

wellcare

Portable ECG Monitor



Model Number: PM10
Version: 1.0

USER MANUAL
Issue Date: 04/2026

Contents

03	General Safety Warnings
08	Before first use
11	Packaging
12	Product Overview
13	Intended Use
15	Operating Instructions
20	Battery Usage Guide
21	Portable ECG Software
30	Mobile Application
31	Cleaning and Disinfection
33	Maintenance and Storage
35	Troubleshooting
39	Symbols
40	Specifications
44	Compliance

General Safety Warnings

READ CAREFULLY AND KEEP FOR FUTURE REFERENCE

Read this manual thoroughly before first use, even if you are familiar with this type of product. The safety precautions enclosed herein reduce the risk of injury and product damage. Keep the manual in a safe place for future reference, along with the completed warranty card, purchase receipt and packaging carton. If applicable, pass these instructions on to the next owner of the appliance.

Always follow basic safety precautions and accident prevention measures when using a device, including the following:

Usage conditions and restrictions

- Domestic use only: This device is intended for private domestic use only. It is not suitable for commercial, industrial or trade use.
- Intended purpose: Do not use the device for anything other than its intended purpose, and only use it as described in this manual. Any other use is not recommended and may cause fire, electric shock or injury.
- Accessories: Do not use accessories that are not supplied with this unit. The use of accessories that are not recommended or sold by the manufacturer can cause fire, electric shock or injuries.
- Usage restrictions: This device is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given

supervision or instruction concerning the use of the device by a person responsible for their safety.

- Children: Supervise children to ensure they do not play with the appliance.
- **WARNING:** Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the warranty and create a safety hazard.
- Do not use the device if you have skin allergies or skin damage.
- Fire and explosion risk: Do not use the device near flammable or anesthetic gases, and do not leave it unattended while switched on.
- Electrical safety:
 - Do not use the device in wet environments or allow water to enter it
 - Do not use the device while charging
 - Use only the specified USB cable and approved accessories
- Do not disassemble, repair, or modify the device. Unauthorized

servicing may result in injury or hazardous radiation exposure.

- Stop use immediately if pain, discomfort, or abnormal operation occurs, and seek medical advice or technical inspection if symptoms persist.
- Keep out of reach of children when not in use to prevent accidental injury or swallowing of small parts.
- Storage and handling: Do not immerse the device in liquids, expose it to direct sunlight, high temperatures, dust, or corrosive cleaning agents.

- EMC Notice: Please note the effect from EMC when using the device, because it can be influenced by portable or movable high electromagnetic compatibility RF devices.
- This equipment needs to be put into service in accordance with the information provided in the accompanying documents.
- Wireless communication equipment can affect the equipment and should be kept at least a distance away from the equipment. The distance is calculated by the manufacturer from the 800 MHz to 2.5 GHz column of Table 5 or Table 6 of IEC 60601-1-2.

Before first use

- **Unpack the Device**

Remove the ECG monitor and all accessories from the packaging. Verify that all items listed in the packing list are included and free from visible damage.

- **Inspect the Device**

Check the device, electrodes, cables, and connectors for any signs of damage, cracks, or deformation. Do not use the device if any part appears damaged.

- **Charge the Battery**

Fully charge the device using the supplied USB cable before first use. Ensure the charging port is clean and dry during charging.

- **Install or Check Software**

Install the recommended software or app according to the instructions. Ensure the software version is compatible with the device.

- **Set Date and Time**

Power on the device and confirm that the date and time are correctly set to ensure accurate data recording.

- **Clean the Contact Electrodes**

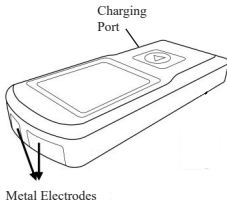
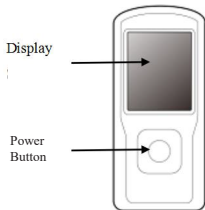
Gently wipe the metal electrodes with a clean, dry, soft cloth before first use. Do not use alcohol, abrasive materials, or chemical cleaners unless specified in this manual.

- **Prepare the Measurement Environment**
Use the device in a quiet, stable environment. Sit or lie down comfortably and relax for several minutes before taking measurements to obtain accurate readings.

Packaging Includes

- Portable ECG Monitor
- USB-C Charging Cable
- User Manual
- Warranty Certificate

Product Overview



Materials and ingredients PATIENT or OPERATOR is exposed to:
Metal electrode, TPU, TPE, ABS

Intended Use

This device is a portable ECG used to monitor and record the user's ECG waveform and HR. After connected with a computer, users can print their ECG waveform, providing data reference for doctors.

Intended purpose

The device is used to monitor and record the user's ECG waveform and HR. It can be used at home.

the patient is an intended operator.

Intended users

Home and personal use.

Patient population

Adults.

Clinical indication

It is suitable for the adult users who suffer from cardio-vascular diseases, or who are caring about their heart working conditions during their daily life.

Contraindication

Not found.

Product principle

The resting ECG signal is measured by ECG electrodes. Via amplifying and filtering, the signal is converted into a digital ECG signal, which is sent to memory and display to record and display ECG waveform.

Operating Instructions

NOTE: The device should not be maintained during being used.

1. Preparation Before Measurement

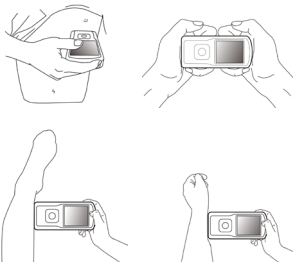
- Ensure the device is sufficiently charged.
- Make sure the ECG electrodes are clean and dry.
- Sit or lie down comfortably in a quiet environment.
- Relax for several minutes before starting the measurement.

2. Power On / Off

- Press and hold the Power button to turn the device on.
- Press and hold the Power button again to turn the device off.

3. ECG Measurement

- Hold or attach the device as instructed, ensuring proper contact between the ECG electrodes and the skin.

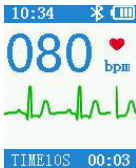


Note: Movement, muscle tension, or poor electrode contact may affect measurement accuracy.

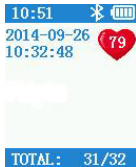
- Keep your body still and breathe normally during measurement.
- The device will automatically collect the ECG signal.
- The ECG waveform and heart rate (HR) will be displayed on the screen in real time.



The ECG waveform and heart rate will be displayed on the screen, as shown. The heart rate is calculated as follows: Let N be the number of heartbeats detected in an ECG segment without interference. **The heart rate (HR) calculation formula is: $HR = 60000 / (\text{Sum of R-R intervals during } N \text{ heartbeats} \div N)$**



When the ECG waveform becomes stable, the device will automatically start formal sampling. The sample time countdown will appear in the lower right corner of the screen and will continue until the sampling period is completed. The color of the sample time indicator will change to red.



After sampling is completed, the device will automatically enter the case review interface, as shown.

This interface displays the sampling start time and the measured heart rate.

- Wait until the measurement is completed before removing contact.

4. Viewing and Storing Data

- Recorded ECG waveforms and heart rate data are automatically stored in the device memory.
- Stored records can be reviewed directly on the device or transferred to a PC or mobile application if supported.

5. Data Transmission (If Applicable)

- Connect the device to a PC or mobile device using the supplied cable or wireless function.
- Launch the recommended software or application.
- Follow on-screen instructions to synchronize and view ECG data.

6. After Use

- Turn off the device. (The device will power off after 1 minute of idle use).
- Gently clean the electrode contact area with a soft, dry cloth.
- Store the device in a clean, dry place away from sunlight.

Battery Usage Guide

- Use only the supplied USB cable or approved charger.
- Connect the device to a USB power source.
- Charge the battery fully before first use.
- Disconnect the charger once charging is complete.

No.	Indicator	Description
a		full power
b		capacity: 3/4
c		capacity: 1/2
d		capacity: 1/4
e		Using battery, low power, it is recommended to recharge the battery. The device will automatically shut down.

Portable ECG Software

Installation

- Power on the computer.
- Download the official software package by scanning the QR code in the Packaging box.
- Double-click the installation file and follow the on-screen instructions.
- Complete the installation and restart the computer if prompted.
- Launch the ECG synchronization software after installation.

Using the Software

- When opening the software for the first time, a “Welcome” pop up appears.
- If secure login is not enabled, Click “Continue” to enter the main interface of the software.
- If secure login is enabled, Click “Continue” to the user management section.

Administrator Mode

- An Administrator Login will be displayed at default for first time users. Input the administrator password “user2025” and click the “Log-in” Button.
- Click the “Modify” Button then write down your new password on the “New Password” and “Confirm Password” edit boxes.
- Click “Confirm” to complete the new password update.

Note: The password must be 8 - 16 characters and must be composed of letters and numbers.

User Login

- Login using the provided username account and password.
- Click “Login” to gain access in the software.

Adding New Users

- Once logged-in as an administrator, a “User Management” window appears.
- Fill up the information required (Username and Password) and click the “Save” button once completed.
- Username has 1 - 32 character limit consisting of letters and numbers.
- Password has 8 - 16 character limit consisting of letters and numbers.

Modify and Delete Users

- Log in as an administrator and select an existing user.
- Edit the user information and click “Save” once done.
- To delete, select the account to be deleted and click “Delete”.

Exiting the Administrator Mode

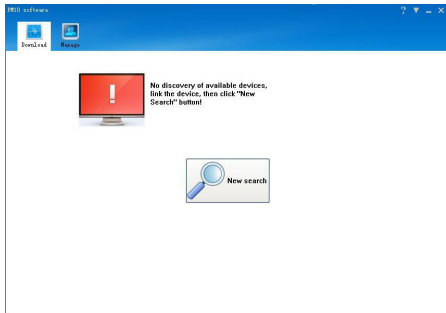
- Once the User Management is completed, click the “Ok” button to return to the “User Login” interface.

Software Settings

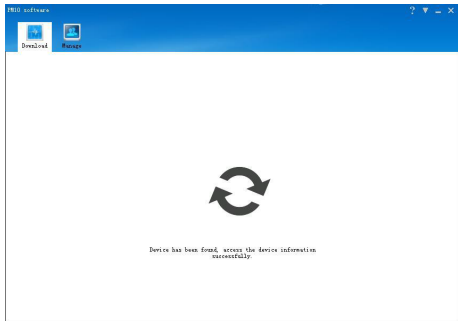
- Once logged in, select the “” Button on the upper right of the software.
- In the Settings window, you can toggle the following:
 - Enable welcome prompt
 - Enable user login
- When editing these settings, an “Administrators Verification” window will appear that requires you to enter your admin password.

Uploading ECG Data

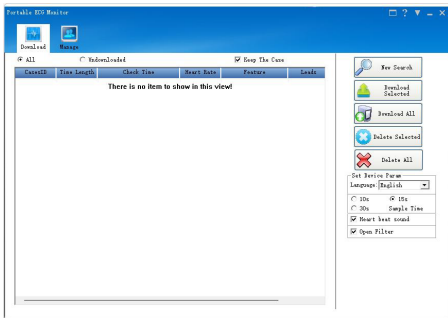
- Once logged in, if there are no devices connected, this is what it will look like.



- Turn on the ECG device and connect it to the computer via USB port. The software then starts to search for the device.



- Once the device is connected, the window will look like this with all of the options available.



Software Operation

- To download a case, select the desired case or select multiple cases and click "Download Selected" or click "Download all" to download all cases.
- To delete a case, select the desired case or select multiple cases and click "Deleted Selected" or click "Delete all" to delete all cases. Select the "yes" button to confirm the deletion of the case.
- Other parameters can be set here:

Set Device Param	
Language:	English
☒ 10s	☐ 15s
☐ 30s	Sample Time
☐ Heart beat sound	
☒ Open Filter	

Set succeeded.

Software Compatibility

	Windows10 system hardware requirements	Windows11 system hardware requirements
	Minimum configuration	
Central processor	1 GHz or faster	1GHz or faster
Memory	2 GB(64 bit), 1 GB(32 bit)	4GB
Graphics card	support Direct X9 tablet	support Direct X12
Residual space of hard disk	no less than 16 GB(32 bit), no less than 20 GB(64 bit)	64GB
Firmware	UEFI 2.3.1, support safety start	UEFI、support safety start

Mobile Application

- Download the mobile app via the QR Code:



IOS and Android Compatible

- Start the mobile app and power up the device.
- Connect the ECG Portable Device via bluetooth under "PM10".
- Download and Review case data upon connecting.

Cleaning and Disinfection

Device Cleaning

- Clean the device surface and electrode areas after each use or as needed.
- Use a soft, clean, dry cloth to wipe the device.
- If necessary, slightly dampen the cloth with clean water.

DO NOT:

- Do not immerse the device in water or any liquid.
- Do not allow liquid to enter the device ports or openings.
- Do not use abrasive materials, metal brushes, or sharp objects.
- Do not use alcohol, bleach, or strong chemical cleaners unless specifically instructed.

Disinfection

- Routine household use generally does not require frequent disinfection.
- If disinfection is required:
 - Use a soft cloth lightly moistened with a mild, non-corrosive disinfectant recommended for electronic medical devices.
 - Wipe only the external surface and electrode contact area.

WARNING:

- Do not spray disinfectant directly onto the device.
- Do not use high-concentration alcohol, chlorine-based disinfectants, or solvents.
- Excessive disinfection may damage the device surface or electrodes.

Maintenance and Storage

Maintenance

- The device requires no routine maintenance.
- Do not attempt to disassemble, repair, or modify the device.
- Maintenance or servicing must not be performed by children, especially those under 6 years of age.
- If abnormal operation is detected, stop using the device immediately and have it inspected by qualified personnel before further use.
- Do not drop the device or subject it to strong impacts.
- Do not immerse the device in water or any liquid.
- Clean the device surface only with a damp, lint-free cloth. Do not use chemical cleaners, solvents, or corrosive agents.
- Keep the device clean and dry when not in use.

Storage

- Store the device in a cool, dry, and well-ventilated place.
- Keep the storage environment clean and free from dust and pests.
- Avoid exposure to direct sunlight, high temperatures, moisture, dirt, or humidity.
- Do not place heavy objects on the device.
- Store the device in its original packaging to prevent damage when not in use.
- Keep the device out of reach of children after use.
- If the device is stored for long periods, recharge the battery at least once every 3 months to maintain battery performance.

Troubleshooting

If the solutions offered here do not help you with the problem, or if you experience any other problems with your Portable ECG Monitor, do not try and manage them by yourself. Contact our after sales support centre for advice on service or repair.

Problem	Possible Cause	Potential cause and solution
The equipment can't be turned on.	• The battery is drained away or almost drained away. • The malfunction of the equipment.	• Recharge the battery fully before use • Contact our After Sales Support Team
No ECG Waveform Displayed	• Poor electrode contact • User movement during measurement • Electrodes are dirty or wet	• Ensure proper contact between electrodes and skin • Keep still and relax during measurement • Clean and dry the electrodes before use

ECG Waveform Is Unstable or Noisy	• Muscle movement or body motion • Dry skin or poor contact • Strong electromagnetic interference	• Remain still and breathe normally • Slightly moisten the skin if allowed, or reposition the electrodes • Move away from electrical equipment that may cause interference
Heart Rate Reading Is Abnormal or Inaccurate	• ECG signal interference • Measurement taken during movement • Short or incomplete sampling time	• Repeat the measurement in a calm, resting state • Ensure the waveform is stable before formal sampling starts • Complete the full sampling duration
Device Stops During Measurement	• Low battery • Loss of electrode contact	• Recharge the battery • Re-establish proper electrode contact and restart the measurement

Data Cannot Be Stored or Reviewed	• Device memory is full • Device error	• Transfer stored cases to PC or mobile software • Delete old records if permitted • Restart the device and try again
Device Cannot Connect to PC or Mobile Application	• Incorrect connection method • Software not installed or not running • Communication interference	• Use the supplied cable or approved connection method • Ensure the software or app is properly installed and running • Reconnect the device and restart the software
Data Transfer Fails or Is Interrupted	• Device disconnected during transmission • Low battery • Software communication error	• Keep the device connected until transfer is complete • Ensure sufficient battery power before data transfer • Restart the software and repeat synchronization

Battery Does Not Charge	• Incorrect charger or cable • Dirty charging port • Battery aging	• Use only the supplied or approved charging cable • Ensure the charging port is clean and dry • If charging failure continues, contact authorized service personnel
--------------------------------	--	--

IMPORTANT:

- Do not attempt to repair or disassemble the device yourself.
- If the problem persists after following the above steps, discontinue use and contact qualified service personnel or the distributor.

Symbols

Symbol	Description
	Type BF applied part
	Refer to the Instructional Manual
IP22	The degree of protection against harmful ingress of water and particulate matter
	The equipment should be sent to the special agencies according to local regulation for separate collection after its lifespan use

Specifications

Product Name	Portable ECG Monitor
Rated Input	5V ---
Operating Current	$\leq 150\text{mA}$
Battery	3.7 --- 430mAh
Power Supply	Input: 100 - 240V AC, 50/60Hz, 0.2A Output: 3.7V DC, 160mAh
Operational Environment	Temperature: +5 °C ~ +40 °C Relative humidity: 25% ~ 80% Atmospheric pressure: 70 kPa ~ 106 kPa

Transportation and Storage Environment	Temperature: $-20\text{ }^{\circ}\text{C} \sim +55\text{ }^{\circ}\text{C}$ Relative humidity: $\leq 95\%$ Atmospheric pressure: $50\text{ kPa} \sim 106\text{ kPa}$
Calibration voltage	$\text{mV} \pm 5\%$
Standard sensitivity	$10\text{ mm/mV} \pm 5\%$
Amplitude frequency characteristic	Standard: 10 Hz Range: $1\text{ Hz} \sim 20\text{ Hz}$ ($+0.4\text{ dB}$, -3 dB)
Noise level	$\leq 30\text{ }\mu\text{V}$
CMRR	$\geq 60\text{ dB}$
Scanning speed	$25\text{ mm/s} \pm 5\%$

Running Time	2 hours when battery is fully charged
Battery Cycle Life	Up to 200 times
Sampling rate	250 dots/s
HR measurement range:	30 bpm ~ 300 bpm, error: ± 1 bpm or 1%
Pre-set up time	30 minutes, at the condition of: - Warm from the minimum storage temperature until it is ready to use at ambient temperature of 20 °C. - Cool from the maximum storage temperature until it is ready to use at temperature of 20 °C.

Service Life	3 years
Dimensions	100 mm (L) x 45mm (W) x 15mm (H)
Weight	About 57g

Sponsor: Tempo Aust Pty Ltd
Level 15, 177 Pacific Highway, North Sydney, NSW, 2060 Australia

Manufacturer: Contec Medical Systems Co.,Ltd.
No.112 Qinhua West Street,
Economic & Technical Development Zone,
Qinhuangdao,Hebei Province,
PEOPLE'S REPUBLIC OF CHINA

Compliance

This device has been fully tested and meets all requirements as set out by standards IEC 60601.

Responsible Disposal



**PLEASE
RECYCLE**

Packaging materials are recyclable. Please dispose of them responsibly for recycling.



**PLEASE DISPOSE
OF THOUGHTFULLY**

At the end of its working life, do not throw this device out with your household waste. Electrical and electronic products contain substances that can have a detrimental effect on the environment and human health if disposed of inappropriately. Observe any local regulations regarding the disposal of electrical consumer goods and dispose of it appropriately for recycling.

Contact your local authorities for advice on recycling facilities in your area. Or find recycling scheme services listed on Planet Ark's website at

www.recyclingnearyou.com.au,
or call Planet Ark on 1300 733 712.

wellcare



Please read the manual

It will help you get the best out of your product.

Still have questions?

Call After Sales Support

1300 886 649

Or visit tempo.org/support



Please scan the QR code to access the latest manual.

Product does not work?

If you encounter problems with this product, or if it fails to perform to your expectations, make sure to contact our After Sales Support Centre on (AU) 1300 886 649 or (NZ) 0800 836 761 for advice.

Distributed by Tempo (Aust) Pty Ltd ABN 70 106 100 252

PO BOX 6097, North Sydney NSW 2059

Customer Helpline:

(AU) 1300 886 649 (NZ) 0800 836 761

Email: tempo.org/support

www.wellcarehealthproducts.com