



LIQUID SPARK HEADPHONE AMPLIFIER



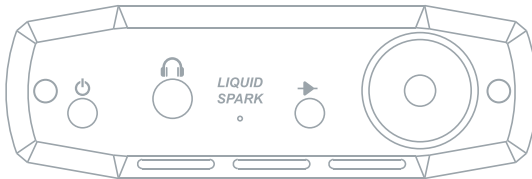
P/N **33304**
User's Manual

The Liquid Spark is a compact, desktop solid state headphone amplifier. It has one TRS (standard 1/4" phone plug) single ended output and one RCA preamp output.

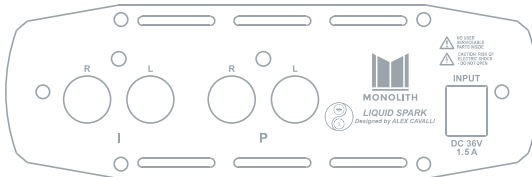
The amp has one set of (RCA) inputs.

The LS (Liquid Spark) has gains of 3X and 6X, front panel selectable, and an approximate full output power of 1.3W per channel with a 50 ohm load.

FRONT VIEW



BACK VIEW



Amplifier Operation

1. The LS has a short startup delay to protect the headphones. Do not attempt to defeat this startup timing. Do not repeatedly push the power button on and off because this will always reset the timing.
2. Plug the Monolith/Liquid Spark labeled power supply into the back of the amplifier.
3. Press the power button to turn on the amplifier.
4. The small LED in the center of the front panel should light red.
5. After approximately 10 seconds the LED will turn white and the headphones will be connected.
6. If the LED does not turn white within 30 seconds, please contact Monoprice Tech Support Associates
7. Select gain with the center pushbutton. Pushbutton out is 3X, push button in is 6X.
8. The preamp output is only active when headphones are not plugged in.
9. To turn off the power push the power button again (pushbutton out).

CAUTION: Please remember to turn down the volume (or power down completely) before plugging or unplugging any sources or headphones into or from your Liquid Spark.

Setup Instructions

1. Plug source(s) into the RCA or both inputs.
2. Select the gain.
3. Plug in headphones.

Protective Circuit

There is one protective circuit in the LS which protects the headphones from DC offset.

The protective circuit is triggered if either or both channels exhibit an average DC voltage above the set threshold. If this happens the LED will turn to Red and the amplifier will be in protection mode and will not operate. In normal operation, when the issue is relieved, the LED will return to its white condition indicating that the amp is ready for operation again. If the LED stays red, please contact Monoprice Tech Support Associates

Sometimes the protection circuit will trip when you insert or remove the TRS plug with the amp delivering power to the jack. This means that the amp is responding to the well-known channel shorting that occurs during the insertion/removal of the plug. To prevent this, always turn down the volume before removal/insertion of a TRS plug.

Preamp Output

The preamp out has an output impedance of 150 ohms. Remember that the LS is a small power amplifier. DO NOT short the preamp outputs to ground as this make cause damage to the amplifier.

General Best Practices

- Plug in headphone cables when the amplifier is turned off.
- Turn the volume all the way down before plugging in headphones.
- Turn the volume all the way down before putting on headphones.
- Plug in sources when the amplifier is turned off and turn the amplifier off to switch sources.

Amplifier Break-In

- Most amplifiers need at least 100 hours of continuous music playback to reach their full sound signature.
- It is **not necessary** to set up a break-in period. The amp will change character as you listen normally and you will hear it evolve into its natural sound signature.
- If you do employ break-in, we recommend about 100 hours playing in continuous music mode with no headphones and the volume set to about 10 o'clock.
- We recommend you disconnect your headphones when not listening during this break-in period.
- After about 100 hours we do not recommend to keep the amplifier on constantly as this will shorten the life the components.

Power Sources

Your LS Amplifier is supplied with a universal power supply module. It has a US (Type A) plug, but will work with the adapter suitable for your location.

Grounding

This amplifier shares the ground of the source it is plugged into. In unusual circumstances, ground noise may occur, depending on the exact grounding of the source equipment.

Power and Signal

Cables should never be connected or disconnected with equipment powered up. Failure to heed this warning may damage or destroy equipment.

Servicing

There are no serviceable parts in the amplifier. Do not attempt to service the amplifier. All servicing must be referred to authorized service personnel.

FOR YOUR PROTECTION

Ventilation

Your amplifier runs warm and requires free air circulation to the vents on the product.

Never place the amplifier in an enclosed space with restricted airflow, especially one with low vertical clearance.

Never place it near another source of heat, especially on top of something that is generating significant heat. Excessive heat will shorten the life of the product.

Water and Moisture

- NEVER use the LS amplifier near water.
- NEVER handle the amplifier while in contact with water.
- NEVER let the amplifier come in contact with water.
- NEVER spill water or other liquids into it.
- NEVER operate the LS with wet hands.

TECHNICAL SUPPORT

Monoprice is pleased to provide free, live, online technical support to assist you with any questions you may have about installation, setup, troubleshooting, or product recommendations. If you ever need assistance with your new product, please come online to talk to one of our friendly and knowledgeable Tech Support Associates. Technical support is available through the online chat button on our website **www.monoprice.com** during regular business hours, 7 days a week.

You can also get assistance through email by sending a message to: **tech@monoprice.com**

Need Help? We're here for you!

Contact us: **www.monoprice.com/contactus**

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