-5xe<sup>MP</sup> may be turned off if desired. A single blue light indicates that the

display is off. When 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 on the remote control again will turn the display on.

## Processor Pass-Through

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When using the Ayre K-5xe<sup>MP</sup> 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 K-5xe<sup>MP</sup>, 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 K-5xe<sup>MP</sup> with the touch of a single button.

If you are using a surround-sound processor, connect the front left and right outputs of the processor to one of the inputs on the K-5xe<sup>MP</sup>. Please note that

the K-5xe<sup>MP</sup> can accept either balanced or unbalanced signals.

To activate the “Processor Pass-Through” mode for that input, remove the AC power from the K-5xe<sup>MP</sup> 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 K-5xe<sup>MP</sup>. When that input is selected, the preamplifier section of the K-5xe<sup>MP</sup> is set to unity gain (0 dB), and the volume is controlled directly from the surround-sound processor. The volume indicator of the K-5xe<sup>MP</sup> 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 K-5xe<sup>MP</sup> 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 preamplifier to reach its full performance potential.

## Numbers and

# Specifications

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<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>Maximum Gain</i>	4 dB – unbalanced outputs 10 dB – balanced outputs
<i>Frequency Response</i>	DC – 200 kHz
<i>Output Impedance</i>	110 $\Omega$ – unbalanced outputs 220 $\Omega$ – balanced outputs (110 $\Omega$ per phase)
<i>Power Consumption</i>	10 watts
<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 K-5xe<sup>MP</sup> preamplifier 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 (except for the disc transport mechanism, which will be warranted for a period of two 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:* \_\_\_\_\_





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