

CONTEC CMS50F

Contec CMS50F Wrist-worn Pulse Oximeter User Manual

Model: CMS50F

1. INTRODUCTION

The Contec CMS50F Wrist-worn Pulse Oximeter is designed for monitoring pulse rate and blood oxygen saturation (SpO₂). This device features a color, multi-direction OLED display that shows real-time data including pulse rate, SpO₂, pulse waveform, pulse bar graph, and battery level. It is intended for sports, aviation, and home use, and is not a medical device for diagnosis or treatment.



Figure 1: Contec CMS50F Pulse Oximeter in use, showing the wrist unit and finger probe.

2. PRODUCT FEATURES

- Simple and easy to use wrist-worn design.

- Comfortable design suitable for both pediatric and adult users.
- Accurately records pulse rate and SpO2 blood oxygen saturation.
- Equipped with rechargeable batteries for convenience.
- Includes a download cable and software for data analysis on Windows PCs.
- Color, multi-direction OLED display with adjustable brightness.
- Audible alarm function for low pulse rate, low oxygen saturation, incorrect probe positioning, or low battery.



Figure 2: Side view of the CMS50F unit, showing the USB port for charging and data transfer.

3. SETUP AND INITIAL USE

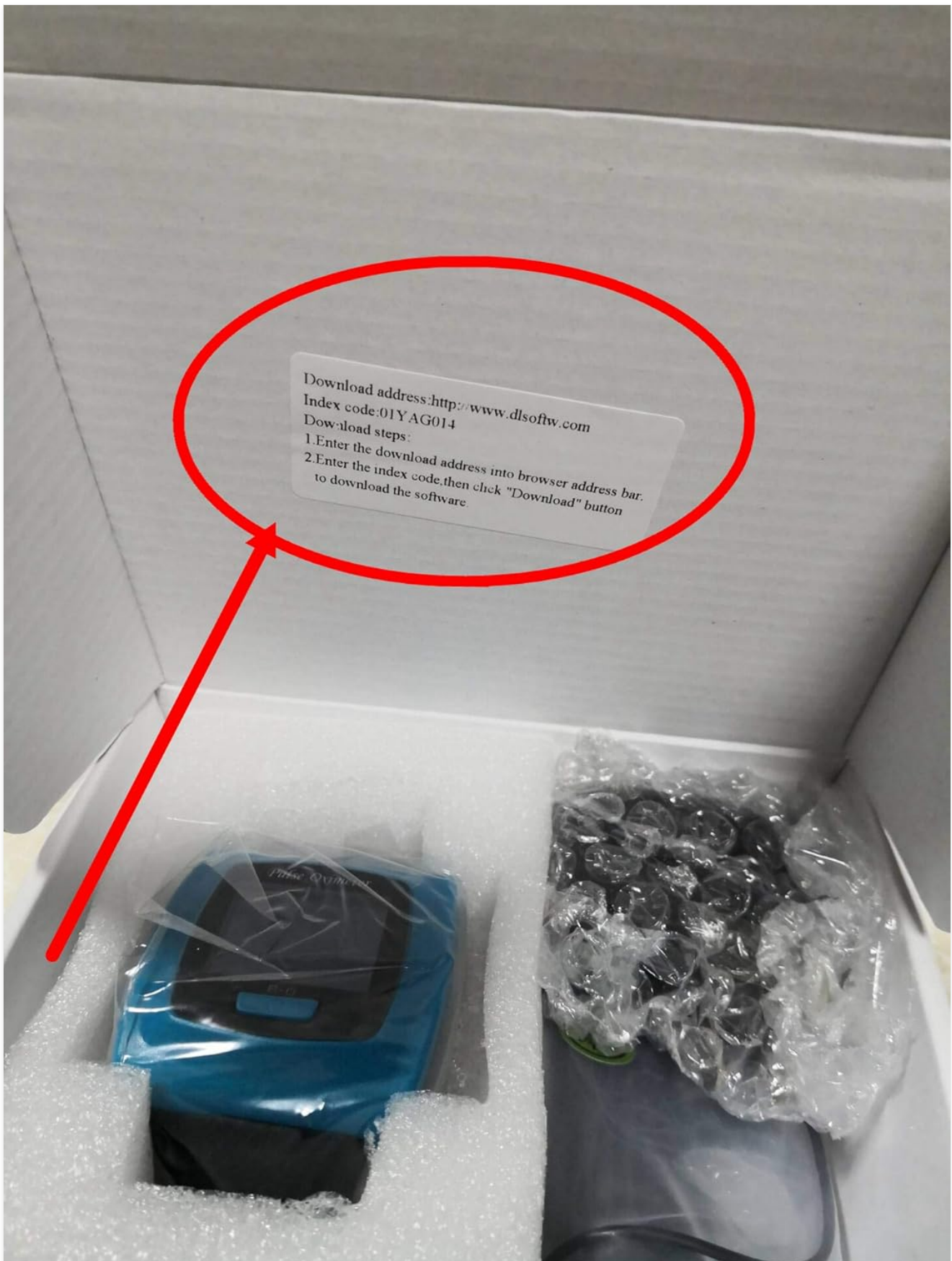
3.1 Charging the Device

The CMS50F comes with rechargeable Lithium Ion batteries. Before first use, fully charge the device using the provided USB cable. Connect the cable to the unit's USB port and to a standard USB power source (e.g., computer USB port, wall adapter). A full charge may take a few hours. For optimal battery life, it is recommended to perform a few charge/discharge cycles initially.

3.2 Software Installation (Windows PC Only)

The device includes software for data analysis. This software is compatible with Windows PCs only. The download address and index code are typically provided on a sticker within the product packaging or on a mini-CD. Follow these steps:

1. Locate the download address (e.g., www.dlsoftw.com) and index code (e.g., 01YAG014) from the packaging.
2. Open your web browser and enter the download address.
3. Enter the provided index code when prompted.
4. Click the "Download" button to obtain the software installer.
5. Run the installer and follow the on-screen instructions to complete the software installation on your Windows PC.



4. OPERATING THE DEVICE

4.1 Wearing the Oximeter

Attach the wrist unit to your wrist like a watch. Connect the finger probe to the designated port on the wrist unit. Place the finger probe on your index finger, ensuring it is securely but comfortably positioned. A piece of tape or a band-aid around the lower part of the finger unit can help keep it from slipping off or moving, potentially providing more accurate readings, especially during sleep.



Figure 4: Proper placement of the CMS50F wrist unit and finger probe.

4.2 Powering On and Display Information

Press the power button to turn on the device. The OLED display will illuminate, showing:

- **SpO2:** Blood Oxygen Saturation percentage.
- **PRbpm:** Pulse Rate in beats per minute.
- **Pulse Waveform:** A graphical representation of your pulse.
- **Pulse Bar Graph:** A visual indicator of pulse strength.
- **Battery Level Indicator:** Shows remaining battery life.

The display can be adjusted to be readable either horizontally or vertically. Refer to the device's on-screen menu for navigation and settings adjustments.

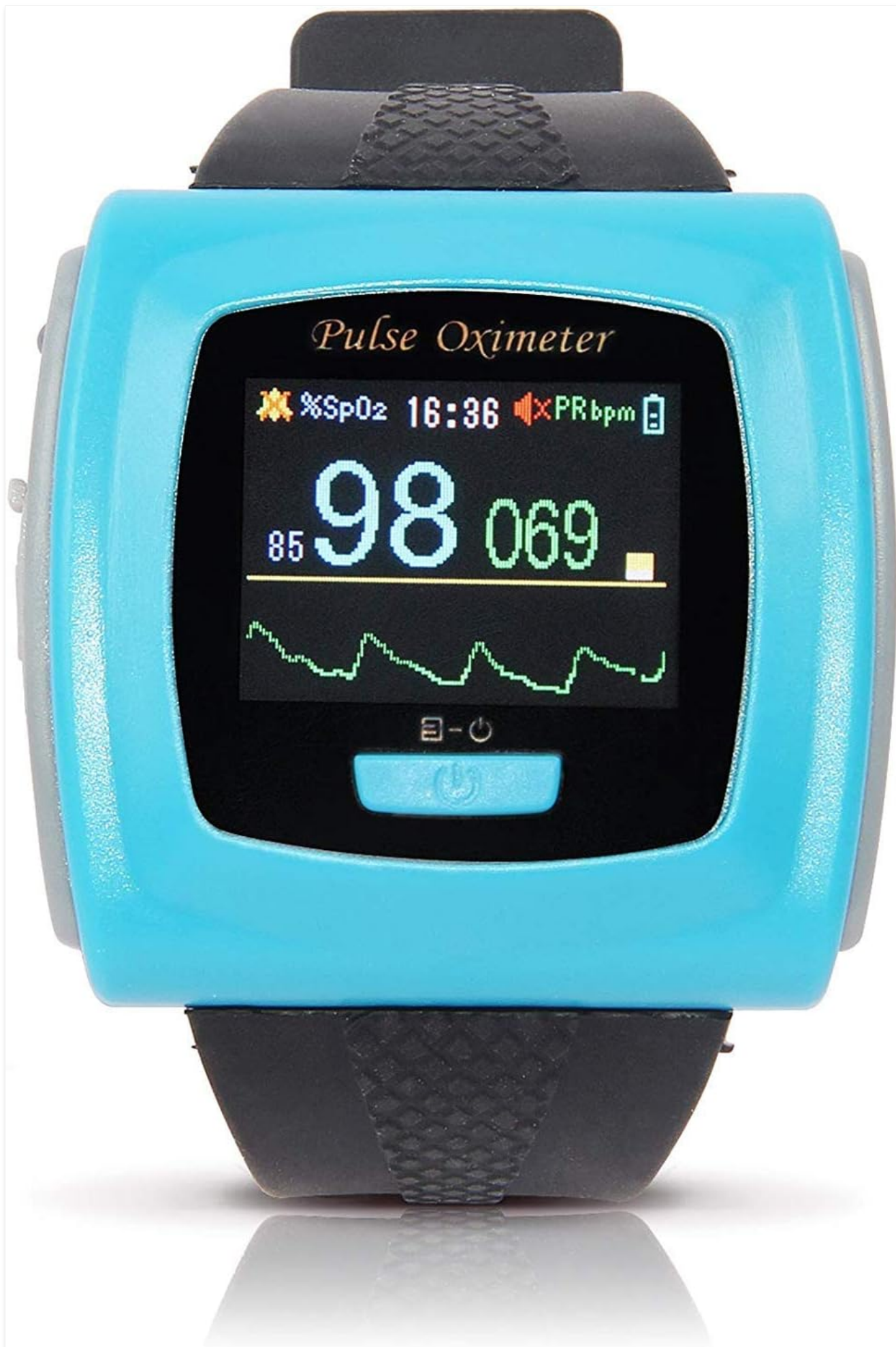


Figure 5: The CMS50F display showing SpO2 and PRbpm readings.

4.3 Alarm Function

The oximeter can sound an audible alarm under specific conditions. You can set your own parameters for SpO₂ and pulse rate (both high and low limits) through the device's menu. Alarms will activate if:

- The pulse rate or oxygen saturation drops below or exceeds a pre-set level.
- The oximeter unit or finger probe is not correctly positioned on the finger.
- The battery level is low.

5. DATA MANAGEMENT AND SOFTWARE USAGE

The CMS50F allows you to record and download data to your Windows PC for detailed analysis. Ensure you have installed the software as described in Section 3.2.

5.1 Recording Data

To record data, you must activate the "Record" mode from the wrist unit's menu. Each time you start a new recording session, previous data stored on the device will be overwritten. Therefore, it is crucial to download recorded data to your computer regularly.

5.2 Downloading and Viewing Data

Follow these steps to download and view your recorded data:

1. Open the installed CMS50F software program on your Windows PC.
2. Connect the wrist unit to your computer using the supplied USB cable.
3. Turn on the wrist unit.
4. From the computer program's menu, select the option to download recorded data from the wrist unit to your computer.
5. Once downloaded, open the desired data file within the computer program to view and analyze your results. The software provides informative reports, including full, oximetry, and summary reports.

Note: The software is designed for Windows operating systems only. Mac users will not be able to install or use the provided software.

6. MAINTENANCE

6.1 Cleaning

Clean the device regularly with a soft, dry cloth. For disinfection, use a cloth lightly dampened with a mild disinfectant solution (e.g., 70% isopropyl alcohol). Do not immerse the device in water or any other liquid. Ensure the device is completely dry before storage or next use.

6.2 Storage

Store the oximeter in a cool, dry place, away from direct sunlight, extreme temperatures, and humidity. Keep it out of reach of children.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Device does not power on.	Low or depleted battery.	Charge the device fully. Ensure the charging cable is securely connected.
Inaccurate or inconsistent readings.	Improper finger probe placement; excessive movement; cold fingers.	Ensure the finger probe is correctly and securely positioned. Minimize movement during measurement. Warm hands if cold.
Alarm sounds frequently.	Pre-set alarm limits are too sensitive; incorrect probe placement.	Adjust alarm parameters in the device settings. Verify correct finger probe placement.
Difficulty connecting to PC software.	Driver issues; incorrect connection sequence; software compatibility.	Ensure software is correctly installed on a Windows PC. Try a different USB port. Follow the connection sequence: open software, connect device, turn on device. Restart both PC and oximeter.
Short battery life after initial use.	New battery conditioning.	Perform a few full charge/discharge cycles to optimize battery performance.

8. SPECIFICATIONS

Model Name: CMS50F

Brand: CONTEC

Product Dimensions: 2.13 x 0.69 x 2.06 inches

Item Weight: 1.76 ounces

Batteries: 1 Lithium Ion battery (included, rechargeable)

Measuring Range (Pulse Rate): 60-100 beats per minute (typical range, device may display wider range)

Measuring Range (Blood Oxygen Saturation): 95-100% (typical range, device may display wider range)

Display: Color, multi-direction OLED

Software Compatibility: Windows PC only

Manufacturer: Facelake

First Available Date: May 3, 2011

9. IMPORTANT INFORMATION AND DISCLAIMER

Legal Disclaimer: 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.

This device is intended for general wellness and sports/aviation use. It is not a medical device and should not be used for medical diagnosis or treatment. Consult with a healthcare professional for any health concerns.

10. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation included with your purchase or contact CONTEC customer service directly. Contact details can typically be found on the manufacturer's official website or on the product packaging.