

UHA-3 USB DAC and Headphone Amplifier

User Guide

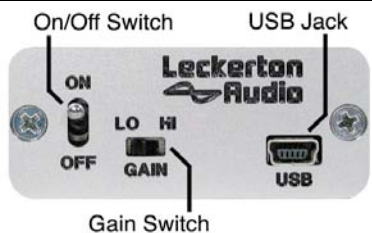
Caution: The UHA-3 is capable of generating extremely loud signals with most earphones and headphones. It is recommended to first power up the UHA-3 and then set the volume to minimum (fully counter-clockwise). After starting music playback, place the headphones/earphones and adjust the volume to a comfortable level.

Front Panel



1. **1/8" (3.5mm) Analog Input** – connect to any headphone output or line level output.
2. **1/8" (3.5mm) Headphone Output** – connect to any headphones, earphones, or line level input.
3. **Indicator LEDs** – CHG indicator LED is orange when battery is charging, off when charging is complete. PWR indicator LED is blue when the UHA-3 is powered on and the battery has greater than one hour of estimated remaining runtime. PWR indicator LED turns red when estimated remaining runtime is less than one hour.
4. **Volume Knob** – maximum setting (fully clockwise) provides 18dB gain in high-gain mode, 0dB gain in low-gain mode.

Rear Panel



1. **On/Off Switch** – enables power to amplifier circuitry; battery charging functions are automatically enabled whenever the UHA-3 is connected to USB.
2. **Gain Switch** – 18dB maximum gain in high-gain mode, 0dB maximum gain in low-gain mode. The gain switch is recessed slightly in the enclosure to prevent accidental switching during use.
3. **USB Connector** – connect to a computer using a mini-USB cable for USB audio streaming and battery charging.

USB Streaming Configuration

The UHA-3 uses the default USB audio drivers which are included with Windows and Mac OS. In most cases, the UHA-3 is automatically selected as the output sound device upon connection to the computer. It may be required to manually

select the UHA-3 as the output device:

In Windows XP, select **Start > Settings > Control Panel > Sounds and Audio Devices**. Under the **Audio** tab, select **USB Audio DAC** as the default device under the **Sound playback** tab.

In Windows 2000 and ME, select **Start > Settings > Control Panel > Sounds and Multimedia**. Under the **Audio** tab, select **USB Audio DAC** as the default device under the **Sound playback** tab.

In Mac OS 10.0 or later, select **Sound** in **System Preferences**. On the **Output** tab, select **USB Audio DAC**.

Note: Do not disconnect the UHA-3 from USB during audio playback. This can cause the music player application or the operating system to become unstable.

Compatible operating systems are Microsoft Windows 98SE, 98ME, 2000, XP, Vista, Mac OS 9.1 or later, and Mac OS 10.0 or later.

Battery Charging

The battery is charged via the USB connection. Charging begins automatically when the UHA-3 is connected to USB and the battery voltage has dipped below a programmed threshold. The UHA-3 on/off switch does **not** need to be on while the battery is charging. During charging, the CHG indicator LED remains solid orange. Charging is complete when the CHG indicator turns off.

Battery Replacement

The Lithium-ion battery is rated for a lifetime of several hundred complete charge and discharge cycles. After several years of use, the battery may begin to lose its ability to recharge completely. If desired, it can be replaced with a Lithium-ion 14500 750mAh equivalent rechargeable battery (500mAh minimum capacity). For a small service fee, Leckerton Audio can swap your battery for a new one. Send an email to customer_service@leckertonaudio.com for information.

WARNING: Use of Alkaline, NiMH, NiCad, or other battery types with the UHA-3 can result in significant damage and injury.

Technical Specifications

- Dynamic range: >120 dB A-weighted with analog input, 96 dB A-weighted with USB input
- Up to 100 mW into 32 Ω , <1.0% THD
- Up to 115 mW into 100 Ω , <1.0% THD
- Up to 40 mW into 300 Ω , <1.0% THD
- 0.05% THD, 1 mW into 32 Ω
- 0.02% THD, 1 mW into 100 Ω
- 0.008% THD, 1 mW into 300 Ω
- 13 dBu output level into high-impedance load (>1 k Ω), <0.01% THD
- -116 dBV A-weighted output noise floor in low-gain mode
- Frequency response: 20 Hz to 20 kHz, +/- 1dB
- Dimensions: 3.2" x 2.1" x 0.9"
- 18 hours typical runtime on full battery
- 3 hours typical battery charge time
- USB current draw: 500mA maximum
- 32kHz, 44.1kHz, and 48kHz sample rates supported for USB audio streaming (16-bit)
- Enclosure: extruded aluminum, anodized

Full Six-Month Warranty

The UHA-3 comes with a Full Six-Month Warranty which covers the cost of repairs (parts and labor) within the first six months after original purchase date. If Leckerton Audio is unable to repair your amplifier, a replacement will be provided. The warranty does not cover damage caused by misuse, neglect, abuse, or failure to follow the operation instructions. The owner is responsible for the cost of shipping the device to Leckerton Audio for repair service. For information on obtaining warranty or repair service, send an email to repairs@leckertonaudio.com.