

**Zildjian**<sup>®</sup>  
ALCHEM·E

**PERFECTTUNE**<sup>™</sup>  
OVER EAR HEADPHONES



User Guide, Version 1.0

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## IMPORTANT SAFETY INSTRUCTIONS

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use headphones near water.
- Clean only with a dry cloth.
- Only use attachments/accessories specified by the manufacturer. Refer all servicing to Zildjian Customer Care at [zcustomercare@zildjian.com](mailto:zcustomercare@zildjian.com). Servicing is required when the headphones have been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen onto the headphones, the headphones have been exposed to rain or moisture, do not operate normally, or have been dropped.

## WARNING AND CAUTIONS

- Do NOT use the headphones at a high volume for any extended period.
  - ▶ To avoid hearing damage, use your headphones at a comfortable, moderate volume level.
  - ▶ Turn the volume down on your device before placing the headphones on your ears, then turn the volume up gradually until you reach a comfortable listening level.
- Do NOT use your headphones while driving for phone calls or any other purpose.
- Do NOT use the headphones if they emit any loud unusual noise. If this happens, turn the headphones off and contact Zildjian customer service.
- Do NOT use the headphones with noise canceling on at any time the inability to hear surrounding sounds may present a danger to yourself or others, e.g., while riding a bicycle or walking in or near traffic, a construction site or railroad, etc., and follow applicable laws regarding headphone use.
  - ▶ Remove the headphones, or use the headphones with noise canceling off and adjust your volume, to ensure you can hear surrounding sounds, including alarms and warning signals.
  - ▶ Be aware of how sounds that you rely on as reminders or warnings may vary in character when using the headphones.
- Remove headphones immediately if you experience a warming sensation or loss of audio.
- Do NOT use the headphones as aviation communication headsets.
- Do NOT make unauthorized alterations to this product.

## WARNING AND CAUTIONS

- Do NOT use mobile phone adapters to connect headphones to airplane seat jacks, as this could result in personal injury or property damage due to overheating.
- Contains small parts which may be a choking hazard. Not suitable for children under age 3.
- This product contains magnetic material. Consult your physician on whether this might affect your implantable medical device.
- To reduce the risk of fire or electrical shock, do NOT expose this product to rain, liquids or moisture.
- Do NOT expose this product to dripping or splashing, and do not place objects filled with liquids, such as vases, near the product.
- Use this product only with an approved power supply that meets local regulatory requirements (e.g., UL, CSA, CDE, CCC).
- If the battery leaks, do not allow the liquid to come in contact with the skin or eyes. If contact is made, seek medical advice.
- Do not expose products containing batteries to excessive heat (e.g. from storage in direct sunlight, fire or the like).
- Do NOT wear the headphones while charging.
- The headphones do not play audio while charging.

## WARNING – BATTERY SAFETY GUIDELINES

- This device contains a built-in rechargeable lithium battery that cannot be replaced by the user. To ensure continued performance and safety, do not dismantle or replace the battery yourself. For product support, please contact Zildjian Customer Care at [zcustomercare@zildjian.com](mailto:zcustomercare@zildjian.com).
- Store between -4 to 113°F (-20 to 45°C).
- Do not subject the battery to extremely low air pressure conditions, as it may result in an explosion or the leakage of flammable liquid or gas.
- Failure to adhere to these guidelines may result in damage to the device, personal injury, or fire hazard. Operate and store the device in accordance with recommended usage and disposal guidelines.
- Always dispose of the device properly according to local regulations.

# COMPLIANCE

## US

### FCC STATEMENT

**WARNING:** Any changes or modifications to this device not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment. This equipment complies with the FCC radiation exposure limits set forth for an uncontrolled environment. This device must not be co-located or operated in conjunction with any other antenna or transmitter.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## CANADA

### ISED STATEMENT

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil est conforme à la norme RSS sans licence d’Industrie Canada. Son fonctionnement est soumis aux deux conditions suivantes : (1) cet appareil ne doit pas provoquer d’interférence et (2) cet appareil doit supporter les interférences, y compris les interférences susceptibles de provoquer un fonctionnement inattendu.

## EU



This symbol on the product means that used electrical and electronic equipment should not be mixed with general household waste. The correct disposal will help prevent potential negative effects on human health and the environment. For proper treatment, recovery and recycling, please contact your city office, waste disposal servicer or the shop which you purchased the product.



Avedis Zildjian Co. hereby declares that this product is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU and all other applicable EU directive requirements. The complete declaration of conformity can be found at [zildjian.com/compliance](http://zildjian.com/compliance)

- Maximum transmit power less than 10 dBm EIRP
- Frequency bands of operation 2402-2480

## CHINA

Names and Contents of Toxic or Hazardous Substances or Elements						
Part Name	Toxic or Hazardous Substances and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent (CR(VI))	Polybrominated Biphenyl (PBB)	Polybrominated diphenylether (PBDE)
PCBs	X	O	O	O	O	O
Metal Parts	X	O	O	O	O	O
Plastic Parts	O	O	O	O	O	O
Speakers	X	O	O	O	O	O
Cables	X	O	O	O	O	O
This table is prepared in accordance with the provisions of SJ/T 11364. O: Indicates that this toxic or hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement of GB/T 26572. X: Indicates that this toxic or hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement of GB/T 26572.						



## LICENSING

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## SPECIFICATIONS



### Type

Closed-Back Circumaural Headphones  
with Active Noise Canceling

### Bluetooth version

Version 5.3

### Bluetooth range

> 15m

### Audio codecs

SBC, AAC

### Battery capacity

680mAh/3.7V

### Voice assistants

n/a

### Speaker drivers

40mm dynamic driver

### Frequency response

7Hz - 22000Hz

### Total harmonic distortion

0.019% (90dB at 1kHz)

### Microphones

High AOP Mems

### Weight

356.8g

### Mobile application

Zildjian, iOS and  
Android compatible

### Audio connections

Bluetooth, 3.5mm Analogue

### Charging

USB-C

## OPERATING INSTRUCTIONS

**NOTE:** Before using your headphones, be sure to remove all packaging. This includes any silicone tubes covering the metal parts attached to the earcups.

### BLUETOOTH/SETUP

#### Turn your headphones on/off

- 1 Press and release the power button on the bottom-right ear of the headphones. Do NOT hold the power button down. Holding down the power button will put the headphones into Bluetooth pairing mode.

#### Connect to Bluetooth

- 1 Press and hold the power button to enter Bluetooth pairing mode. The headphones will play a pairing sound and the light strip will pulse blue.
- 2 From your phone settings, turn on Bluetooth and select ALCHEM-E Headphones from the device list.
- 3 The headphones will play a tone and one blue light will appear on the light strip to confirm pairing is complete.

#### Pair your headphones to the Zildjian app

- 1 While your headphones are paired to your phone's Bluetooth, open the Zildjian app.
- 2 Click the **Connect to Headphones** button.
- 3 Select your headphones from the list of **Detected Headphones**.
- 4 Click **Next**.

#### Remove your headphones from the Zildjian app

- 1 Open the Zildjian mobile app.
- 2 Tap the **Settings** button in the bottom menu bar.
- 3 Tap **Remove headphones**.
- 4 Click **Remove** to complete the process.

#### Auxiliary (wired) connection



- 1 Plug an auxiliary cable into the aux jack on the left arm.

#### Notes

- USB audio connections are not supported
- While the auxiliary cable is plugged in, Bluetooth connection is disabled.

## OPERATING INSTRUCTIONS



### NOISE CANCELING MODE

- Single-press the Active Noise Canceling (ANC) button to scroll through the noise canceling modes:

MODE	DESCRIPTION
<b>FULL</b>	Designed for isolation, protection on airplanes, etc.
<b>HALF</b>	Designed for a protective, full-frequency acoustic drumming experience.
<b>OFF</b>	No noise canceling.

#### Notes

- When turned on, the headphones will automatically return to the last selected noise canceling mode.
- Full and Half modes do not disable the auto power-off functionality. Disable Auto Standby to keep the headphones on even if no audio is streaming.



## OPERATING INSTRUCTIONS

### AUDIO PLAYBACK

You can control your audio playback via the control knob on your headphones.

CONTROL KNOB	ACTION
<b>Rotate clockwise</b>	Increase volume
<b>Rotate counterclockwise</b>	Decrease volume
<b>Short press</b>	Play/Pause (Bluetooth and auxiliary)
<b>Double-press</b>	Skip to next track
<b>Triple-press</b>	Within first 10 seconds of an audio track, play previous track. After 10 seconds, restart current track.
<b>Press and rotate clockwise</b>	Scrub track forward (Bluetooth only)
<b>Press and rotate counterclockwise</b>	Scrub track backward (Bluetooth only)

**Note:** The scrubbing feature is only available on devices that support it.

### PHONE CALLS

While connected via Bluetooth, an incoming phone call will pause the streamed audio and play your mobile device ringtone.

CONTROL KNOB	ACTION
<b>Short press</b>	Accept incoming call
<b>Double-press</b>	Reject incoming call and resume audio
<b>Short press during call</b>	End call and resume audio
<b>Double-press during call</b>	Put call on hold
<b>Double-press during hold</b>	Resume call

# OPERATING INSTRUCTIONS

## VOLUME LIMITING

Use the Zildjian mobile app to control the maximum volume of the headphones.

- ❶ Open the Zildjian mobile app.
- ❷ Tap the **Settings** button in the bottom menu bar.
- ❸ Tap **Volume limiter**.
- ❹ Select a volume limited mode.

MODE	DESCRIPTION
<b>Off (Generic)</b>	Default. Enables full volume output. Maximum output is 100dBA.
<b>EU Standard</b>	Reduces the maximum output volume to 94dBA, in accordance with European Standard EN-50332: 2017 Sound system equipment: headphones and earphones associated with personal music players.
<b>Kids Safe</b>	Reduces the maximum output volume to 85dBA, which is considered a “safe listening level” for up to 40 hours per week.

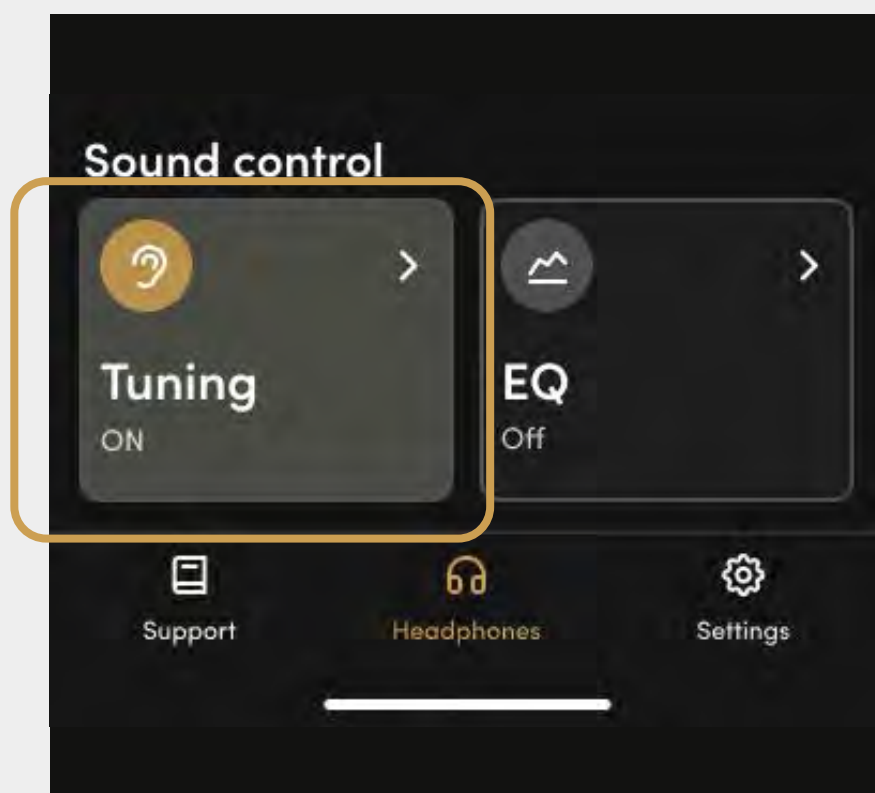
**Caution:** While care has been taken to carefully calibrate and test the volume limiting settings, their use does not guarantee that the user will not damage their hearing with excessive sound level exposure. To avoid hearing damage, use your headphones at a comfortable, moderate volume level.

## SOUND CONTROL

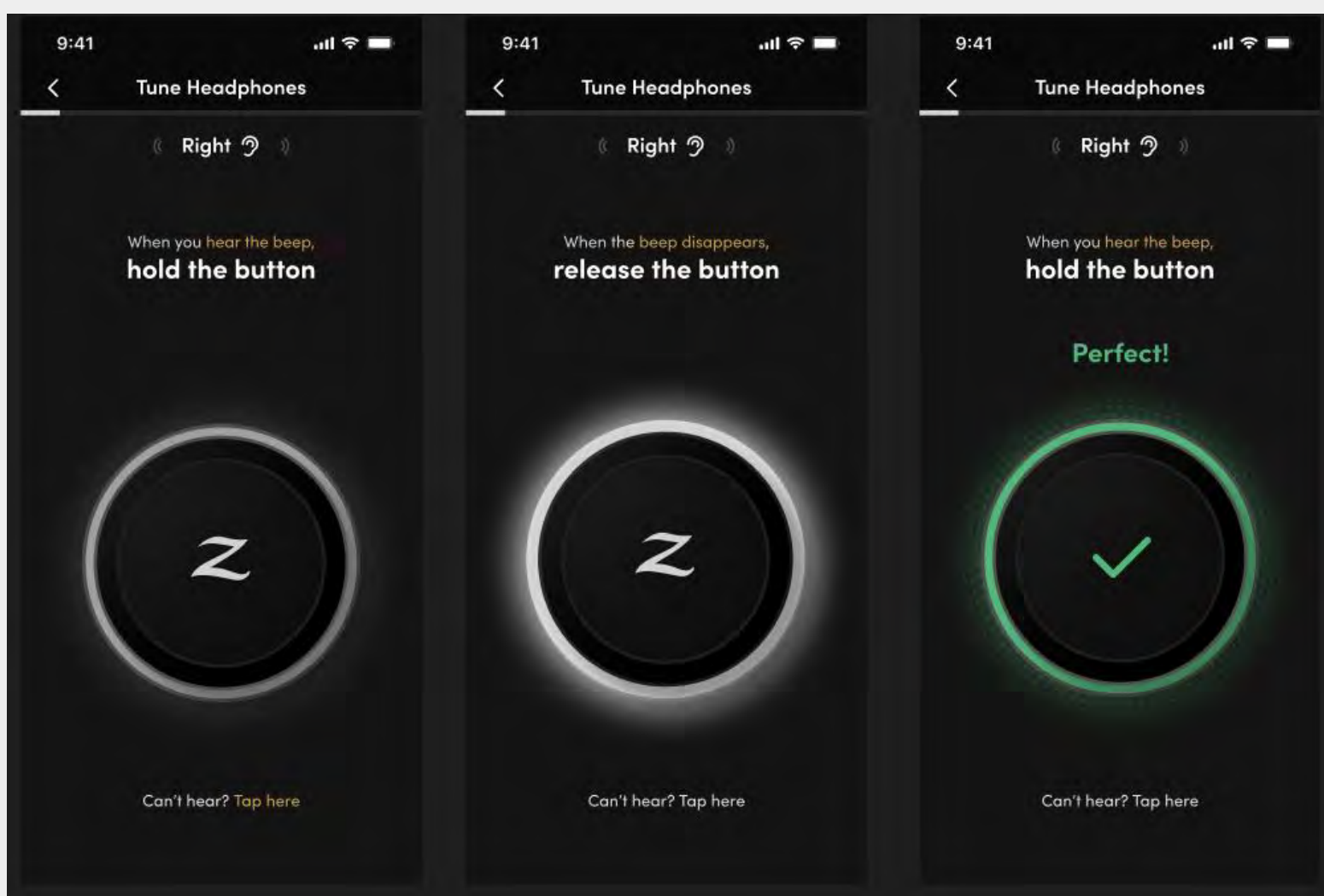
### ZILDJIAN PERFECT TUNE™

You can adjust the sound of your headphones manually in the Zildjian app.

- 1 Open the Zildjian mobile app.
- 2 Tap **Tuning** under the **Sound control** heading on the home screen.



- 3 Follow the app's prompts to perform a short tuning flow in the left ear, then the right ear.



## SOUND CONTROL

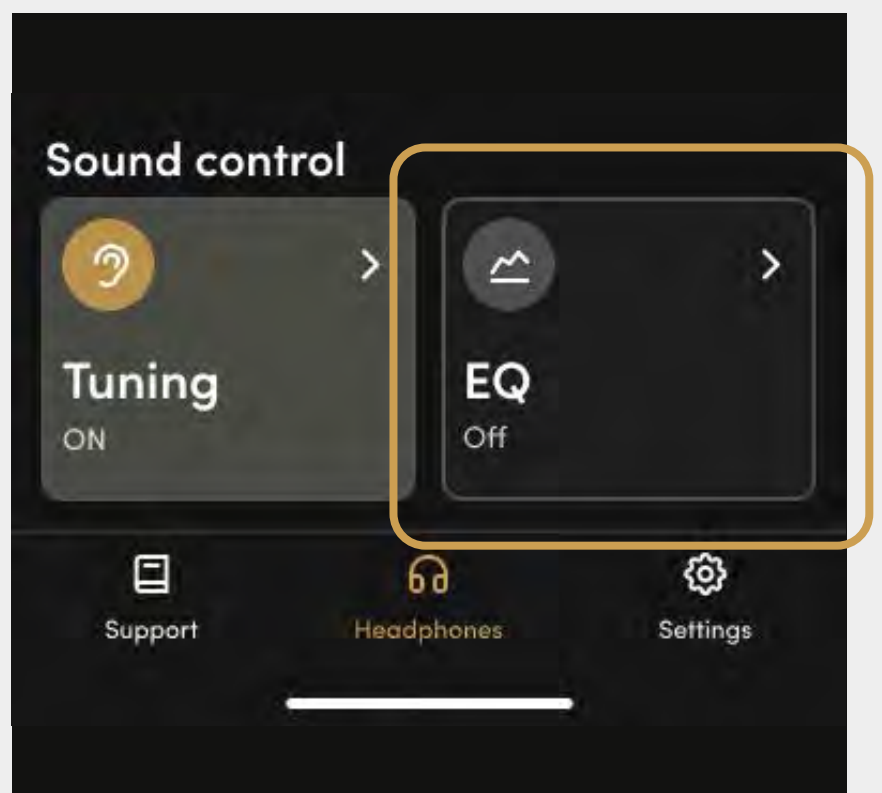
### EQUALIZING

The sound output of your headphones can also be adjusted from the EQ page. These settings are applied in addition to your Zildjian Perfect Tune™ settings. If you wish to turn off Perfect Tune™ or your customized EQ settings, you can do so by toggling either setting to Off within the app.

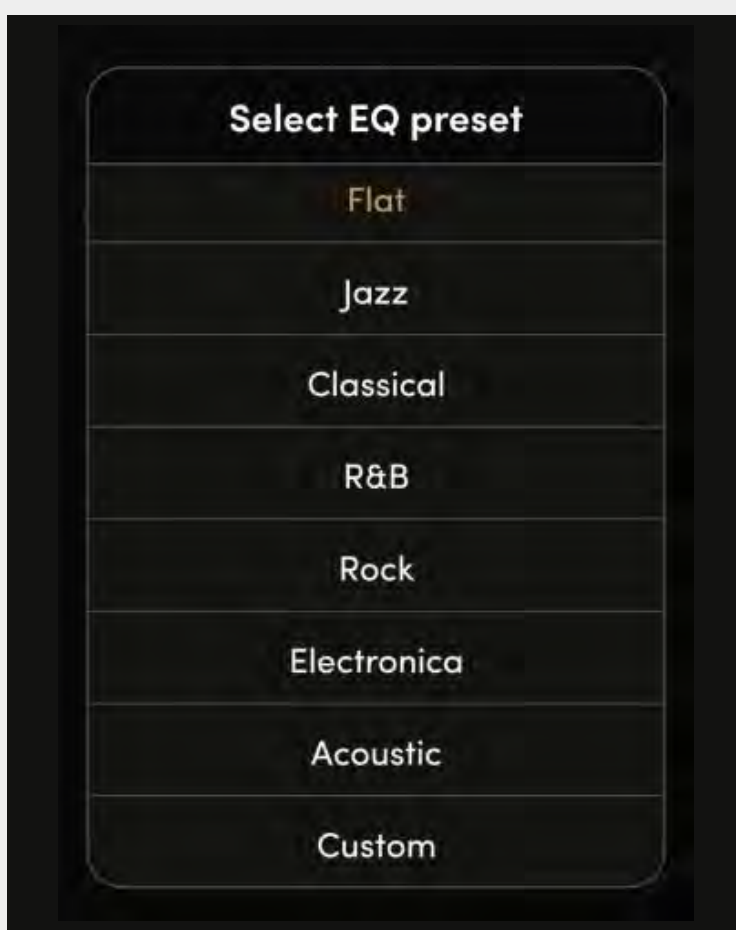
The mobile app contains several EQ presets curated by sound experts, and includes a custom EQ feature that allows you to further customize sound output. Any changes made in the app are applied to the headphones in real time and do not need to be saved.

❶ Tap **EQ** under the **Sound control** heading on the homescreen.

❷ Toggle the Enabled button to turn on the EQ options.



❸ Scroll through the EQ presets, or choose Custom.



❹ If you chose **Custom** in Step 3, drag the settings up and down to customize the sound.



## SOUND CONTROL

### AUTO STANDBY

You can set your headphones to automatically power off if they have not been used for a set time. By default, your headphones will automatically power off after 30 minutes of disuse. You can change the timeframe in the Zildjian app.

- ❶ Open the Zildjian mobile app.
- ❷ Tap the Settings button on the bottom menu bar.
- ❸ Tap Auto standby.
- ❹ Select from the available auto standby options; Never, 15 minutes, 30 minutes or 1 hour. Once selected, return to the app via the back arrow. The changes are applied to the headphones in real time and do not need to be saved.

## MAINTENANCE AND CARE

### BATTERY

#### Charge your headphones

- ❶ Plug the USB-C charging cable into the USB port on the right ear.
- ❷ Plug the other end of the charging cable into a power source.



#### Notes









- We recommended using the Zildjian-provided power cord to charge your headphones.
- While charging, the headphones will remain powered off.
- Charge for at least 15 minutes to reach 15% battery power.
- Charge for at least 2 hours for 100% battery power (5V/2A).



## MAINTENANCE AND CARE

### STATUS INDICATORS

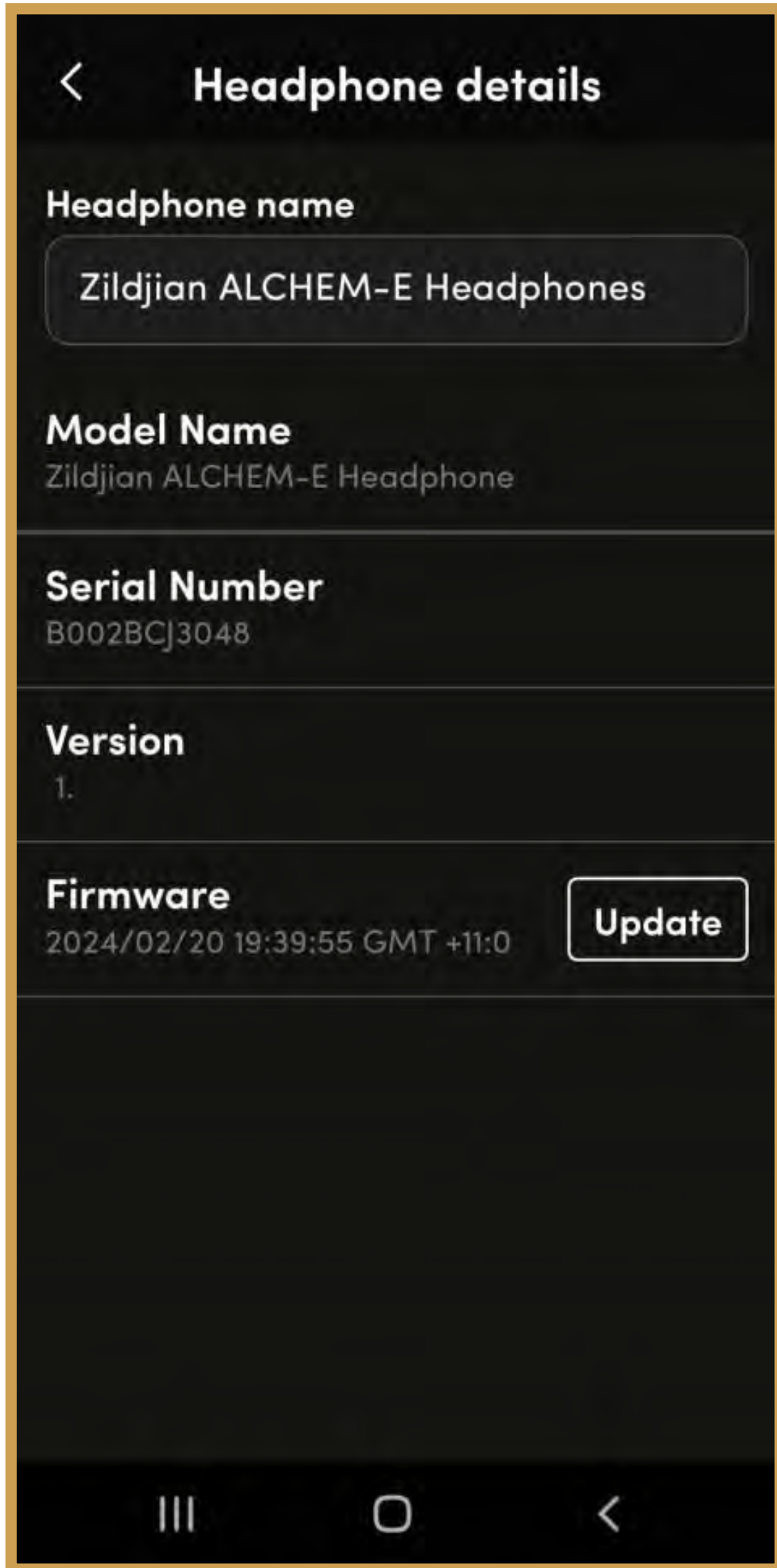
The LED indicators on the right ear alert you to your headphones' status.

<p><b>Powering on</b> Increasing white bars, followed by 3x battery status flash.</p>	
<p><b>Powering off</b> Decreasing white bars.</p>	
<p><b>Battery status</b> Green or red bars flash three times after headphones are powered on.</p> <p><b>100-75%</b> flash 4 green bars <b>74-50%</b> flash 3 green bars <b>49-25%</b> flash 2 orange bars <b>24-11%</b> flash 1 red bar <b>4 - 10%</b> 1 semi-rapid red flashing bar <b>3%</b> 1 rapid red flashing bar</p>	
<p><b>On but not in use</b> Single white bar slowly pulsing. Bar is blue if connected to Bluetooth.</p>	
<p><b>Connecting to Bluetooth</b> Single blue bar moving up and down.</p>	
<p><b>Bluetooth pairing successful</b> All bars fade blue 0% to 100% 3x over 1 second.</p>	
<p><b>Bluetooth playing audio</b> Single blue bar at 50%.</p>	
<p><b>Connecting to auxiliary</b> All bars fade yellow 0% to 100% 3x over 1 second.</p>	

## MAINTENANCE AND CARE

### UPDATES

Firmware updates are available via the Zildjian mobile app.



### CLEANING

The headphones should be cleaned periodically.

- Wipe the outside surfaces with a soft, dry cloth.
- Do not allow moisture to get inside the ear cups or the Aux input connector.

## MAINTENANCE AND CARE

### REPLACEMENT PARTS AND ACCESSORIES

The earpads and headband pad are removable. Replacements can be purchased from Zildjian.

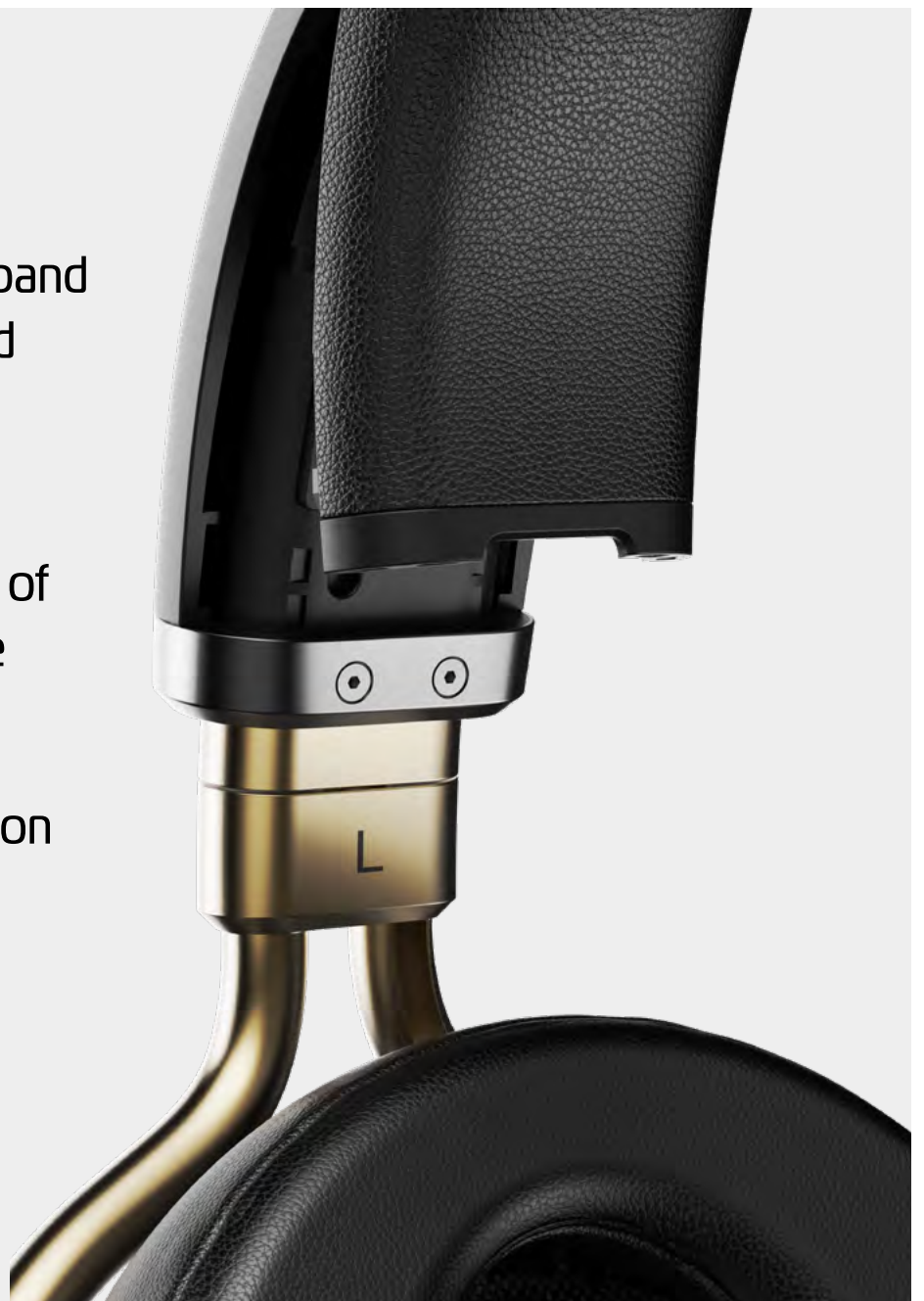
#### Earpads

- ❶ To remove the old earpad, hold it and twist off counterclockwise
- ❷ Attach the new earpad and twist clockwise to secure it.



#### Headband

- ❶ To remove the bottom headband pad, get the pry tool supplied with the replacement pad.
- ❷ Wedge the pry tool into the small opening at the bottom of the headband, directly above the two screws.
- ❸ Apply light downward force on the tool to pop the pad out.
- ❹ Insert the new headband pad into place.



## WARRANTY

Zildjian ALCHEM-E Headphones have a 1-year warranty against manufacturing defects under normal use on parts.

Visit <https://zildjian.com/pages/warranty> for more information.

## HELP

### TROUBLESHOOTING

#### Headphones won't power on

Please ensure your headphones are fully charged.

See the Battery section of this guide for more information.

#### Headphones won't connect to Bluetooth

- 1 Remove the headphones from the mobile pairing list.
- 2 Perform a hard reset.
- 3 Add the headphones back to the mobile pairing list.
- 4 Attempt to connect to Bluetooth again.

#### Hard reset

A hard reset recovers the device in the unlikely event of a firmware crash.

It does not clear any settings or configurations.

- 1 Hold the power button down for 10 seconds, then press it again briefly.

#### Factory reset

A factory reset restores the headphones to their factory defaults. All personal data (including EQ settings, device name, and personalization) are removed.

- 1 Press and hold the ANC button and the control knob together for 7 seconds until headphones power off and then restart. The start up LED sequence will begin and the headphones will immediately enter pairing mode.

## CONTACT US

We're here to help. For Customer Support, please visit [www.zildjian.com/contact](http://www.zildjian.com/contact).