Eko COR501-CHP/CHP

Eko CORE 500™ Digital Stethoscope User Manual

Model: COR501-CHP/CHP

1. Introduction

The Eko CORE 500™ Digital Stethoscope represents a significant advancement in auscultation technology, combining high-fidelity audio with advanced digital features. This device is designed to enhance diagnostic capabilities for healthcare professionals by providing superior sound quality, noise reduction, and integrated cardiac monitoring.

Key features include:

- **40x Amplification & Active Noise Cancellation:** Delivers clear and precise heart, lung, and body sounds by minimizing artifact and reducing background noise.
- **3-Lead ECG & Full-Color Display:** Visualize heart rate and ECG data directly on the stethoscope's screen for comprehensive patient assessment.
- **FDA-Cleared AI with Eko+:** Unlock advanced murmur and AFib detection capabilities through the Eko App (requires Eko+ membership).
- **Durable Design:** Built for tough clinical shifts with water- and shatter-resistant construction and up to 60 hours of battery life.



Figure 1: The Eko CORE 500™ Digital Stethoscope, showcasing its sleek design and integrated digital display.

Video 1: An introductory overview of the Eko CORE 500™ Digital Stethoscope, highlighting its innovative features and design.

2. Setup

Before first use, ensure your CORE 500 is properly assembled and charged. The device comes with a chestpiece and a separate earpiece assembly.

2.1 Assembly

To assemble, align the mark on the chestpiece socket with the right side mark on the earpiece. Plug the earpiece into the CORE 500 chestpiece. Twist the earpiece clockwise with a quarter turn until it locks securely. To detach, twist counter-clockwise with a quarter turn until it unlocks.



Figure 2: Components included with the Eko CORE 500™ Digital Stethoscope, ready for assembly.

2.2 Powering On/Off

To turn on the device, press the top button on the chestpiece. The CORE 500 automatically goes to sleep after a short period of inactivity. To wake it up, simply pick it up by the neck of the chestpiece. To turn it off, press the top button and the volume up button simultaneously. Confirm the shutdown on the screen.

2.3 Charging

Connect the device to a power source using the included USB-C cable and a power adapter. The device cannot be used while charging or if it loses battery power. A full charge provides up to 60 hours of regular clinical use.

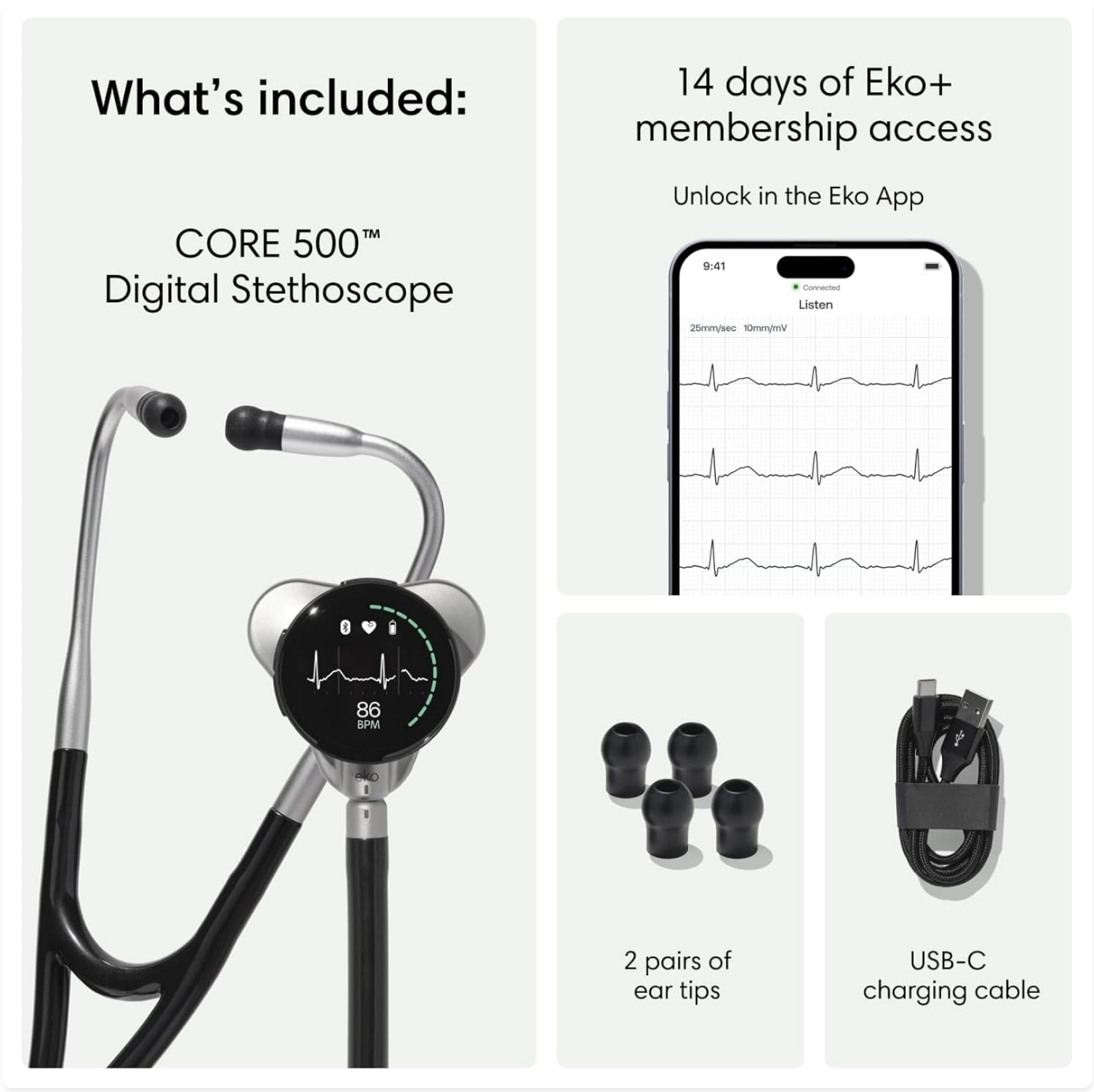


Figure 3: The CORE 500™ display indicating battery life, which can last up to 60 hours.

2.4 App Download and Connection

Download the Eko App from your device's app store. The app is required to take recordings, visualize waveforms, and access AI analysis features. Follow the in-app instructions to connect your CORE 500 via Bluetooth.

Video 2: A comprehensive guide on how to get started with your Eko CORE 500™ Digital Stethoscope, covering assembly, power, and app connection.

3. Operating

The CORE 500 offers various modes and features to optimize your auscultation and ECG readings.

3.1 Auscultation Modes

The device features three primary audio filters: Cardiac, Pulmonary, and Wide. Each filter is optimized for specific sound frequencies. Press the top button on the chestpiece to cycle through these modes:

- **Cardiac:** Focuses on heart sounds.
- **Pulmonary:** Optimized for lung sounds.

- **Wide:** A general-purpose filter suitable for all body sounds.

The wide filter is recommended for initial assessment due to its broad bandwidth.



Figure 4: The CORE 500™ offers advanced features like 3-lead ECG and specialized audio filters, surpassing traditional analog stethoscopes.

3.2 Volume Adjustment

Adjust the volume of the amplified sounds using the up and down buttons located on the side of the chestpiece. The current volume level will be displayed on the screen.

3.3 3-Lead ECG Functionality

The CORE 500 can capture a 3-lead ECG. Ensure direct skin contact with the electrodes on the chestpiece for accurate readings. The ECG waveform and heart rate (BPM) will be displayed in real-time on the full-color screen.



Figure 5: The CORE 500™ display indicating detection of Atrial Fibrillation (AFib), prompting the user to check the app for details.

3.4 Recording and Sharing via Eko App

Connect your CORE 500 to the Eko App to unlock advanced features:

- **Waveform Visualization:** View real-time heart and lung sound waveforms.
- **Recording:** Capture and save auscultation and ECG data.
- **AI Analysis:** With Eko+ membership, the app can analyze recordings for murmurs and AFib.
- **Patient Profiles:** Organize recordings by patient for longitudinal tracking.
- **Sharing:** Securely share recordings and PDF reports with colleagues or specialists.

Video 3: Demonstrates the clarity of heart sounds captured using the CORE 500™, ideal for detailed assessment.

4. Maintenance

Proper maintenance ensures the longevity and optimal performance of your CORE 500.

4.1 Durability

The CORE 500 is designed with a durable, water- and shatter-resistant construction to withstand the rigors of daily clinical use.

4.2 Battery Life

The rechargeable battery provides up to 60 hours of continuous use, ensuring reliability through long shifts. Recharge as needed using the provided USB-C cable.

4.3 Cleaning

Regularly clean the device with alcohol wipes or other approved medical-grade disinfectants to maintain hygiene and prevent cross-contamination. Ensure the device is powered off before cleaning.

5. Troubleshooting

Here are some common issues and their solutions:

- **Sensitive Pulmonary Mode:** Some users may find the pulmonary mode to be highly sensitive. Ensure proper placement and minimal movement to avoid excessive noise.
- **ECG Signal Issues:** If the ECG lead indicator is gray, ensure all three electrodes on the chestpiece have direct and firm contact with the patient's skin. Clean the skin if necessary.
- **App Connectivity:** If the device is not connecting to the Eko App, ensure Bluetooth is enabled on both devices and the app is updated to the latest version. Restarting both the stethoscope and the mobile device may resolve connection issues.

6. Specifications

Feature	Specification
Package Dimensions	19 x 6.5 x 2.5 inches; 2.1 Pounds
Batteries	1 Lithium Ion batteries required. (included)
Manufacturer	Eko Health, Inc.
ASIN	B0DLLN9BTH
Country of Origin	Malaysia

7. Warranty & Support

For detailed warranty information and technical support, please refer to the official user guide provided by the manufacturer, Eko Health, Inc. You can access the PDF version of the user guide via the following link:

Download User Guide (PDF)

Additional support resources may be available on the official Eko Health website.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

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you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question