

OPERATING INSTRUCTIONS | AMP+DACS

ELEMENT

SUPPORT

ONLINE

BY PHONE

BY MAIL

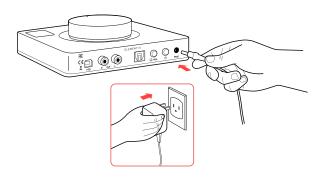
CONTACT@JDSLABS.COM

JDSLABS.COM/SUPPORT

314-252-0936

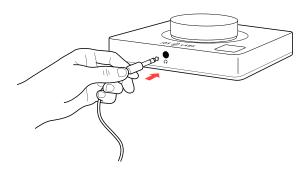
9:30AM-6PM CST, MONDAY THROUGH FRIDAY 909 N BLUFF RD COLLINSVILLE, IL 62234 UNITED STATES

QUICK SETUP



STEP 01

Connect AC power adapter to rear power jack (16VAC), then connect to wall outlet



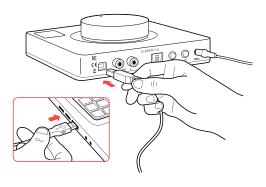
STEP 03

Connect headphones to the front headphone output jack



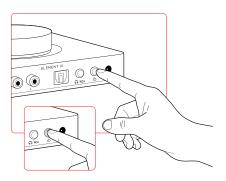
STEP 05

Slowly raise the volume knob to an appropriate listening level. See listening tips on page 5



STEP 02

Connect USB cable between your computer and the USB jack



STEP 04

Pressing the Power button turns Element on or off.

Pressing the Headphone/RCA button toggles between headphone or RCA Output modes.

Please see Connectivity and Computer Setup for additional help.

CONFIGURATION

Automatic Gain

Element III handles audio logic for a blissful experience, automatically toggling the optimal gain state as you adjust volume. No thought is required on your part. Enjoy!

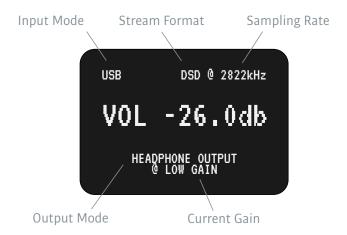
Low Gain is always active at volume levels from -127.5 to 0 dBFS. Continuing to turn the knob beyond 0 dB presents an on-screen progress bar, signifying a pending transition to High Gain. Element III automatically adjusts volume for a pleasant transition between gain states. You will see an effective volume range of 0 to 13.5 dB in High Gain.

Please observe safe listening habits under Listening Tips. Typical listening levels range from-50 dB to -20 dB for most dynamic and planar headphones, depending on your music collection and preferences.

Display

Element III displays status information while you interact, then vanishes so that your focus remains on listening.

Pressing down on the Volume Knob for 3+ seconds enters the Options Menu. Turn the knob to navigate up/down the options menu, and push the knob to make a selection.



OPTIONS MENU

Display Settings



Pressing down on the Volume Knob for 3+ seconds enters the Options Menu. Turn the knob to navigate up/down the options menu Push the knoh to make a selection

Screen Timeout

Default: **5** seconds, with a range of 0 (never) to 120 seconds.

Screen Contrast

HIGH, MED, OR LOW

LED Mode

ON LEDs will remain on while Element III is on.

LEDs will power off after 5 min of USB inactivity, and resume with audio. 5 MIN STANDBY

WITH SCREEN LEDs will power off while the screen is off.

Encoder Resolution

FULL, LOW

Encoder Steps

0.5 dB

1.0 dB

2nd Harmonic Steps

Default: 0, with a range of -75 to 75

3rd Harmonic Comp

Default: -20, with a range of -75 to 75

DPLL BANDWIDTH

Default: 7, with a range of 0 to 15. This setting directly impacts jitter rejection, with the optimal value dependent on timing stability of your PC or audio source. Most audio sources produce stable audio when DPLL is set to 5. We have conservatively increased the default DPLL value to 7 in order to support a wider range of sources, especially modern 4k TVs. If you encounter stuttering, try increasing DPLL Bandwidth.

SPDIF DE-EMPHASIS

The default value of **ON** automatically enables de-emphasis when an incoming S/PDIF stream contains such a flag, and otherwise disables de-emphasis. Setting to OFF bypasses auto de-emphasis.

DAC_FILTER **FAST ROLLOFF** SLOW ROLLOFF MIN PHASE

STATUS

Displays the current firmware version, USB Stream status (Active, Inactive), and internally recovered I2C Errors. This information is intended for factory Q/C checking. Please note I2C Errors can occur from strong ESD or other interference. Element III monitors for and automatically recovers from I2C errors.

FACTORY RESET

As the name suggests, Factory Reset clears all above settings to their default states. Upon reset, your Element 3 will default to -45 dB volume in Headphone Output mode via USB Input, and RCA Output will default to 0 dB.

Connectivity

Inputs

Element III accepts digital input via USB or S/PDIF (optical). Press the volume knob to toggle between input modes.

Outputs

Element III provides headphone output and RCA Preamp Outputs. Press the Headphone/RCA button on the rear to toggle between output modes. Only one output is active at a time. Volume is adjustable in either mode, and saved to memory for easy transitions.

Pressing an input or output button displays the current mode on the screen.

HEADPHONE OUTPUT MODE RCA OUTPUT MODE HEADPHONE **HEADPHONES HEADPHONE** AUDIO TO AMPLIFIER **HEADPHONES AMPLIFIER MUTE** DIGITAL USB DAC DAC INPUT INPUT AUDIO TO **RCA JACKS** RCA JACKS SPEAKERS (LINE-OUTPUT) (LINE-OUTPUT) MUTE **SPEAKERS**

Listening Tips

Set sampling rate to the highest integer multiple of your music collection. For example, use 192kHz for a collection of 48k and 192k audio files. Common streaming services and games tend to use 48kHz audio. Alternatively, you may install the optional XMOS drivers in Win 10/11 and use an ASIO capable app to achieve bitperfect sampling rate changes. Active sampling rate is displayed on Element III's screen.

By default, Element III disables host operating volume controls for maximum fidelity and plentiful D/A headroom. Note Win 10/11 may still permit system level volume adjustments.

Element III can amplify headphones to dangerously loud audio. Listen safely to conserve your hearing: www.hearingloss.org

Operating Care

Element III uses a high current power supply and runs warm to the touch. Avoid covering the top and sides.

Element III can be safely powered on 24/7.

Do not lift the amplifier by its knob!

To ensure an optimal noise floor, always position headphone amplifiers as far away as possible from wireless devices.

SETUP

Computer Setup

Element III requires no drivers in Windows 10/11, macOS, Linux, and modern versions of iOS and Android. You may download optional drivers for Windows at jdslabs.com/drivers to enable all bitrates, adjust Buffer Length (latency), and enable an ASIO endpoint. Be sure to select your new DAC as the default playback device:

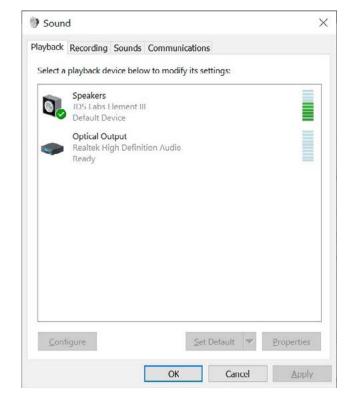
Windows 10/11

- Right click the volume icon in your taskbar and click: Open Sound Setting → Sound Control Panel
- 2. Click on "JDS Labs Element III," then choose "Set Default."

Please refer to Listening Tips for optimal properties

macOS

Ensure JDS Labs audio device is selected from Audio Devices.



Troubleshooting

No USB device or "Failed to Play Audio"

Cause: USB Device is not initialized.

Solution: Turn Element III off, then back on to reset the USB device.

Amplifier does not turn on

Cause: Missing, damaged, or loose power adapter connection.

Solution: Please see jdslabs.com/troubleshooting

LEDs flash repeatedly, or screen does not respond

Cause: Element III constantly self-monitors to automatically correct potential error states. Flashing LEDs or no screen activity indicate no response from the XMOS processor despite internal reset attempts. This may be caused by a power surge or extreme ESD event. **Solution:** Please turn Element III off for at least 1 minute, and then back on. If behavior persists, please reach out to jdslabs.com/support

Element III reboots during use

Cause: Element III is designed to detect insufficient AC mains power, and may reboot when subjected to a severe brownout.

Solution: Ensure clean power is provided.

No sound from headphones

Cause: Wrong mode or incorrect connectivity setup.

Solution: Please see Connectivity on page 4. Double check all cabling and volume levels.



Power Adapters

ATTENTION: Incorrect power adapters can result in capacitor explosion hazards and device damage. Only use the power adapter included with your Element:

Type: AC-to-AC Transformer	Output Voltage: 16 VAC
Current: Minimum 1000mA	Connector: 2.1x55.mm (ID x OD)



