

## MUSE Muse S Athena

# MUSE S Athena Brain Sensing Headband User Manual

Brand: MUSE | Model: Muse S Athena

## 1. PRODUCT OVERVIEW

The Muse S Athena is an advanced brain-sensing headband designed to enhance meditation, improve focus, and optimize sleep. It provides real-time neurofeedback using EEG (Electroencephalography) and fNIRS (functional Near-Infrared Spectroscopy) technology.

This device offers comprehensive tracking for sleep, focus, and recovery. An optional Premium subscription provides access to an AI Coach, deeper brain insights, and a library of over 500 meditations. The Muse S Athena acts as a personal coach to help users understand their brain activity, improve mental fitness, and develop stronger cognitive abilities.

The soft, adjustable headband is designed for comfortable wear, including overnight use. It connects to the Muse app via Bluetooth, allowing users to select various meditation, sleep, or brain training experiences. Post-session reports provide insights into brain activity, effort, performance, and sleep scores, enabling users to track progress and optimize their mental well-being.

Built on scientific validation, Muse technology is trusted by neuroscientists and wellness professionals, combining SmartSense EEG sensors with fNIRS technology for an advanced biofeedback experience.

## 2. KEY FEATURES

- **Advanced EEG + fNIRS Tracking:** Monitors brain activity and blood flow for sleep, focus, and recovery.
- **Personalized Coaching:** Integrates with the Muse app for guided experiences and progress tracking.
- **Real-time Biofeedback:** Provides immediate feedback during sessions to guide users towards calm and focus.
- **Comfortable Design:** Soft, adjustable fabric suitable for extended wear, including sleep.
- **Long Battery Life:** Up to 10 hours of continuous use.

- **USB-C Charging:** Convenient charging with an included cable.
- **Bluetooth Connectivity:** Connects wirelessly to compatible smartphones (iPhone 12 or later, Android Pixel 6/equivalent or higher).



**Figure 2.1:** Clinical-grade technology overview, highlighting EEG, fNIRS, heart rate, and fabric comfort.

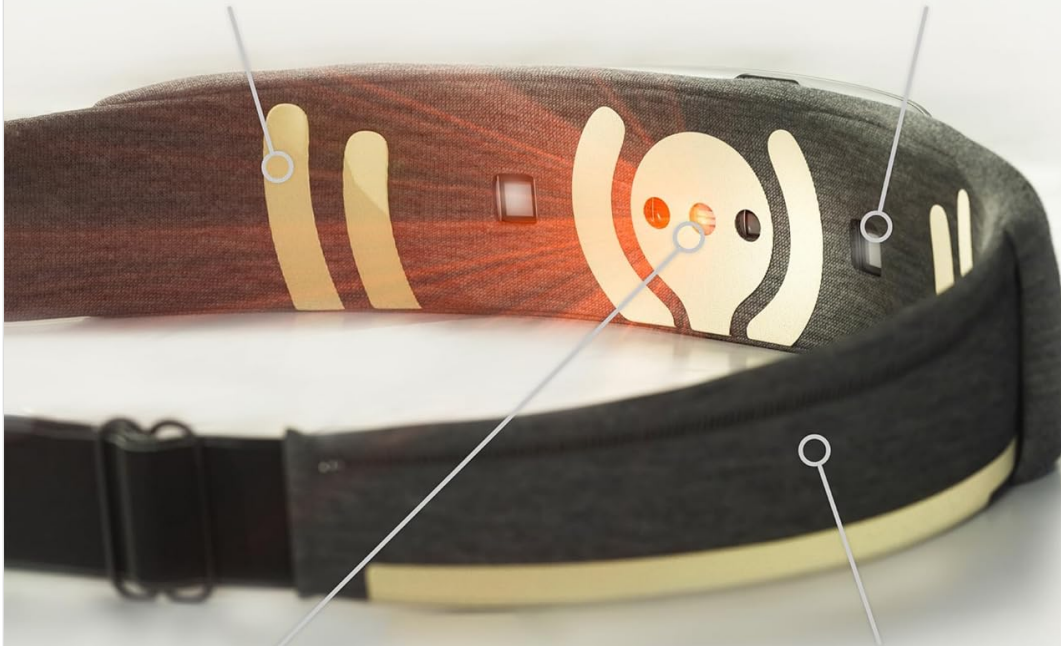
## Clinical-grade technology

### SmartSense EEG

Detects brain activity & provides valuable real-time feedback

### fNIRS blood flow + O<sub>2</sub> monitoring

Tracks cognitive effort & endurance via blood flow & oxygenation to the brain.



### Heart rate detection

PPG detects heart rate and circulation

### Ultra comfortable fabric

Forget you are wearing it comfort

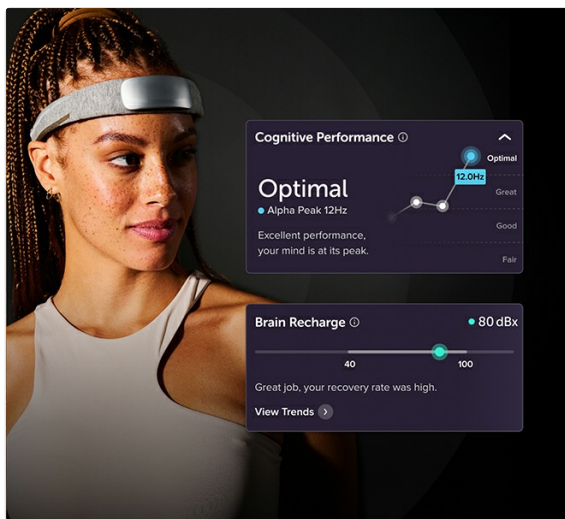
Figure 2.2: Features for sleep tracking, including battery life and connectivity.



## Accelerated learning with real-time feedback

The Muse app records real-time data, providing post-session reports on calm, neutral, and active states. Track progress, set goals, and level up with programs for consistent practice

Figure 2.3: Cognitive fitness benefits: Focus, Endurance, and Recovery.



## Reduced stress

↑ **77%** of Musers felt they had a better handle on their stress

↑ **78%** of Musers reported being more calm & relaxed

## Improved focus

↑ **72%** of Musers reported better focus & clarity

↑ **71%** of Musers reported having better emotional regulation

Figure 2.4: Feature comparison across Muse devices and subscription tiers.

### 3. SETUP

1. **Charge the Headband:** Before first use, fully charge your Muse S Athena headband using the provided USB-C cable. The battery life is approximately 10 hours.
2. **Download the Muse App:** Download and install the official Muse app from your device's app store. The app is compatible with iPhone 12 or later, and Android Pixel 6 or equivalent/higher.
3. **Pair via Bluetooth:** Open the Muse app and follow the on-screen instructions to pair your headband via Bluetooth. Ensure Bluetooth is enabled on your smartphone.
4. **Position the Headband:** Place the soft, adjustable headband on your head, ensuring the sensors make good skin contact across your forehead and behind your ears. Adjust for a snug but comfortable fit.



Figure 3.1: Proper positioning and adjustment of the Muse S Athena headband.

## 4. OPERATING INSTRUCTIONS

Once your Muse S Athena headband is set up and connected to the Muse app, you can begin your sessions.

1. **Select an Experience:** In the Muse app, choose from various experiences such as guided meditations, sleep journeys, or brain training exercises.
2. **Start a Session:** Follow the app's prompts to start your chosen session. The headband will begin sensing your brain activity (EEG) and blood flow (fNIRS).
3. **Engage with Biofeedback:** During meditation or focus sessions, the app provides real-time audio feedback that responds to your mental state. For example, calm states might be accompanied by peaceful sounds, while a wandering mind might introduce more active audio cues.
4. **Track Sleep:** For sleep sessions, wear the headband overnight. The app will track your sleep stages, deep sleep intensity, and body positions, providing a detailed report in the morning.
5. **Review Progress:** After each session, review your performance and insights within the Muse app. This data helps you understand your progress and refine your practice.

*Note: No official seller videos for the Muse S Athena were available for embedding in this manual.*

## 5. MAINTENANCE

To ensure the longevity and optimal performance of your Muse S Athena headband, follow these maintenance guidelines:

- **Cleaning:** Gently wipe the sensor areas and the fabric band with a soft, damp cloth. Avoid using harsh chemicals or abrasive materials. Ensure the headband is completely dry before storing or using.
- **Storage:** Store the headband in a cool, dry place away from direct sunlight and extreme temperatures. Keep it in its original packaging or a protective case when not in use to prevent damage.
- **Charging:** Use only the provided USB-C cable for charging. Avoid overcharging the device.
- **Handle with Care:** The headband contains sensitive electronic components. Avoid dropping, bending, or applying excessive force to the device.

## 6. TROUBLESHOOTING

If you encounter issues with your Muse S Athena headband, refer to the following common troubleshooting steps:

- **Connection Issues:** If the headband fails to connect to the app, ensure Bluetooth is enabled on your device and the headband is charged. Try restarting both the headband and the Muse app.
- **Sensor Contact:** Poor sensor contact can lead to inaccurate readings or connection drops. Ensure the headband is positioned correctly and snugly on your head, with all sensors making firm contact with your skin. Lightly moistening the sensor areas with water can sometimes improve contact.
- **App Not Responding:** If the Muse app is unresponsive, try closing and reopening it. If the issue persists, restart your smartphone.
- **Inaccurate Data:** Verify that the headband is correctly positioned and the sensors are clean. Environmental factors or excessive movement during a session can affect data accuracy.
- **Battery Not Charging:** Check the USB-C cable and charging port for any damage. Try using a different compatible USB-C cable and power adapter.

For further assistance, please visit the official MUSE support website or contact their customer service.

## 7. SPECIFICATIONS

| Feature            | Detail  |
|--------------------|---|
| Brand              | MUSE  |
| Model              | Muse S Athena   |
| Material           | Polyester   |
| Color              | Dark Grey   |
| Compatible Devices | Smartphones (iPhone 12+, Android Pixel 6/equivalent+) |
| Item Weight        | 12 ounces   |
| Battery Life       | 10 Hours  |

|                      |                           |
|----------------------|---------------------------|
| Sensor Type          | EEG, fNIRS                |
| Battery Description  | Lithium-Ion               |
| UPC                  | 629230731111              |
| Package Dimensions   | 9.84 x 3.46 x 1.42 inches |
| Date First Available | April 10, 2025            |
| Manufacturer         | MUSE                      |

## 8. IMPORTANT INFORMATION

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Statements regarding dietary supplements have not been evaluated by the FDA and are not intended to diagnose, treat, cure, or prevent any disease or health condition.

## 9. SUPPORT & WARRANTY

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For product support, frequently asked questions, and warranty information, please refer to the official MUSE website or contact their customer service department. Specific warranty terms and conditions may vary and are typically provided with your product purchase or available on the manufacturer's website.