Owner's Manual

Integrated Hub

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Welcome to

Ayre

Thank you for purchasing the EX-8 Integrated Hub. We sincerely hope you get as much joy listening through it as we did designing and building it.

Our team has been designing world-class, award winning products since 1993. It is our goal to make the most musically accurate equipment we possibly can at any given price range. We enjoy designing, building, and talking about what we do. If you have any questions about your new Ayre product, please don't hesitate to give us a call.

Your EX-8 is the culmination of decades of audio innovation, distilling elements from Ayre's most celebrated works into one powerful piece of equipment. As always, the warmth and immediacy of a live performance are apparent from the first listening. Combining superb resolution and a natural, relaxed quality, your EX-8 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 the EX-8 will provide you a lifetime of musical enjoyment.

Quick Start

The information required to install, operate, and optimize your amplifier is contained in the following three chapters of this manual. The remaining chapters cover additional information that may be read at your leisure.

To begin enjoying your EX-8, connect any audio source to the rear of the unit. You may also use a wired or wireless Ethernet connection to begin streaming music.

> For the most current information on streaming music with your EX-8, visit the streaming section of our website: http://streaming.ayre.com

Connect your choice of an output device (headphones, loudspeakers, or secondary amplifier) to the appropriate connectors of the EX-8, and then supply the EX-8 with power from a wall outlet. Toggle the rear power switch to the ON (I) position to provide power to the unit.

Press the left-hand button on the front of the EX-8 or power button on the included remote control to wake the unit from sleep. Use the right-hand button (on the faceplate) or left and right arrow keys (on the remote control) to select the input you wish to use. Control the volume using either the knob on the EX-8 or the + and – keys on the remote control.

Installation

The Ayre EX-8 is easy to set up and use. The following guidelines will ensure the installation goes smoothly. At this point, you should consider how you would like to use the EX-8 in your system and how to incorporate your other equipment.

In this section, you will find descriptions of the various connections that are available on your EX-8, as well as recommendations for their intended use.

Location

Do not stack the Ayre EX-8 directly with other components, as this may restrict the air flow or induce hum into the audio circuitry.

A good location for the EX-8 is in an open-backed cabinet or on a shelf. The amplifier section produces a moderate amount of heat during operation. Be sure to provide at least three inches (75 mm) of air space above the amplifier.

An adequate supply of air flow will avoid overheating the amplifier.

The infrared beam will travel through glass.

The receiver for the remote control is between the two front panel buttons. A line of sight from the listening position will ensure maximum range.

Break-in Period

Once installed, a break-in period of around 100 to 500 hours will allow the amplifier to reach its full sonic potential.

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

Each input uses a different physical path on the input circuit board, therefore a separate break-in period is required for each input.

Analog Inputs

When you have a choice, a balanced connection will offer slightly higher sound quality than a single-ended connection.

Every EX-8 comes complete with three analog audio inputs: one pair of balanced XLR inputs (**B1**) and two pairs of single-ended RCA inputs (**S1** and **S2**).
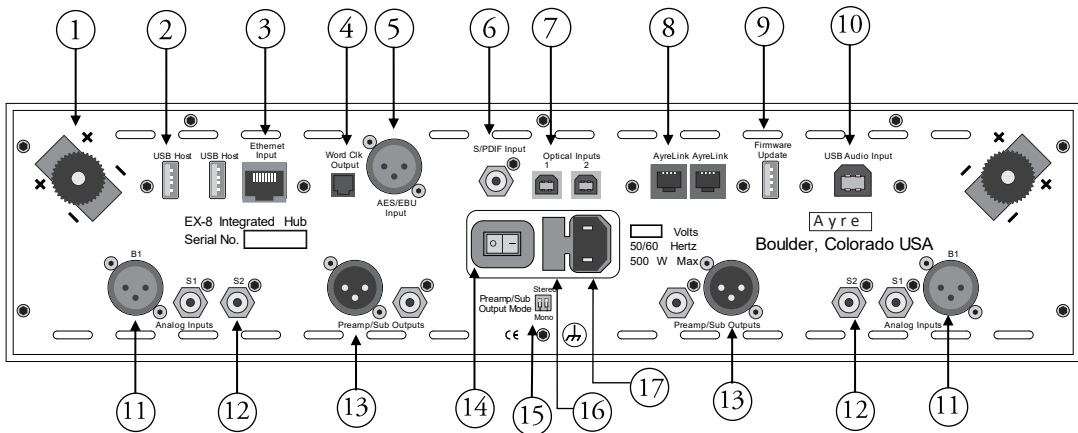
Digital Inputs

The digital inputs on the EX-8 are options which can be included when the product is first ordered or can be added at a later time.

The Digital base option of the EX-8 includes four inputs, one AES balanced input (**AES/EBU**), one RCA (**S/PDIF**), and two TOSLINK (**Optical 1** and **2**).

The USB option includes one USB type B port for asynchronous USB audio (**USB Audio Input**).

The Network option allows you to connect to your local area network (**Ethernet Input**). There are also two USB ports (**USB Host**) which allow you to connect wirelessly using the included USB Wi-Fi adapter and/or directly access files from a USB flash drive.

1) Loudspeaker Outputs

2) USB Host Ports

3) Ethernet Input

4) Word Clock Output

5) AES/EBU Input

6) S/PDIF Input

7) Optical Inputs

8) AyreLink Ports

9) Firmware Update Port

10) USB Audio Input

11) Balanced Analog Input

12) Singled-ended Analog Inputs

13) Preamp/Sub Outputs

14) On/Off Power Switch

15) Preamp/Sub Output Mode Switch

16) AC Fuse holder

17) IEC Power inlet

1) Left-hand Button

   • Sleep/Mute

2) IR Receiver / Status LED

3) Right-hand Button

   • Input Select

4) Display

5) Balanced Headphone Out

6) Single-ended Headphone Out

7) Volume Control

Loudspeaker Outputs

The heavy-duty output terminals of the Ayre EX-8 work best with speaker cables equipped with ¼" spade lugs.

The EX-8 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.**

Preamplifier Outputs

The Stereo/Mono Selection switch lets you configure your preamplifier outputs for different purposes.

Stereo

Mono

The balanced and single-ended preamplifier outputs on the rear panel of the EX-8 allow for a seperate amplifier/subwoofer to be driven. Two switches accessible through the rear panel allow for these outputs to be configured as mono or stereo. Both switches must be in the same position (up or down) for the outputs to operate as intended.

Headphone Outputs

¼" Headphone Jack:

Single-ended

Headphones can be connected easily to the front of the EX-8. Between the display and volume knob you will find three connectors; one for single-ended headphones and two for a set of balanced headphones. The single ¼" on the right will allow you to listen in single-ended mode.

The two 3.5mm connectors on the left will allow you to listen to headphones in balanced mode. These outputs are not compatible with single-ended headphones.

Balanced

Headphones with a 3.5mm stereo connector can be used with the EX-8 by using a ¼" to 3.5mm adapter.

Only use headphones with stereo phone plugs (two insulating rings). Mono phone plugs (single ring) may damage the unit. Four conductor (three rings) plugs may not connect properly, distorting the sound.

The EX-8 automatically detects when headphones are plugged in. The loudspeaker and preamp outputs are disabled while the headphone outputs are active.

All outputs on the EX-8 share a common volume control. Exercise caution when connecting headphones, as 'nominal' volume levels vary.

AyreLink Ports

For improved stack integration, try connecting your Ayre equipment together with AyreLink.

The AyreLink communication system provides a convenient way to control your audio system. There are two AyreLink ports on the rear panel of the EX-8. Each port has four contacts and contains both an input and an output. Both ports function identically and may be used interchangeably.

Be sure to use two-line telephone cords to make AyreLink connections. These can be identified by the four gold contacts on each connector.

The linked components should be connected in daisy-chain fashion, connecting each component to another until all of the linked components have been connected. Be careful not to connect the two ends of the chain.

Closing the chain to form a loop will cause the AyreLink system not to function.

Word Clock Output

The word clock output lets you synchronize a digital source to the EX-8.

Some digital products have word clock inputs and provide higher performance when supplied with a high-quality external word clock. The word clock output in the Ayre EX-8 is derived from the ultra-low phase-noise master clock built into the Digital base option.

Firmware Update Port

The Firmware Update port allows you to update core Firmware with a USB flash drive. For more information, see page 25.

Operation

The following chapter details operation of the EX-8. On the front of the unit, you will find two buttons, a status LED, a display, an IR receiver for the remote, and a volume knob. In addition to these controls, some network applications can provide further integration with the unit.

System-sleep Mode

When first turned on, the EX-8 automatically enters System-sleep mode, indicated by a green status LED. The amplifier's audio circuitry is disabled, reducing the amount of power it draws. To activate the unit, simply press the left-hand button on the front of the unit, or the power button on the remote. If either button is held for three seconds, AyreLink connected devices will also be turned on.

Active Mode

Active mode provides power to the audio circuit and enables the system for listening.

Once in Active mode, the audio circuitry in the unit is enabled. The currently selected input is displayed on the screen and any signal present at that input will be driven to the enabled output(s). When available, information or meta-data from a digital recording being played will be shown on the EX-8's display.

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Volume Control

The EX-8 volume control is purely analog.

The volume control in the EX-8 is motorized and may be controlled using the knob on the front of the unit, the remote control handset, or a network application.

Input Selection

To make input selection easier, try disabling any inputs you aren't using through the menu.

By pressing the right-hand button on the front panel, the currently selected input will cycle to the next enabled input. This may also be adjusted using the left/right arrow keys or number keys on the remote handset. To learn more about enabling/disabling inputs, see page 21.

Mute / System-sleep

When muted, the amplifier prevents signal from reaching the outputs.

A quick press of the left-hand button will mute the audio outputs of the EX-8. While muted, an icon will appear on the display. A second short press of the left-hand button will un-mute the unit.

By pressing and holding the left-hand button for three seconds, the EX-8 and any AyreLink connected devices will return to System-sleep mode.

Headphones

When either single-ended or balanced headphones are connected, the amplifier automatically reconfigures for headphone playback, and the headphone symbol is shown on the display.

By pressing the headphone button on the remote control, you can switch between headphone and rear-panel outputs while headphones are connected.

Display

After a period of inactivity the display automatically powers off, indicated by a blue status LED. This minimizes the amount of active digital circuitry to ensure the best sound quality while also extending the lifetime of the display. This feature may be extended, shortened, or disabled entirely through the menu, see page 23.

The brightness of the display may be controlled via remote control. Each press of the brightness button cycles through the four available brightness settings.

Brightness button

Changing the brightness on your EX-8 will adjust the display brightness of any AyreLink connected components to the same level.

Sample Rate

When digital audio is playing, the EX-8 will display the sample rate it is receiving. If you are expecting a different sample rate than what the EX-8 shows, check the settings in your source software.

Meta-data

If "Track" or "Artist" information becomes available while using the Network input, it will be displayed on the screen.

HDCD Indicators

If Pacific Microsonics HDCD headers are detected in the digital data-stream, the letters HDCD will appear on the screen to indicate the EX-8 is playing true HDCD. If HDCD appears in quotation marks, then the header is not accompanied by any decodable information.
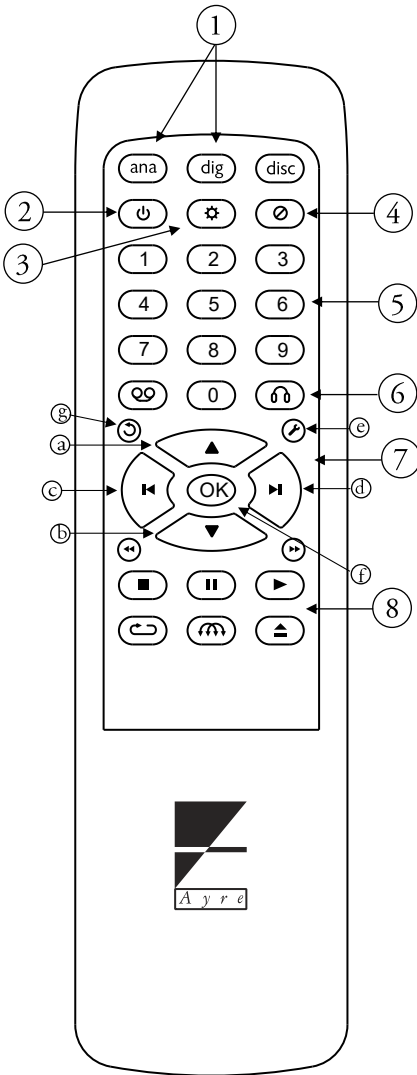
Pre-emphasis Indicator

The letters PRE beside the sample rate indicates that the current track was recorded with pre-emphasis, and the proper de-emphasis EQ is being applied.

Remote Handset

The provided remote control handset will operate the Ayre EX-8 as well as other Ayre products.

The top row of buttons contains illuminating product selection keys. By pressing one of these, you may select which type of device you would like to control. Whenever another button is pressed, the key corresponding to the current selection will illuminate.

1) Product Selection Keys

2) System-sleep / Active Mode

3) Brightness Cycle

4) Mute Toggle

5) Number Keys (Input Selection)

6) Headphone button

7) Navigation keys

  a. Up (Volume)
  b. Down (Volume)
  c. Left (Previous Input)
  d. Right (Next Input)
  e. Enter Setup
  f. OK (Select)
  g. Return

8) Transport Controls (Not used)

Customization

Your EX-8 offers a high level of flexibility in terms of setup. The following information will allow you to configure the unit in the best way for your system.

Setup Menu

To access and operate the menu, you may either use the remote included with the unit, or the two buttons to the left of the display.

Operation using the remote

Setup button

To access the menu, press the Setup button on the remote. "Setup Menu" will be displayed on the screen briefly, then the main menu will load. All outputs are muted while the unit is in the setup menu.

Return button

Once in the menu, the navigation keys (up, down, left and right) allow you to adjust your selection in the menu. With the desired selection highlighted, press OK to select it. To return to the previous screen, press the Return button. To immediately exit the menu, you may press the Setup button at any time.

Operation using front panel buttons

To access the menu, you must first place the unit into System-sleep mode. This can be done by pressing and holding the left-hand button for 3 seconds and will be indicated by a green status LED. Next press and hold the right-hand button for three seconds. "Setup Menu" will be displayed on the screen briefly, then the root menu will load.

Once in the menu, the right-hand button will allow you to adjust your current selection; each press will cycle through the list of available options. With the desired selection highlighted, a quick press of the left-hand button will select it. To return to the previous screen, press and hold the left-hand button.

Screen layout and icons

The menu screen is organized with the section title at the top and a list of options below.

Arrow symbols indicate more content is available off-screen:

At any one time, four options may be displayed on the screen. An arrow symbol on either the left or right side of the screen indicates that more options are available off-screen, in that direction.

Some screens contain a list of sub-menus, while others control a specific setting. On a setting screen, the current value of the setting being modified is indicated by a mark to the left of that setting. Once a new setting has been selected, the mark moves to reflect the change.

Setting Selection marker:

Menu Structure and Contents

From the main menu, you will have access to the five main sub-menus: Input, Output, Display, Network, and System.

The EX-8 setup menu has five sub-menus, which allow you to optimize the amplifier for your system.

The **Input** sub-menu will allow you to access settings specific to each input installed in your EX-8.

The **Output** sub-menu contains settings for the output sections of your amplifier.

The **Display** sub-menu will allow you to adjust the display timeout setting, which causes the display to turn off after a preset period of inactivity.

The **Network** sub-menu will allow you to access Wi-Fi setup functions, network connection information, network F/W updates, and network module reset.

The **System** sub-menu will allow you to set Auto-sleep mode, check current F/W revisions, check module installation, and perform a system factory default reset.

Input Sub-menu

Different settings are available for the different types of inputs available in the EX-8.

After entering the Input sub-menu, select the input you would like to modify. The settings available for the selected input will appear.

Some settings are available for all inputs, while others are only available for analog or digital inputs exclusively.

Settings available for all inputs

Enable (On/Off) – This setting determines whether an input is enabled for use. Disabled inputs are not selectable, allowing quicker access to inputs that are in use. By default, all inputs are enabled.

Name – The name displayed for each input can be assigned individually with either a preset or a custom name. By selecting "Custom" from the name selection screen, you may modify the stored custom name for the selected input up to the character limit of ten. The default name for each input matches the input name on the rear-panel of the EX-8.

The AyreLink ID setting allows the system to automatically configure when an Ayre source is turned on.

AyreLink ID (A – Z) – The AyreLink ID associated with an input refers to the source connected to that input. Selecting the correct ID allows for optimal AyreLink functionality between your EX-8 and a connected Ayre source component. For example, if a CX-8 is connected via TOSLINK to the Optical 1 input of the EX-8, an AyreLink ID of 'C' should be assigned to the Optical 1 input.

Reset (Yes / No) – Selecting Yes will restore all settings for the selected input to their default.

Settings available for analog inputs

Pass-Through (On / Off) – When an input with Pass-Through enabled is selected in Active mode, the system will adjust the volume to unity gain. This can be helpful when the EX-8 is driven by a separate pre-amplifier or surround-sound processor.

Settings available for digital inputs

Video Mode (Music / Video) – During normal operation (Music Mode) data from the AES/EBU, S/PDIF, and Optical inputs are asynchronously buffered and then re-clocked using the EX-8's high quality local oscillators. This can cause the audio data to become out of sync with the source. Selecting Video Mode forces the EX-8 to synchronize with the incoming data stream, which will keep the audio and video in sync.

Word Clock Output (On / Off) – Some digital products have word clock inputs and provide higher performance when supplied with a high-quality external word clock. This setting determines whether this clock signal is active for the selected input.

Output Sub-menu

The Output sub-menu lets you enable different outputs of the amplifier.

Output Mode (All, Preamp/Sub Only, Speakers Only) – By default, both the Preamp/Sub and Loudspeaker outputs are enabled, but either may be disabled if not required for your system.

Headphone output functionality is not affected by this setting.

Display Sub-menu

The Display sub-menu contains the Display Timeout Setting.

Display Timeout (5s, 15s, 30s, 60s, Never) – While the system is active, the display will automatically turn off after a period of inactivity defined by this setting.

⚠ **Please note that leaving the display timeout in "Never" mode can cause faster than normal fading of the display.**

Network Sub-menu

The Network sub-menu allows you to perform Wi-Fi setup procedures, access your device's IP addresses, check for network firmware updates, and perform a network reset that clears your network settings.

Wi-Fi Setup – The AP and WPS functions found here allow you to connect your EX-8 to a home network. For detailed instructions, please refer to the Wi-Fi setup section of the manual (page 29).

Connection – The connection screen will display the EX-8's current LAN and WLAN IP addresses.

Check for Update – Once confirmed, the EX-8 will attempt to contact Ayre's FTP server and determine if the local firmware is the latest available. If an update is available, it will be installed automatically. For more information, refer to the Firmware Update section of the manual (page 25).

Reset – Once confirmed, any stored Wi-Fi network information, Device Names, and other network settings will be cleared to the defaults and the network module will reboot.

System Sub-menu

The System sub-menu provides access to system information as well as the Factory Reset function.

Auto-Sleep Mode (Enable / Disable) – In order to save energy, the EX-8 can automatically disable its audio circuitry when a selected digital input remains inactive for a period of 30 minutes. As soon as the input becomes active again, or if any other changes are detected, the audio circuitry is automatically re-enabled.

FW Revisions – The firmware revision screen contains all the current revision codes installed in the unit.

Options Installed – The EX-8 offers several optional inputs. This screen shows which of these options have been detected and are ready for use.

Factory Reset – The factory reset function restores all settings to their defaults.

⚠ **Performing a factory reset will reset all names and settings for ALL inputs and outputs.**

Firmware Updates

Firmware updates will be made available for the EX-8 as new features are added or as ease of use is improved. There are two types of firmware updates that are available for the EX-8.

For detailed information about firmware updates, and to check for available updates, please visit www.ayre.com/ex8_support.htm.

⚠ **Do not turn off the EX-8 while updates are in progress.**

Network Firmware Updates

If the Network option is installed in your EX-8, firmware updates can be performed automatically over the internet.

Whenever the unit enters System-sleep mode, it will attempt to contact Ayre's servers and check for available updates. If any are found, you will be prompted to download and install the them. You may also manually check for updates using the menu.

USB Firmware Updates

The system (SYS) and signal processing (DSP) firmware can be updated using the USB Firmware Update port on the rear of the unit.

When the unit is first powered on with the On / Off rocker switch, it will automatically check for a USB flash drive in the USB Firmware Update port. If a drive is detected, it will search for available firmware files and install them.

To perform a USB firmware update, please refer to the following procedure.

1) If the EX-8's firmware revisions do not match the revisions available at www.ayre.com/ex8_support.htm, you may download the new files from the website to your computer by following the links on the page.

To successfully update over USB, ensure that the file placement is correct. Also note that file and folder names are case sensitive.

2) The new firmware will be in a compressed folder called "EX8boot.zip". This compressed folder contains two program files, "ex8_p---.hex" and "ex8_x---.bin". Place these two files into a folder called "EX8boot" in the root directory of a USB flash drive. Please note the folder and program files are case sensitive.

⚠ **Both program files should be placed into the USB flash drive at the following directory location: "[Drive:]/EX8boot/".**

3) Turn the power switch on the back panel of the EX-8 to the OFF position and allow several seconds for the device to power down.

4) Insert the USB flash drive into the port labeled "Firmware Update" on the back panel.

⚠ **Be sure to insert the flash drive into the Firmware Update port and not either of the USB Host ports, as these will not allow the unit to update.**

5) Turn the power switch on the back panel of the unit into the ON position. The firmware update will commence automatically and the screen will show "Installing Update".

6) Once the update is complete, the unit will start as normal. Once in the System-sleep state, return the unit to operation mode by pressing the left-hand button.

7) The USB flash drive can be safely removed from the Firmware Update port.

Networking

To begin streaming audio to your EX-8 over the network, you will first need to set up your connection. The EX-8 can be connected either with a standard network cable, or with the included USB Wi-Fi adapter.

Network Connection

Once set up, the EX-8 will be available for playback from a variety of applications.

Connection quality has a significant effect on sound quality. The best quality audio will be achieved with a short hard-wired connection to your home network. If a wireless connection is required, the best performance will be achieved by keeping the distance between your EX-8 and wireless router to a minimum.

Connecting with an Ethernet cable

If available, a hard-wired Ethernet connection is the best way to connect your EX-8 to your home network.

Once connected to your home router with a standard Ethernet cable, the EX-8 will automatically connect to your home network and be available for use by any devices connected to the same network.

Connecting Wirelessly

The three methods below will allow you to connect to your home network via Wi-Fi using the included USB Wi-Fi adapter. After performing one of these procedures, your EX-8 will automatically connect to your home Wi-Fi when it is powered on.

Wi-Fi Connection using WPS

Wi-Fi Protected Setup (WPS) is a common feature in wireless routers.

If your Wi-Fi router supports WPS, this is likely the quickest and easiest way to connect your EX-8 to your home Wi-Fi network. You will need to know how to activate the WPS function on your wireless router.

1) Connect the included USB wireless network adapter to one of the two "USB host" ports on the rear-panel of the EX-8.

2) Enter the Setup Menu and navigate to the Network sub-menu. From here you can select Wi-Fi setup, and then the WPS function.

3) Once confirmed, wait for the EX-8 display to change from "WPS Function: Initializing" to "WPS Function: Running".

4) Activate the WPS function by pressing the WPS button on your Wi-Fi router.

5) The two devices will attempt to establish a connection, and when complete the EX-8 will display "Connection success!" This may take about a minute.

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Wire-aided Wi-Fi Connection

With a temporary wired connection, your Wi-Fi network information can be provided to the EX-8.

To achieve the wire-aided Wi-Fi connection, you will need a smart device connected to your home network. You will also need to download and install the mConnect application to the device.

1) Connect the included USB Wi-Fi adapter to one of the two "USB host" ports on the rear-panel of the EX-8. Also connect your unit to your home router using an Ethernet cable.

To download mConnect, please visit the app store supported by your mobile device and search for "mConnect control".

2) Using your smart device, open the mConnect application.

3) Access the mConnect setup menu using the gear icon on the player screen, then select "Device Setup".

4) Select "Ayre EX-8" from the list of available devices. You may need to refresh the list.

5) Select "Wi-Fi Network Selection".

6) Choose the desired Wi-Fi network from the list of available networks. You may need to refresh the list.

7) Type in your password. A notice will appear indicating "The device is attempting to connect to the network". Press OK.

8) After the wireless connection is established, you may disconnect the Ethernet cable and relocate the EX-8 if necessary.

Wi-Fi Connection with the AP function

The Access Point (AP) function causes the EX-8 to temporarily host its own Wi-Fi network. By connecting to this network with a smart device, you may provide the EX-8 your own Wi-Fi network information, similar to wire-aided Wi-Fi connection.

To perform the Access Point procedure, you will need a smart device connected to your home network. You will also need to download and install the mConnect application to the device (page 33).

1) Connect the included USB Wi-Fi adapter to one of the two "USB Host" ports on the rear-panel of the EX-8.

2) Enter the Setup Menu and navigate to the Network sub-menu. From here you can select Wi-Fi setup and then the Access Point function.

3) Once Access Point has been selected, and confirmed, wait for the EX-8 display to change from "Access Point Function: Initializing" to "Access Point Function: Running".

4) Using your smart device, you will need to connect to the Wi-Fi network hosted by your EX-8, named "EX-8_---". The password is "password".

5) Once connected to the "EX-8_---" Wi-Fi network, open the mConnect application.

Gear icon

6) Access the mConnect setup menu using the gear icon on the player screen, then select "Device Setup".

7) Select "Ayre EX-8" from the list of available devices. You may need to refresh the list.

8) Select "Wi-Fi Network Selection".

9) Choose the desired Wi-Fi network from the list of available networks. You may need to refresh the list.

10) Type in your password. A notice will appear indicating "The device is attempting to connect to the network". Press OK.

11) At this point, the EX-8 will stop hosting its own network, and attempt to join the network you selected. If it is successful, the EX-8 will display "Connection success!"

Network Applications

The EX-8 network module supports a variety of network standards, which allows you to stream to and control the device. Below are a few of the supported applications. For a complete list, please visit:

http://www.ayre.com/ex8_support.htm.

mConnect Control

Some features supported by the EX-8 may only be available through the "mConnect Control" application. For a complete list of features, please visit the website above.

Spotify

With a Spotify Premium account, the EX-8 becomes an available Spotify Connect device. Using the Spotify application, select the "Ayre EX-8" as the playback device.

Roon

Roon is an advanced and powerful software application capable of relating, organizing and playing back a large digitally stored music library. As shipped from the factory, the EX-8 is a "Roon Ready Endpoint", which will allow you to connect to and control the EX-8 from a Roon control application.

Generic UPnP Applications

A variety of applications across platforms support the DLNA standard, which allows them to stream music files to the EX-8. Searching for "UPnP control apps" in your device's application store will help you find available options.

Specifications

Analog Inputs	One Balanced: 8 V rms max Two Single-ended: 4 V rms max
Digital Inputs	Optical/SPDIF/AES • PCM 16, 20, 24 bits at 44.1 - 192 kHz • DSD64 (as DoP) USB • PCM 16, 20, 24 bits at 44.1 - 384 kHz • DSD64 and DSD128 (as DoP) Network • PCM 16, 20, 24 bits at 44.1 - 192 kHz • DSD64
XLR Input Polarity	Pin 1 = Ground Pin 2 = Non-inverting (Positive) Pin 3 = Inverting (Negative)
Frequency Response	DC – 250 kHz
Power Output	100 watts per channel continuous into 8 ohms
Input Impedance	1 MΩ – unbalanced inputs 2 MΩ – balanced inputs (1 MΩ per phase)
Headphone Outputs	4 V rms max balanced / 2 V rms max single-ended
Power Consumption	60 watts in low-current consumption mode 120 watts in operating mode, no signal
Dimensions	17.25" W x 13.00" D x 3.75" H (44 cm x 33 cm x 10 cm)
Weight	24 pounds (11 kgs)

Trouble

In the event that you experience any technical difficulties with your Ayre product, the following items may help to solve the problem or track down the cause.

Fault Messages

The Ayre EX-8 will display faults when a problem occurs. The following faults are listed, along with possible solutions to the problem.

Low Voltage

If you have trouble clearing any of these faults, contact your local Ayre dealer.

If the AC line voltage supplied to the unit drops below operable levels, this fault will be displayed. Once normal power is restored to the unit, the fault should clear itself.

If the fault persists, try restarting the EX-8.

Fuse Blown

If either of the internal fuses in the EX-8 has blown, this fault will be displayed. The fuses will need to be replaced to clear the fault.

If the unit is completely unresponsive, the main AC fuse in the IEC inlet may have blown.

For a list of replacement values, please visit the product support page on our website.

Amplifier Overheated

If the internal temperature of the amplifier reaches a critical level, the audio circuitry will be automatically disabled to protect the internal components of the unit and the fault "Amplifier Overheated" will be displayed.

This fault will persist until the temperature of the amplifier returns to its normal operating range.

DC Offset

If DC Offset is detected at either of the Loudspeaker outputs, the audio circuitry will automatically disable to prevent damage to your speakers.

If an analog input was being used when DC Offset appeared, follow these instructions to trouble shoot this error:

1) Turn the volume control all the way down.

2) Return the EX-8 to Active mode by pressing the left-hand button on the faceplate twice.

3) If the DC Offset fault does not reappear, then the problem is likely in the attached source component. In this case the fault will probably return when you turn the volume back up.

4) If the DC Offset reappears immediately, power off the EX-8 and contact an authorized Ayre dealer.

Update Error

If an error is detected during a firmware update process, this fault will be displayed.

Please try to update the unit again using the USB Firmware update method (page 25).

If the unit has become unresponsive, or if network functionality has been impacted, the update error may have critically impacted the system and must be taken to an authorized Ayre dealer for repair.

Persistent Faults

In the event that any fault persists, or if another issue occurs but is not displayed, please contact your Ayre dealer for further assistance.

Network Connection Issues

If the EX-8 cannot be seen by devices on your home network or if playback is inconsistent, the following steps may help.

If you are using a wireless connection, try connecting the EX-8 with an Ethernet cable to see if that resolves the problem.

Visit the "Network Info" page in the setup menu (page 23) and verify that the EX-8 has been assigned an IP address on your home network. If both the "LAN IP" and "WLAN IP" fields are blank, or zeroes, there may be a connection issue between the EX-8 and your home network. Try reviewing the connection steps (page 28).

If you are experiencing streaming issues, visit the FW Version page in the setup menu (page 24) and verify that your NET firmware version matches the most recent found on the support web page.

USB Connection Issues

If you are experiencing any issues with the USB audio input, please try the following;

Try using the stock USB A to B cable that came with your EX-8. Some custom USB cables, or cables of excessive length, can cause issues with USB connectivity and playback.

If the EX-8 appears as "Unknown USB device", or something similar on your computer, you may be experiencing a driver related issue. For more information about drivers, visit the product support page at www.ayre.com/ex8_support.htm.

Warranty

North American Warranty

Your Ayre EX-8 integrated hub is warranted against defects in materials and workmanship 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 the product delivery. This optional warranty is only available within the thirty-day registration period.

North American Warranty Statement

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 return 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

Serial Number: _____

Purchase Date: _____

Dealer: _____

Salesperson: _____