ESPOO YM201

ESPOO Pulse Oximeter Fingertip YM201 Serious User Manual

Model: YM201

Brand: ESPOO

1. Introduction and Overview

The ESPOO YM201 Fingertip Pulse Oximeter is a compact, portable device designed for non-medical use by healthy individuals to monitor their oxygen saturation (SpO2) and pulse rate (PRbpm). It features a clear 1.14-inch TFT display, 20-reading memory, and adjustable brightness for optimal visibility in various conditions. This manual provides essential information for the proper setup, operation, and maintenance of your device.

Disclaimer: This pulse oximeter is not a medical device and is not intended to diagnose or treat any medical condition or disease. It is intended for non-medical use by healthy people to monitor their pulse rate and blood oxygen levels. For individuals with medical conditions, please consult your physician.

2. What's in the Box

Upon opening your ESPOO YM201 Pulse Oximeter package, you should find the following items:

- 1 x ESPOO YM201 Fingertip Pulse Oximeter (White&Gray)
- 2 x AAA Batteries
- 1 x User Manual
- 1 x Lanyard

Image: The package contents including the ESPOO YM201 Pulse Oximeter, two AAA batteries, the user manual, and a lanyard.

3. Setup

3.1 Battery Installation

The ESPOO YM201 Pulse Oximeter requires two AAA batteries for operation. Follow these steps to install them:

1. Open the battery compartment cover located on the back of the device.
2. Insert the two AAA batteries according to the polarity indicators (+/-) inside the compartment. Ensure they are correctly oriented.
3. Close the battery compartment cover securely.

Caution:

- Do not mix old and new batteries.
- Do not mix alkaline, standard (carbon-zinc), or rechargeable (nickel-cadmium) batteries.
- Remove batteries if the device will not be used for an extended period to prevent leakage.

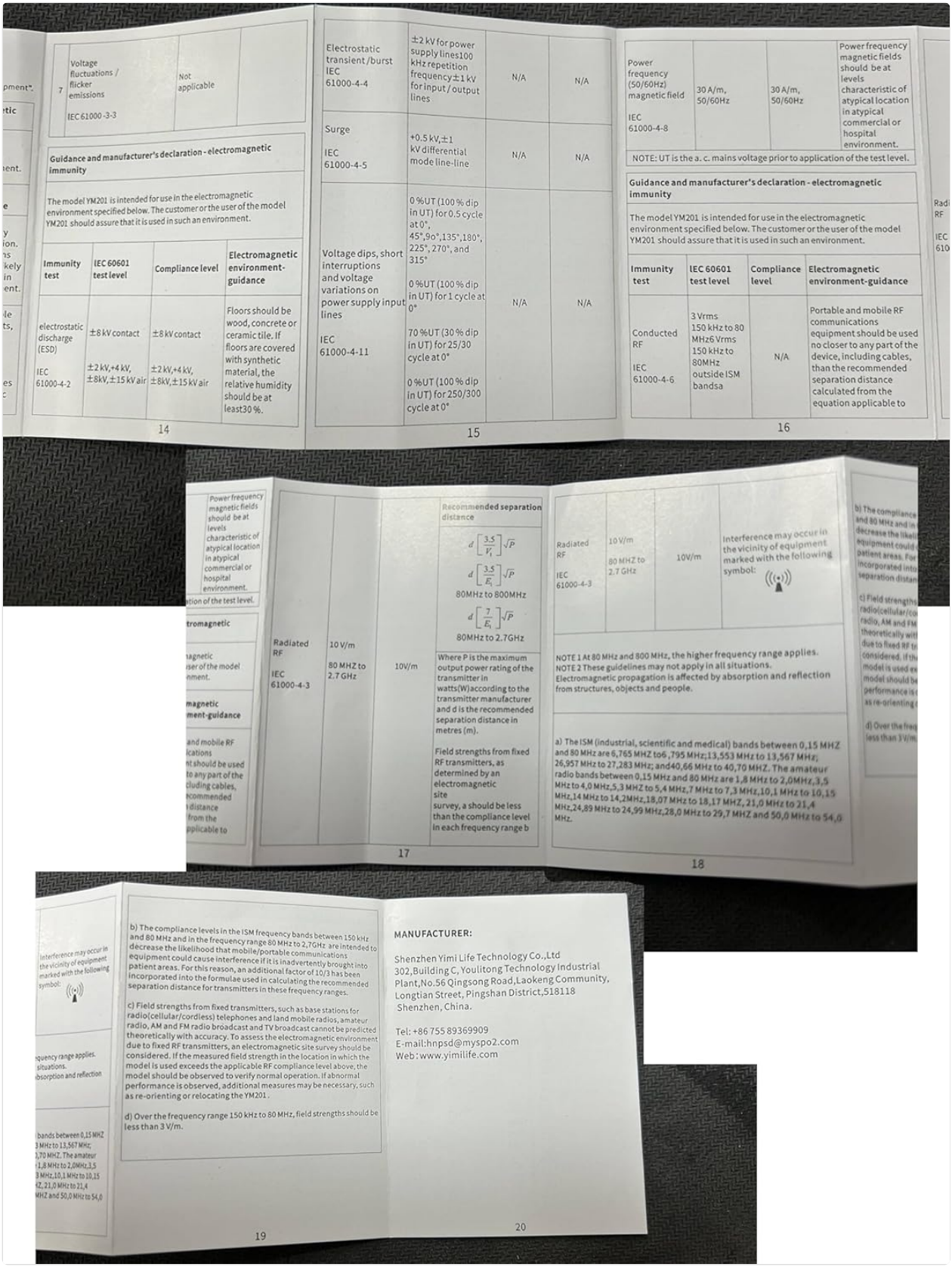


Image: Step-by-step guide showing battery insertion and proper finger placement for measurement.

4. Operating Instructions

4.1 Taking a Measurement

1. Ensure batteries are installed correctly.
2. Open the clamp of the oximeter.
3. Insert one of your fingers (preferably the index finger) into the rubber opening of the oximeter, ensuring it is fully inserted and resting on the sensor.
4. Press the power button once to turn on the device.
5. Keep your hand still during the measurement. The readings for SpO2 and PRbpm will appear on the display within a few seconds.
6. The device will automatically power off after approximately 8 seconds of inactivity.

Image: The ESPOO YM201 Pulse Oximeter, ready for use.

4.2 Understanding the Display

The 1.14-inch TFT display shows the following information:

- **%SpO2:** Oxygen Saturation level. Normal range is typically 95%-99%.
- **PRbpm:** Pulse Rate in beats per minute.
- **PI%:** Perfusion Index, indicating the strength of the pulse signal.
- Pulse waveform graph.
- Battery indicator.

Image: A close-up of the oximeter's display, highlighting the SpO2, PR, and PI readings, along with the graphical pulse display.

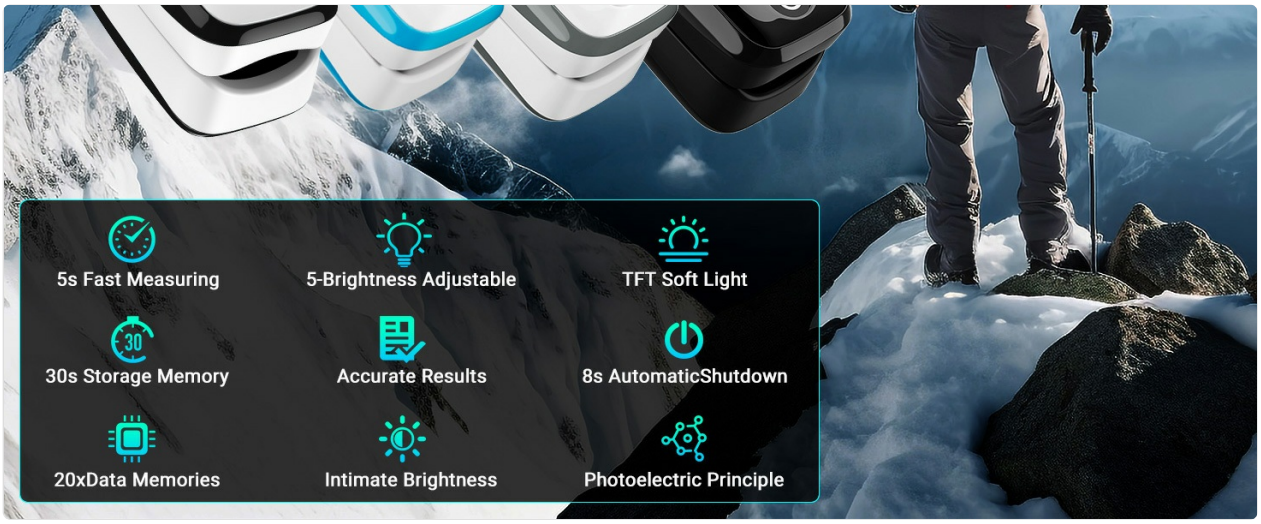


Image: Visual representation of the large 1.14-inch TFT display, showing clear readings and pulse waveforms.

4.3 Adjusting Settings and Brightness

The device features a 5-level adjustable TFT screen with 4 colors for enhanced visibility. You can manually control the brightness.

1. After turning on the oximeter, press and hold the power button for 2 seconds to enter the setting menu.
2. Short press the power button to move the cursor (indicated by an asterisk '*') to the desired option.
3. Hold the power button to confirm your selection and enter the sub-menu or confirm a setting change.
4. Navigate to the 'Brightness' option to adjust the display intensity.

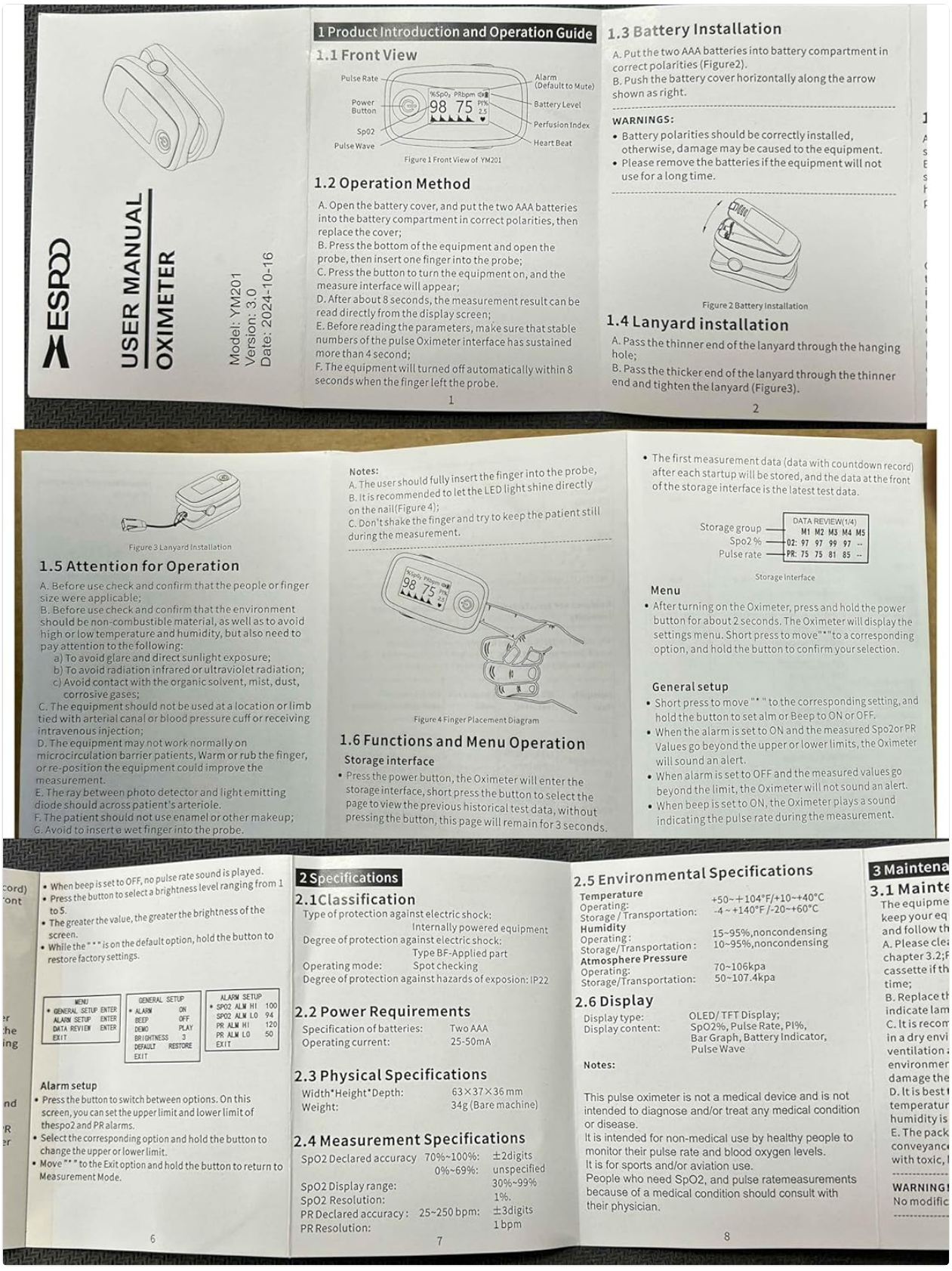


Image: Demonstrates the five levels of brightness adjustment available on the oximeter's display.

Image: Illustrates how to access and navigate the device's settings menu, including general setup and alarm settings.

4.4 Memory Function

The ESPOO YM201 Pulse Oximeter is equipped with 20-set memory storage, allowing it to record your pulse oximetry trends over 48 hours. This feature enables smart data recall for comparing oxygen saturation and pulse rate patterns, useful during workouts or sleep monitoring.

1. From the main menu, navigate to the 'Data Review' option.
2. Press the power button to view stored readings.
3. Short press to scroll through the 20 memory sets.

Image: Shows the device's capability to store 20 sets of data, allowing users to review past measurements.

5. Features

- **Clear 1.14” TFT Display:** Enjoy a vibrant, high-definition 1.14-inch TFT display that ensures data visibility,

even in low-light conditions.

- **20-Reading Memory & Trend Tracking:** Equipped with 20-set memory storage, this finger pulse oximeter records your pulse ox trends over 48 hours. Features smart data recall for comparing oxygen saturation/pulse rate patterns during workouts, sleep.
- **Enhanced Contrast Display & Manual Brightness Control:** Featuring 5-level adjustable TFT screen with 4 colors, this fingertip pulse oximeter achieves significantly improved visibility compared to conventional displays. Manual brightness settings ensure clear oxygen monitor readings in both low-light environments and outdoor conditions.
- **High-Performance Chip:** Utilizes an imported 32-bit MCU chip for fast and accurate measurements, providing values in approximately 8 seconds.
- **Lightweight & Portable Design:** Compact and portable, the ESPOO oximeter is easy to carry, fitting seamlessly into daily life for everyday use.

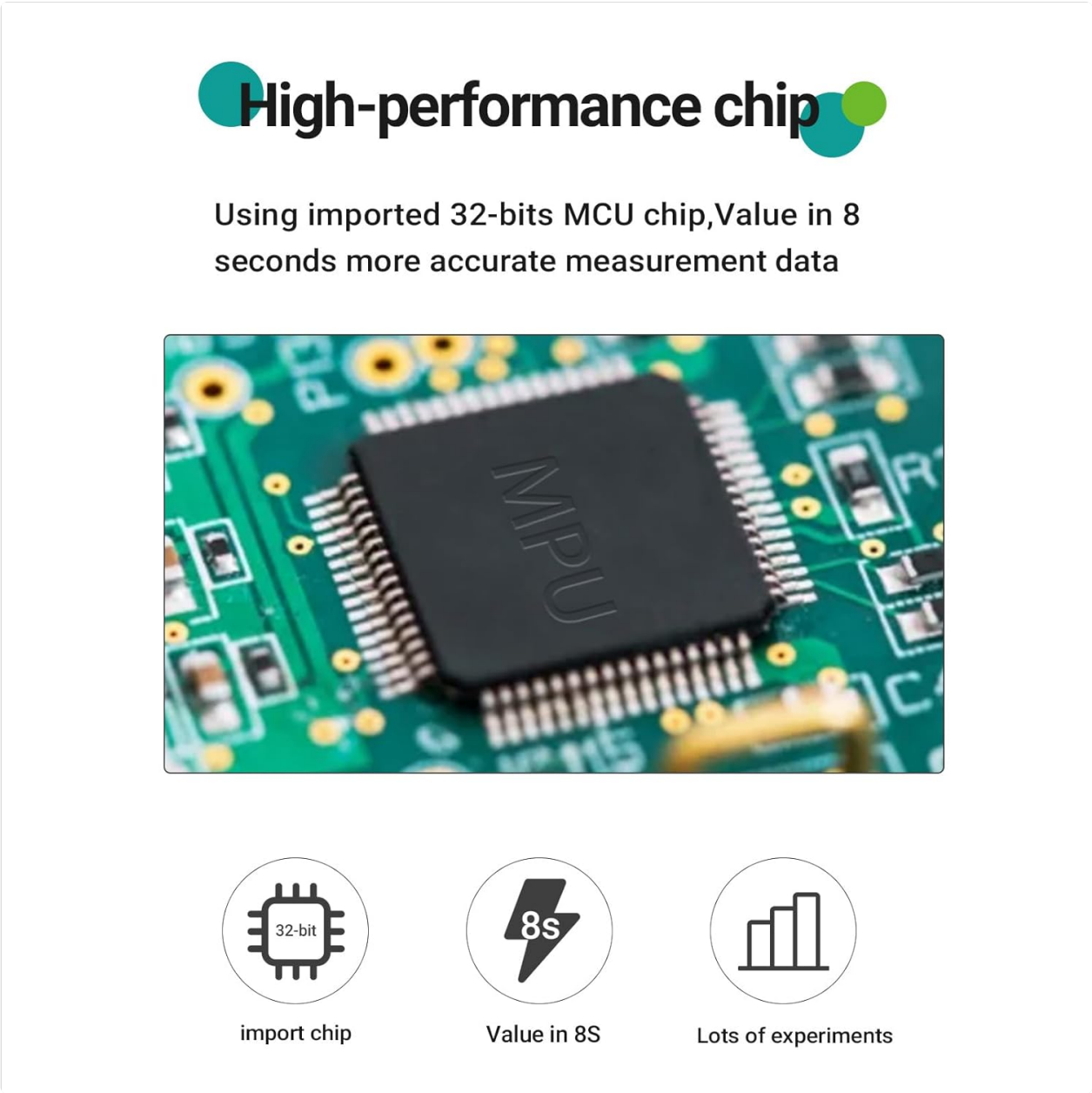
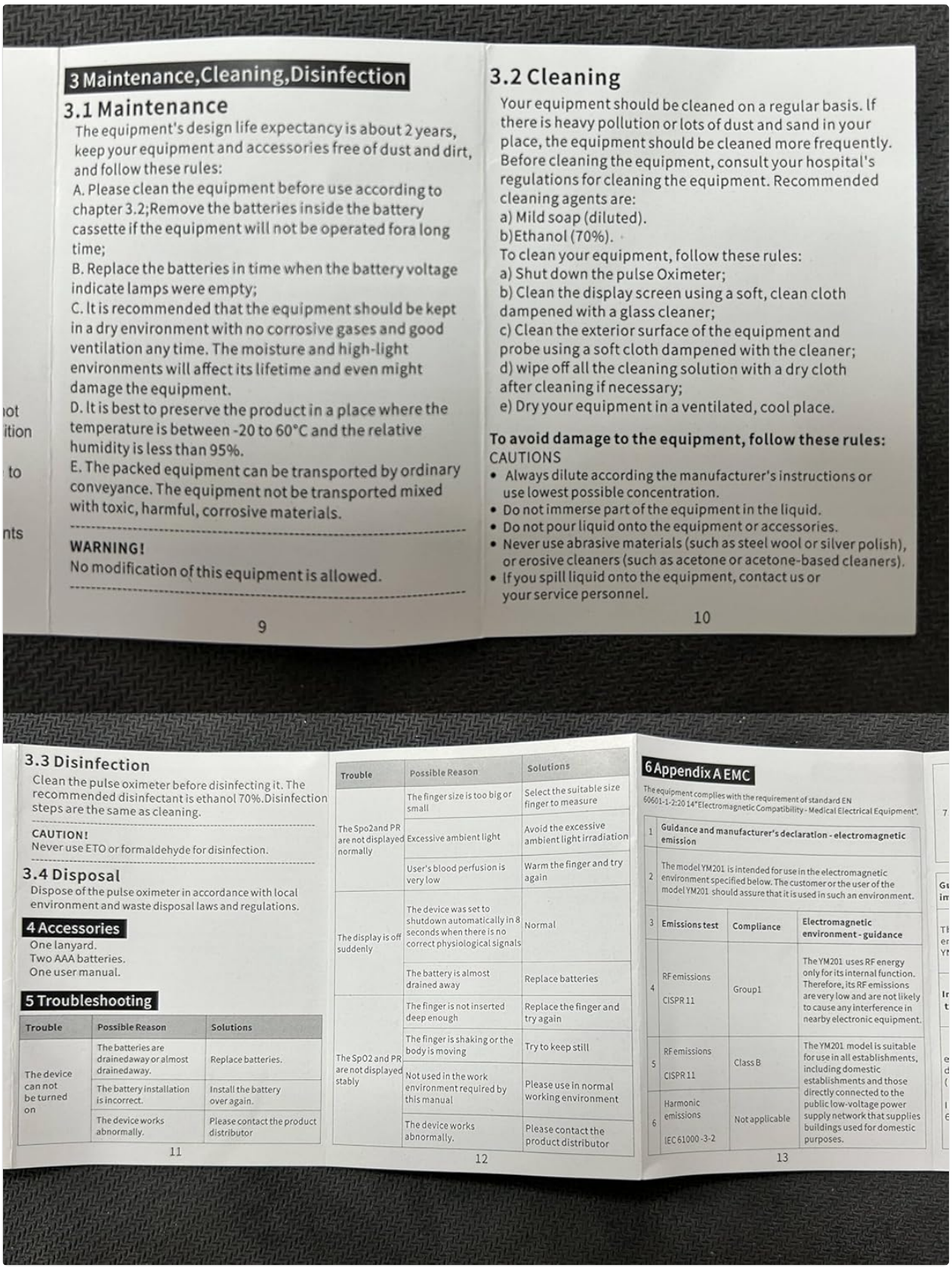


Image: Depicts the high-performance 32-bit MCU chip, ensuring accurate and fast measurements.

5.1 Product Applications

The ESPOO YM201 Pulse Oximeter is suitable for a variety of users who wish to monitor their oxygen levels and pulse rate in non-medical settings:

- Mountaineering enthusiasts
- Older people
- Pregnant individuals
- Cycling enthusiasts



3 Maintenance,Cleaning,Disinfection

3.1 Maintenance

The equipment's design life expectancy is about 2 years, keep your equipment and accessories free of dust and dirt, and follow these rules:

A. Please clean the equipment before use according to chapter 3.2;Remove the batteries inside the battery cassette if the equipment will not be operated fora long time;

B. Replace the batteries in time when the battery voltage indicate lamps were empty;

C. It is recommended that the equipment should be kept in a dry environment with no corrosive gases and good ventilation any time. The moisture and high-light environments will affect its lifetime and even might damage the equipment.

D. It is best to preserve the product in a place where the temperature is between -20 to 60°C and the relative humidity is less than 95%.

E. The packed equipment can be transported by ordinary conveyance. The equipment not be transported mixed with toxic, harmful, corrosive materials.

WARNING!

No modification of this equipment is allowed.

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3.2 Cleaning

Your equipment should be cleaned on a regular basis. If there is heavy pollution or lots of dust and sand in your place, the equipment should be cleaned more frequently. Before cleaning the equipment, consult your hospital's regulations for cleaning the equipment. Recommended cleaning agents are:

a) Mild soap (diluted).

b)Ethanol (70%).

To clean your equipment, follow these rules:

a) Shut down the pulse Oximeter;

b) Clean the display screen using a soft, clean cloth dampened with a glass cleaner;

c) Clean the exterior surface of the equipment and probe using a soft cloth dampened with the cleaner;

d) wipe off all the cleaning solution with a dry cloth after cleaning if necessary;

e) Dry your equipment in a ventilated, cool place.

To avoid damage to the equipment, follow these rules:

CAUTIONS

- Always dilute according the manufacturer's instructions or use lowest possible concentration.
- Do not immerse part of the equipment in the liquid.
- Do not pour liquid onto the equipment or accessories.
- Never use abrasive materials (such as steel wool or silver polish), or erosive cleaners (such as acetone or acetone-based cleaners).
- If you spill liquid onto the equipment, contact us or your service personnel.

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3.3 Disinfection

Clean the pulse oximeter before disinfecting it. The recommended disinfectant is ethanol 70%.Disinfection steps are the same as cleaning.

CAUTION!

Never use ETO or formaldehyde for disinfection.

3.4 Disposal

Dispose of the pulse oximeter in accordance with local environment and waste disposal laws and regulations.

4 Accessories

One lanyard.
Two AAA batteries.
One user manual.

5 Troubleshooting

Trouble	Possible Reason	Solutions
The device can not be turned on	The batteries are drainedaway or almost drainedaway.	Replace batteries.
	The battery installation is incorrect.	Install the battery over again.
	The device works abnormally.	Please contact the product distributor

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Trouble	Possible Reason	Solutions
The Spo2and PR are not displayed normally	The finger size is too big or small	Select the suitable size finger to measure
	Excessive ambient light	Avoid the excessive ambient light irradiation
	User's blood perfusion is very low	Warm the finger and try again
The display is off suddenly	The device was set to shutdown automatically in 8 seconds when there is no correct physiological signals	Normal
	The battery is almost drained away	Replace batteries
The SpO2 and PR are not displayed stably	The finger is not inserted deep enough	Replace the finger and try again
	The finger is shaking or the body is moving	Try to keep still
	Not used in the work environment required by this manual	Please use in normal working environment
	The device works abnormally.	Please contact the product distributor

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6 Appendix A EMC

The equipment complies with the requirement of standard EN 60601-1-2:2014"Electromagnetic Compatibility - Medical Electrical Equipment".

1	**Guidance and manufacturer's declaration - electromagnetic emission**		
2	The model YM201 is intended for use in the electromagnetic environment specified below. The customer or the user of the model YM201 should assure that it is used in such an environment.		
3	**Emissions test**	**Compliance**	**Electromagnetic environment - guidance**
4	RF emissions CISPR 11	Group1	The YM201 uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
5	RF emissions CISPR 11	Class B	The YM201 model is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
6	Harmonic emissions IEC 61000 -3-2	Not applicable	

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Image: Examples of various user groups who can benefit from using the ESPOO Pulse Oximeter.

6. Maintenance, Cleaning, and Disinfection

6.1 Maintenance

The equipment's design life expectancy is about 2 years. To ensure longevity and proper function, keep the equipment free of dust and dirt. Follow these guidelines:

- Clean the equipment before use according to Section 6.2.
- Remove the batteries inside the battery cassette if the equipment will not be operated for a long time.
- Replace the batteries in time when the battery voltage indicator lamps are empty.
- It is recommended that the equipment should be kept in a dry environment with no corrosive gases and good ventilation. High temperatures and humidity can damage the equipment.
- It is best to preserve the product in a place where the temperature is between -20 to 60°C and the relative humidity is less than 95%.
- The packed equipment can be transported by ordinary conveyance. The equipment should not be transported mixed with toxic, harmful, corrosive materials.

Warning: No modification of this equipment is allowed.

6.2 Cleaning

Your equipment should be cleaned on a regular basis. If there is heavy pollution or lots of dust and sand in your place, the equipment should be cleaned more frequently. Before cleaning the equipment, consult your hospital's regulations for cleaning the equipment. Recommended cleaning agents: Ethanol (70%).
To clean your equipment, follow these rules:

1. Shut down the pulse oximeter.
2. Clean the display screen using a soft, clean cloth dampened with a glass cleaner.
3. Clean the exterior surface of the equipment and probe using a soft cloth dampened with the cleaner; wipe off all the cleaning solution with a dry cloth after cleaning if necessary.
4. Dry your equipment in a ventilated, cool place.

To avoid damage to the equipment, follow these rules:

- Always dilute according to the manufacturer's instructions or use lowest possible concentration.
- Do not immerse part of the equipment in the liquid.
- Do not pour liquid onto the equipment or accessories.
- Never use abrasive materials (such as steel wool or silver polish), or corrosive cleaners (such as acetone or acetone-based cleaners).
- Please send it to our company, contact us or your service personnel.

6.3 Disinfection

Clean the pulse oximeter before disinfecting it. The recommended disinfectant is ethanol 70%. Disinfection steps are similar to cleaning.
Caution: Never use ETO or formaldehyde for disinfection.

Image: Side profile of the ESPOO YM201 Pulse Oximeter, showing its compact design.

7. Troubleshooting

If you encounter any issues with your ESPOO YM201 Pulse Oximeter, refer to the table below for common problems and their solutions.

Trouble	Possible Reason	Solutions
The device cannot be turned on	Batteries are almost drained away.	Replace batteries.
The device cannot be turned on	The battery installation is not correct.	Install the battery correctly.
The device works abnormally.	The device works abnormally.	Please contact the product distributor.

Trouble	Possible Reason	Solutions
The SpO2 or PR display is unstable.	Finger is not inserted deeply enough.	Re-insert finger, ensuring it is fully placed.
The SpO2 or PR display is unstable.	Finger is shaking or the patient is moving.	Keep still during measurement.
The SpO2 or PR display is unstable.	Ambient light is too strong.	Avoid direct sunlight or strong artificial light.
The SpO2 or PR display is unstable.	Nail polish or artificial nails are present.	Remove nail polish or artificial nails.
The SpO2 or PR display is unstable.	The finger size is too big or too small.	Select the suitable size finger to measure.
The SpO2 or PR display is unstable.	User's blood perfusion is very low.	Warm the finger and try again.
The device was set to automatically shut down in 8 seconds when there is no signal.	Normal.	Normal operation.
The display is dim.	The battery is almost drained away.	Replace batteries.
The display is dim.	The finger is not inserted deeply enough.	Place the finger in the right position.

8. Specifications

Specification	Detail
Product Dimensions	2.48 x 1.42 x 1.42 inches; 2.82 ounces
Item Model Number	YM201
Batteries	2 AAA batteries required (included)
Date First Available	October 24, 2024
Manufacturer	shenzhen yimi life Technology Co., Ltd
Brand	ESPOO
Color	White&Gray
Measuring Range (SpO2)	70% - 100%
SpO2 Declared Accuracy	70%-100%: ±2 digits
Pulse Rate Range	25-250 bpm

Specification	Detail
PR Declared Accuracy	30-250 bpm: ±3 digits
Display Type	1.14-inch TFT Display

9. Warranty and Support

For warranty information and customer support, please refer to the documentation included with your product or contact the manufacturer directly. Typically, warranty details are provided on a separate warranty card or within the full user manual.

Manufacturer: shenzhen yimi life Technology Co., Ltd
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Tel: +86 755 8938 0000
Email: info@yimi-life.com
Web: www.yimi-life.com