

CONTEC CMS50Q1

CONTEC CMS50Q1 Fingertip Pulse Oximeter User Manual

Model: CMS50Q1

1. INTRODUCTION

The CONTEC CMS50Q1 Fingertip Pulse Oximeter is a portable, non-invasive device designed for spot-checking of oxygen saturation (SpO₂) and pulse rate (PR) through the finger. It is specifically designed for individuals with small fingers, such as children, and is suitable for sports and aviation use. This device is not intended for medical diagnosis or treatment.

Important Note: This device is for Sports or Aviation use only and is not a medical device. Consult a healthcare professional for any medical concerns.

2. PRODUCT OVERVIEW

2.1 Key Features

- **Small Finger Design:** Specifically designed to fit finger diameters greater than 0.2 inch (5mm), making it suitable for children.
- **Accurate & Fast Results:** Provides quick and precise measurements of SpO₂ and pulse rate.
- **Clear Display:** Features a digital rotatable TFT display showing SpO₂ value, pulse rate value, bar graph, and pulse waveform.
- **Easy Operation:** Simple one-button operation for power on and measurement.
- **Comfortable Design:** Fingertip clip made with silica gel material for comfort.
- **Long Battery Life:** Offers 20-30 hours of battery life with automatic power-off after 5 seconds of inactivity.

2.2 What's in the Box

- CONTEC CMS50Q1 Pulse Oximeter (Main Unit)
- Lanyard
- User Manual
- Cartoon Stickers
- Screwdriver (for battery compartment)

CMS50Q1 DETAILS



This image illustrates the various parts of the CMS50Q1 Pulse Oximeter, including the display elements and physical features like the lanyard loop hole and battery cover.

3. SETUP

3.1 Battery Installation

1. Locate the battery compartment on the back of the oximeter.
2. Use the provided screwdriver to loosen the screw on the battery cover.
3. Slide the battery cover off.
4. Insert two AAA batteries (not included) into the compartment, ensuring correct polarity (+/-).
5. Replace the battery cover and secure it with the screw using the screwdriver. This screw helps prevent accidental battery access, especially for children.

HOW TO USE CMS50Q1 PULSE OXIMETER?



01

Install the batteries correctly
(batteries not included)



02

Choose the fingertip to measure



03

Inset the finger into the chamber



04

Press the button



05

Keep still and wait for the results

This image demonstrates the battery installation process and subsequent steps for taking a measurement.

3.2 Attaching the Lanyard

Thread the thin loop of the lanyard through the lanyard loop hole on the oximeter. Then, pass the larger part of the lanyard through the thin loop and pull gently to secure it. This allows for convenient carrying.



This image shows the device dimensions and how to attach the included lanyard.

4. OPERATING INSTRUCTIONS

4.1 Taking a Measurement

1. Ensure the oximeter has batteries installed.
2. Open the clip of the oximeter.
3. Insert one of your fingers (preferably the index finger) into the rubber opening of the oximeter, ensuring the finger is placed correctly and fully inside. The device is designed for finger diameters greater than 0.2 inch (5mm).
4. Press the power button once to turn on the oximeter.
5. Keep your hand still and avoid movement during the measurement.
6. The SpO2 and pulse rate readings will appear on the display within a few seconds.

4.2 Display Orientation

The display of the CMS50Q1 Pulse Oximeter can rotate automatically to provide optimal viewing from different angles. Simply adjust the device's orientation, and the display will adapt.



This image demonstrates the rotatable display feature of the oximeter.

4.3 Automatic Power Off

The device will automatically power off after approximately 5 seconds of inactivity (when no finger is detected) to conserve battery life.

5. DISPLAY INFORMATION

The TFT display provides the following information:

- **SpO2 (%)**: Blood Oxygen Saturation level.
- **PRbpm**: Pulse Rate in beats per minute.
- **Bar Graph**: A visual representation of pulse strength.
- **Pulse Waveform**: A graphical representation of the pulse.
- **Low Battery Indicator**: An icon indicating when batteries need replacement.



This image shows a typical display reading with SpO2, PRbpm, and the pulse waveform.

6. MAINTENANCE AND CARE

6.1 Cleaning the Oximeter

- Clean the surface of the oximeter before and after each use with a soft cloth dampened with medical alcohol (70% ethanol or isopropanol).
- Do not immerse the device in water or other cleaning solutions.
- Ensure the device is completely dry before reuse.

6.2 Battery Replacement

When the low battery indicator appears on the display, replace the batteries promptly. Follow the battery installation steps in Section 3.1.

6.3 Storage

Store the oximeter in a cool, dry place away from direct sunlight, extreme temperatures, and humidity. If the device will not be used for an extended period, remove the batteries to prevent leakage.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
No display after power on	Batteries are dead or incorrectly installed.	Replace batteries or reinstall them with correct polarity.
Display shows '---' or unstable readings	Finger not inserted properly; excessive movement; cold finger; nail polish.	Reinsert finger correctly; remain still; warm the finger; remove nail polish.
Device turns off automatically	Normal auto-off function (5 seconds inactivity) or low battery.	This is normal behavior. If unexpected, check battery level.
Difficulty opening battery cover	Screw is too tight or cover is stiff.	Use the provided screwdriver. Apply gentle, even pressure to slide the cover after unscrewing.

8. SPECIFICATIONS

- **Product Dimensions:** 2.32 x 1.42 x 1.38 inches
- **Item Weight:** 3.52 ounces
- **Measuring Range SpO2:** 70-100%
- **Measuring Range Pulse Rate:** 0-250 bpm
- **Battery Life:** Approximately 20-30 hours
- **Power Source:** 2 x AAA batteries (not included)
- **Automatic Shut-off:** After 5 seconds of inactivity
- **Manufacturer:** Contec Medical Systems Co.,Ltd

9. SAFETY INFORMATION

- This device is intended for sports and aviation use only. It is not a medical device and should not be used for medical diagnosis or treatment.
- Do not use the oximeter during sports activities, as movement can affect accuracy.
- Keep the device out of reach of small children to prevent choking hazards from small parts like batteries or the lanyard.
- Avoid exposing the device to direct sunlight, high temperatures, or moisture.
- Do not attempt to repair or modify the device yourself. Contact support if issues arise.

10. SUPPORT INFORMATION

For technical support or inquiries regarding your CONTEC CMS50Q1 Pulse Oximeter, please contact the manufacturer using the details below:

- **Technical Support Phone:** +86-335-8015431
- **Email:** contecmed@contecmed.com.cn
- **Website:** <http://www.contecmed.com>

Please refer to the official CONTEC website or your purchase documentation for specific warranty terms and conditions.