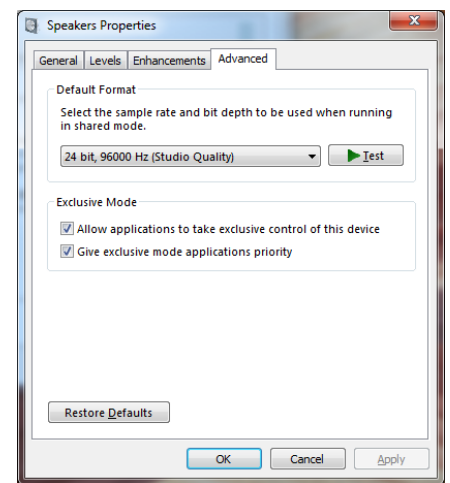# JDS LABS

1. Connect AC power adapter to the rear **power jack** (14-20VAC).
2. Connect USB cable between your computer and the **USB jack** on back side of the O2+ODAC.
3. Connect headphones to the 1/4" **Output** jack at front.
4. Press the **Power** button to power on the Objective2. Keep volume low until music is playing.
5. Slowly raise the Objective2's volume knob to an appropriate listening level. See tips below.

Rear RCA jacks serve as DAC line output. Connect equipment as needed.

Initial Computer Setup

ODAC requires no drivers in Windows, Mac OS X, or Linux. Most operating systems immediately recognize and set ODAC as the default playback device. To manually select the playback device in:

- **Windows XP:**
  Double click volume icon in taskbar. Click 'Options', 'Properties', choose 'ODAC'.
- **Windows Vista/7/8:**
  Right click volume icon in taskbar, click 'Playback Devices', set 'ODAC' as default device. Suggested Properties (Right click ODAC "Speakers" icon):
  - Enhancements: Check "Disable all enhancements"
  - Advanced: 24 bit, 96000 Hz
- **Mac OS X:**
  Ensure 'ODAC' is selected from 'Audio Devices'

Listening Tips

- ✓ For maximum signal fidelity, keep ODAC digital volume set slightly below 100% at the computer. Only control volume from the O2+ODAC.
- ✓ Set output to 24-bit, 96 kHz
- ✓ High-performance audio devices can produce dangerously loud music. Be sensible and listen safely: www.hearingloss.org

Thank you for purchasing the O2+ODAC. If you have additional questions or comments, feel free to write to: contact@jdslabs.com

O2+ODAC Power Adapter Information

ATTENTION: Improper AC adapters and/or tips can result in capacitor explosion hazards and device damage. The O2 strictly requires an AC-to-AC adapter, as specified below.

- Required power adapter characteristics for the Objective$_2$:

Type:	AC-to-AC Transformer (AC/AC)
Voltage:	14-20V **AC** output
Current:	Minimum 200mA
Connector:	2.1x5.5mm (ID x OD)

PLEASE NOTE: AC/DC adapters are very different from AC/AC adapters. Manufacturers commonly abbreviate and refer to all types simply as "AC Adapters", which gives no indication of their actual output. Be aware that most adapters are in fact AC/DC type, which supply DC current. These power adapters are used with laptops, game consoles, computer peripherals, etc., and are *not* **compatible** with the Objective2.

The O2 strictly requires an AC-to-AC transformer, with minimum 14VAC output.

Recommended Power Adapters - North America	Supplier	Part #	Price
1. Triad WAU12-200, 120VAC to 12VAC, 200mA *Notes*: Recommended by NwAvGuy. Actual output: 13.5VAC, suitable for most users.	Mouser.com	553-WAU12-200	$5.55
2. Triad WAU16-400, 120VAC to 16VAC, 400mA *Notes*: Recommended by NwAvGuy. **Not verified by JDS Labs**	Mouser.com	553-WAU16-400	$10.76
3. Xicon 120VAC to 18VAC, 500mA *Notes*: Recommended by NwAvGuy. **Not verified by JDS Labs**	Mouser.com	412-218054	$10.65
4. Triad WAU20-200, 120VAC to 20VAC, 200mA *Notes*: Recommended by NwAvGuy. **Not verified by JDS Labs**	Mouser.com	553-WAU20-200	$6.70

Recommended Power Adapters - United Kingdom	Supplier	Part #	Price
1. Maplin N58AT, AC/AC Multi-Voltage 1000mA Power Supply *Notes*: Use 15V output. **Not verified by JDS Labs**	Maplin	N58AT	£19.99

Troubleshooting

- O2 does not turn on, or power LED is on but output is silent
    - Cause: Wrong or missing power adapter
    - Solution: Connect proper AC adapter
- Distortion at high gain
    - Cause: O2's volume control resides between its input and output stages. Some headphones can overdrive the O2's input stage. Refer to NwAvGuy's blog for thorough explanation.
    - Solution: Use low gain or reduce source volume. Stronger AC adapter can sometimes help.
- No sound in one channel
    - Causes: Bad output cable, or incorrect computer settings
    - Solutions: Check balance settings; try another output cable. Some Mac O/S X machines will pan audio to Left channel upon first connection of ODAC. User must restore balance to center.
- Distorted output or "harsh" treble (constant or intermittent)
    - Causes: Weak USB power, or bad USB cable
    - Solutions: Use a powered USB hub or different computer; try another USB cable