General Use
Battery must be charged prior to first use. See reverse side.

1. Connect an audio player to the Source jack using a Line Output Adapter or 3.5mm interconnect cable.
2. Connect headphones to the Output jack.
3. Upon first use, set bass to Flat, gain to Low, and turn the Volume knob to its minimum position.
4. Turn the rear Power switch on (see reverse side).
5. Slowly raise the Volume knob to an appropriate level. See Listening Tips below.

- Bass boost can be turned on or off by moving the toggle up or down, respectively. Reduce volume before switching bass boost on. This feature boosts low frequencies by +8dB, which can overdrive the headphones and/or opamp at especially high listening levels.

- You should hear no noise or whining with your audio player connected and paused/muted. Every amplifier is hand tested to ensure proper operation. If noise is present or audio is significantly distorted at all volumes, try a different input cable.

Equipment Care
✓ Metal enclosures have rough edges, which can scratch other surfaces or devices! Use included rubber bumpers to avoid scratches.
✓ Always insert cables with care, and avoid cable strain. Small audio jacks are prone to damage.

Listening Tips
✓ Always use low gain, unless maximum volume is insufficient with your specific equipment.
✓ For maximum sound quality, use a line level source, or turn your audio player’s volume up very high (60-80%). Volume should always be controlled from the amplifier.
✓ This amplifier can produce dangerously loud music. Be sensible and listen safely: www.hearingloss.org

Thank you for purchasing c421. If you have additional questions or comments, please contact us at: contact@jdslabs.com
**c421 Charging Instructions**

c421 features smart Li-Ion recharging technology. Typical charge time is 2-5 hours. Minimal user intervention is required:

1. Connect provided mini-USB cable to amplifier.
2. Connect opposite end of cable to any USB source. Charging begins immediately.

Amplifier may be used while charging, and USB cord may be connected/disconnected as desired. Due to USB power consumption limits, charge duration is shorter (faster) when c421 is OFF.

Maximum longevity of any Li-Ion battery is achieved by minimizing the number of charge cycles and avoiding fully charged or fully drained batteries.

**LED Indication**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Indication</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power Off</strong></td>
<td>- Battery LED: Off</td>
</tr>
<tr>
<td></td>
<td>- Power LED: Off</td>
</tr>
<tr>
<td><strong>Power On, Battery Good</strong></td>
<td>- Battery LED: Off</td>
</tr>
<tr>
<td></td>
<td>- Power LED: Green</td>
</tr>
<tr>
<td><strong>Power On, Battery Low</strong></td>
<td>- Battery LED: Red</td>
</tr>
<tr>
<td>~45 min. remaining</td>
<td>- Power LED: Green</td>
</tr>
<tr>
<td><strong>Charging</strong></td>
<td>- Battery LED: Orange</td>
</tr>
<tr>
<td></td>
<td>- Power LED: Blue</td>
</tr>
<tr>
<td><strong>Battery Error</strong></td>
<td>- Battery LED: Orange Flashing. Charge could not complete due to insufficient power or missing battery.</td>
</tr>
</tbody>
</table>

**Operating Environment**

c421 is a high-performance headphone amplifier. Excessive temperature or moisture may temporarily impact sound quality:

- **Operating Temperature Range:** −40°C to 85°C
- **Operating Humidity Range:** 0 to 85% Relative Humidity

**ATTENTION:** Battery shall only be replaced with equivalent 3.7V, 1200mAh Li-Ion pack. Misuse of the battery may cause fire or burns. JDS Labs, Inc. is not responsible for damages caused by device misuse, or failure to adhere to device instructions.

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FCC Certifications

**NOTE:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CE Mark Warning

This equipment complies with the requirements relating to electromagnetic compatibility, EN 55022 class A for ITE, the essential protection requirement of Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility.