

ECG Recorder

Instruction Manual

Product Model: YK-ER6

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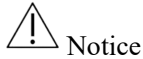
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1. Safety

1.1 Security Information

This instruction manual describes the purpose, functions, and safe operating procedures of the device. Before using this device, please read and fully understand the contents of this instruction manual to ensure that you can use the device correctly and ensure the safety of the patient and the operator.



1. When Bluetooth is disconnected, the application cannot connect to the ECG monitoring device via Bluetooth to view the ECG.
2. When the ECG monitoring device leads become detached, the application will display a lead detachment notification.
3. This product is not suitable for users with disabilities or those who have language differences.
4. Users may encounter the following critical defects: software crashes and server downtime. If you encounter the above situations and cannot recover on your own, please contact an engineer for assistance.
5. The results of an electrocardiogram (ECG) diagnosis may differ from those of the doctor. The doctor can make their own judgment based on their ECG expertise and past experience.
6. Please use the matching electrocardiogram (ECG) acquisition device. The acquisition device must be able to provide data that conforms to the data interface standard of this product.
7. Heart rate calculation method: $60 * 1000 / \text{RR interval}$ (RR interval unit: ms);
8. When the heart rate value suddenly drops significantly or changes to an invalid value and there is no heartbeat waveform, cardiac arrest may occur, and attention should be paid to this.
9. No modifications of this product are permitted.
10. This product is not permitted to be used in conjunction with defibrillators, high-frequency surgical equipment, electrosurgical equipment, diathermy devices, pacemakers, electrical stimulators, CT or MRI equipment.
11. Please keep this product dry, avoid getting it wet, and avoid strong impacts.
12. Do not use this product in strong magnetic fields, as this may affect the measurement results;
13. If you experience heart discomfort or irregular heartbeats, please contact your doctor immediately for treatment.
14. Do not squeeze the product forcefully. If the outer shell cracks, please stop using it.

15. Do not place this product near a fire source to avoid damaging the product or causing the battery to explode;
16. If the electrode pads are contaminated with foreign matter or dust, please clean them with a soft cloth before taking the measurement.
17. When the battery of this product is low, please charge it in time by connecting it to a power source using a Type-C data cable.
18. Improper disposal of products and accessories at the end of their lifespan can harm the natural environment and human health. In such cases, they should be disposed of in accordance with the relevant environmental protection regulations of the city and should not be discarded at will.
19. Please use this product within the temperature and humidity range specified in the instruction manual, and within a space with good heat dissipation. Extremely cold, hot, or humid environments will affect the performance and lifespan of the product, so please avoid using it in such environments.
20. Bluetooth requirements: Bluetooth 5.0 or above to transmit ECG data to the mobile app in real time, with a Bluetooth transmission rate of $\geq 80\text{KB}$.
21. This recorder belongs to the CF type application section (the application section includes metal electrodes and a plastic housing) and internal power supply device, with a liquid ingress protection rating of IP22;
22. This recorder is a device that cannot be used in the presence of flammable anesthetic gas mixed with air or flammable anesthetic gas mixed with oxygen or nitrous oxide.
23. Recorder repairs must be performed by professional technicians from our company or our designated repair centers. Unauthorized personnel are prohibited from disassembling the recorder; otherwise, they will be solely responsible for any consequences. For repair inquiries, please contact our company or our designated repair centers (circuit diagrams, component lists, annotations, calibration details, and other relevant technical documents required for repairs can be obtained from our company by our designated repair centers).
24. The physiological waveforms, physiological parameters, and prompts displayed by this product are for reference only and should not be used as the basis for clinical treatment.
25. For a better user experience, please update your application version promptly.
26. This product collects surface electrical signals from the left and right thumbs and the left

knee or left ankle of the human body using metal electrode pads and calculates the voltage difference to obtain electrocardiogram signals.

27. The electrodes must be custom-made metal electrodes from our company. Incompatible metal electrodes must not be used. Electrodes must not be replaced or modified at will. During use, care must be taken to prevent oxidation, otherwise the measurement results will be affected.
28. Unauthorized personnel are prohibited from replacing the internal battery. Our company will not be responsible for any equipment damage or safety issues caused by unauthorized battery replacement.
29. This product is for adults only.
30. This product should be properly stored away when not in use to prevent damage from pets, insects, or children.

1.2 Symbol Introduction

	CF type		Power on/off
	warn		Validity period
	Manufacturer		Production date
	Temperature Limit		Humidity Limit
	Afraid of rain		Sunscreen
	up		Class II equipment
	Follow the operating instructions		Bluetooth
IP 22	Enclosure protection rating: Protects against entry of particles with an outer diameter of 12.5		Non-ionizing radiation

	mm; protects against vertical water droplets.		
	Discarded electrical and electronic equipment is marked separately .		The symbol is a pollution control mark for electronic information products. This indicates that the product has an environmentally friendly lifespan of 5 years and can be recycled; it should not be discarded at will; dry cell batteries are not included.

2. Product Introduction

ECG Recorder is a handheld six-lead ECG monitoring device. It is intended for use in medical institutions or homes to detect the ECG waveform and heart rate of a person, and to achieve ECG monitoring, health management, and data sharing functions through a wireless transmission module and an application. The patient is the intended operator of this device.

2.1 Scope of application

This product is suitable for detecting electrocardiogram waveforms and heart rate in medical institutions or homes, and can provide a reference for medical personnel in diagnosis.

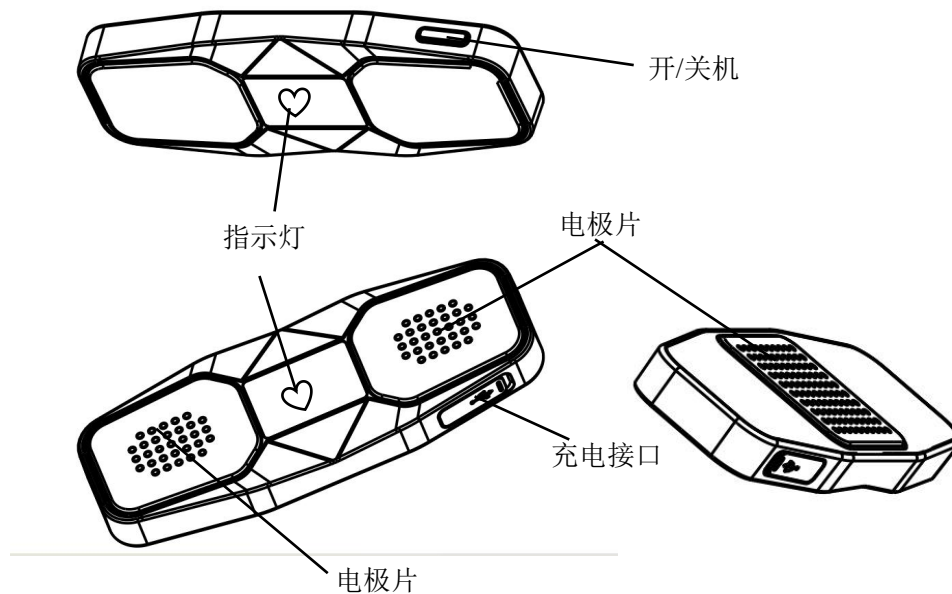
2.2 Contraindications

Not found yet.

2.3 Structural composition

An electrocardiogram (ECG) recorder consists of a main unit, a Type-C data cable, and an application program .

2.4 Product illustration



1. Indicator light : When powered on, the graphic " ♥ " will be displayed as a flashing blue light ;
2. Electrode pads: responsible for signal acquisition. During measurement, keep your thumbs and left knee (ankle) lightly touching the electrode pads until the measurement is completed (see Chapter 3.3 Test Methods for specific test methods) ;
3. Charging port: Connect the Type -C charging cable to the device and adapter, and then plug it into a power source to start charging;

3. Instructions for use

3.1 Unpacking and inspection

Before opening the box, please carefully inspect the packaging. If any damage is found, please contact the carrier or our company immediately. If the packaging is intact, please unpack it correctly and carefully remove the equipment and other components from the box. Check the equipment for any mechanical damage and ensure all items are present. If you have any questions, please contact our company immediately.



1. Please keep the packaging box and packaging materials safe for future use during transportation or storage.
2. Please keep the warranty card safe for warranty purposes.
3. When handling packaging materials, local regulations or hospital waste disposal procedures must be followed, and packaging materials must be kept out of reach of children.
4. The equipment may be contaminated with microorganisms during storage, transportation and use. Please check that the packaging is intact before use, especially for disposable accessories. If any damage is found, please do not use it.
5. The product's production date and expiration date are shown on the label.

3.2 Download and install the APP

Apple (iOS) users, scan the QR code below to open it in your browser or WeChat.



Download path for Android users: Scan the QR code below. (This can only be opened with a browser.)



3.3 APP software operating environment

equipment	Minimum configuration requirements
Software environment	■ Android: Android 5.0 and compatible versions; ■ Apple: iOS 8.0 and compatible versions .
Hardware configuration	■ Android version: Screen display resolution of 1920x1080px or higher , RAM of 8GB or higher , storage of 32GB or higher, screen size of 7 inches or higher ; ■ Apple iOS version: minimum screen resolution of 1920x1080px or higher , RAM of 2GB or higher , storage of 32GB or higher, and screen size of 7 inches or higher .
Network conditions	■ Cellular network, WIFI

3.4 App usage restrictions

The app needs to be used in conjunction with our company's specified model of electrocardiogram recorder;

The app requires a specific software runtime environment; see "App Software Runtime Environment" for details.

3.5 Maximum concurrency

Maximum concurrency: 1, response time <10s.

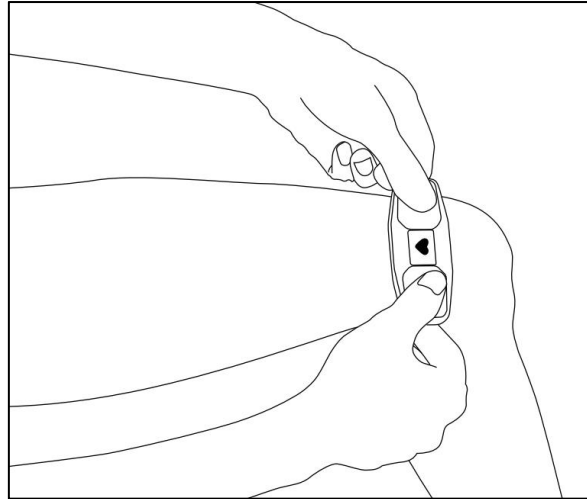
3.6 Test methods

Depending on your measurement needs, you can choose a six-lead ECG or a single-lead ECG.

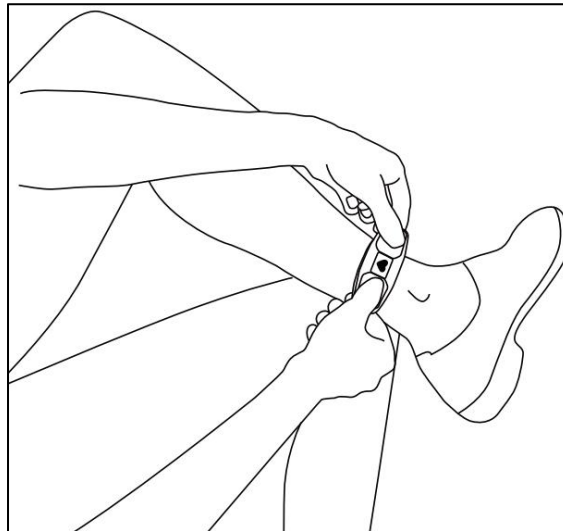
Follow these three methods to click "Start" to begin the measurement.

3.6.1 Six-lead posture measurement

Method 1: Hold the ECG electrodes on both sides with both hands, with the electrodes on the back pressed firmly against the left knee (as shown in the picture):

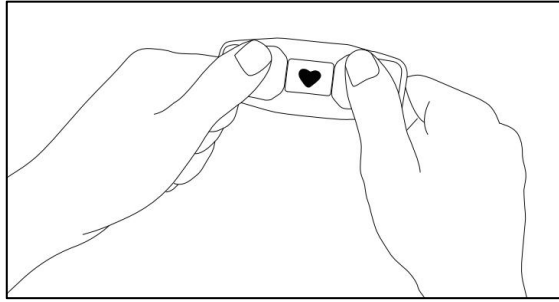


Method 2: Hold the ECG electrodes with both hands, with the back electrodes pressed firmly against your left ankle (as shown in the picture).



3.6.2 Single-lead measurement posture

Hold the ECG electrodes on both sides with both hands, using only your hands (as shown in the picture).



 Notice

1. During use, it is best to avoid shaking or moving your fingers .
2. Before you begin the measurement, please wash your hands with water or wipe them with a damp cloth.
3. automatically enters the measurement stage after contact with both hands . The pressure should be moderate, neither too tight nor too loose.
4. During the measurement process, you must remain seated, relaxed, and refrain from talking or shaking the equipment, otherwise it will affect the electrocardiogram waveform.
5. the software shows the current battery level. It is recommended to charge the battery in time when the power is low to avoid affecting its use.
6. Automatic shutdown: When the ECG recorder's battery is low, the yellow light will flash for 10 seconds and the device will automatically shut down; when the lead is detached or Bluetooth is disconnected for 3 minutes $\pm$ 5 seconds, the device will automatically shut down.

3.7 Software operation

3.7.1 Registration and Login

The left screenshot shows the login page with the title 'Hello!' and the subtitle '欢迎来到YonkerHealth, 请登录'. It has input fields for '邮箱' (Email) and '密码' (Password), a '忘记密码?' (Forgot password?) link, a checkbox for '已阅读并同意《用户登录注册协议》及《隐私政策》' (I have read and agree to the User Login and Registration Agreement and Privacy Policy), and a '登录' (Login) button. At the bottom, there is a link for '没有账号? 注册' (No account? Register).

The right screenshot shows the account registration page with the title '账号注册'. It has input fields for '邮箱' (Email), '验证码' (Verification Code) with a '发送验证码' (Send verification code) button, '密码' (Password), and '确认密码' (Confirm Password). It also has a checkbox for '已阅读并同意《用户登录注册协议》及《隐私政策》' (I have read and agree to the User Login and Registration Agreement and Privacy Policy) and a '确认' (Confirm) button.

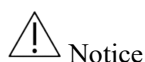
1. Turn on your phone's Bluetooth
2. New users can click "Register" to register an account, enter the "Account Registration" page, fill in the information, and start the registration process.
3. After successful account registration, you will be returned to the login page to log in.

3.7.2 Add device

Press and hold the power button on the dashcam to turn it on. ♡ The blue light on the dashcam screen will flash, indicating that it is waiting for Bluetooth connection. Open the mobile app homepage (as shown in the picture below), click "Add Device" in the upper right corner, and manually bind the device. Then, enter the search page:



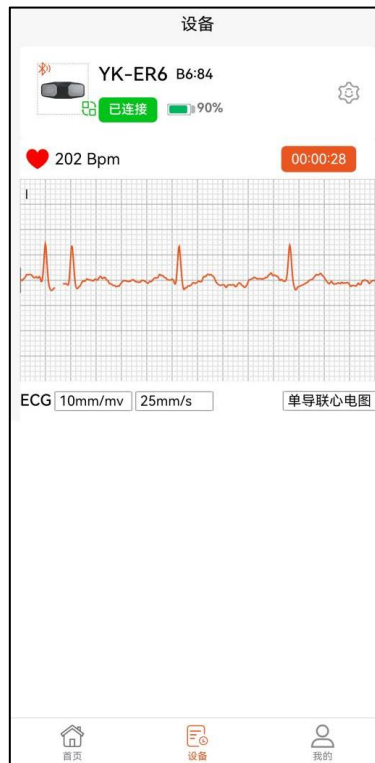
Once the device to be paired is found, click to connect. After a successful Bluetooth connection, the blue light will stay on. After completion, the test will begin (as shown in the picture).



- After exiting the app in the background, the device indicator light flashes blue .
- If the device is not turned on, the page will display a message indicating that no device was found.
- When other devices are opened, one or more devices will be found. Select the device you want to bind.



3.7.3 Equipment settings

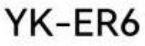


The current page displays the electrocardiogram (ECG) measurement waveform and heart

rate data in real time.

Once the posture is ready and ECG signal acquisition begins, the page will display "Data entry will begin in 3 seconds" and start a countdown. The signal acquisition time is 30 seconds. If a pop-up message appears saying "Data duration is less than 30 seconds and cannot be analyzed normally," it means that the signal acquisition time is less than 30 seconds and ECG data needs to be acquired again.

When a pop-up window displays "Device disconnected," it means that the device has been disconnected and needs to be reconnected.

	Equipment Model
	Current device power
	The current device connection status can be displayed as either not connected or connected.
	Current heart rate
	Collection time

The switchable parameters in the software are shown in the table below.

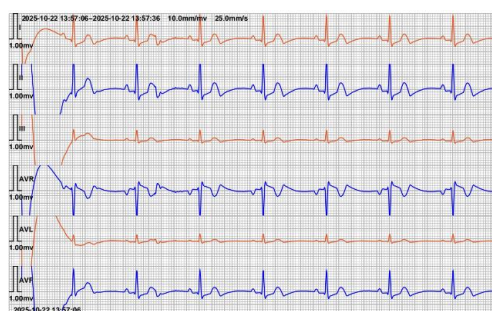
Gain control	5 mm/mv
	10 mm/mv
	20 mm/mv
Paper feeding management	25 mm/s
electrocardiogram	Six-lead electrocardiogram
	Single-lead electrocardiogram

3.7.4 Measurement Records

1. After the measurement is completed, you can view the measurement results on the homepage.
2. The "Home" dropdown menu displays historical measurement data, including specific device model, measurement date, measurement time, and heart rate, as shown in the image below:



3. Clicking on any data point below will take you to the page shown in the image. Clicking "View Full ECG" will then take you to the ECG page. Swipe the progress bar left and right to view the complete ECG, as shown in the image below:



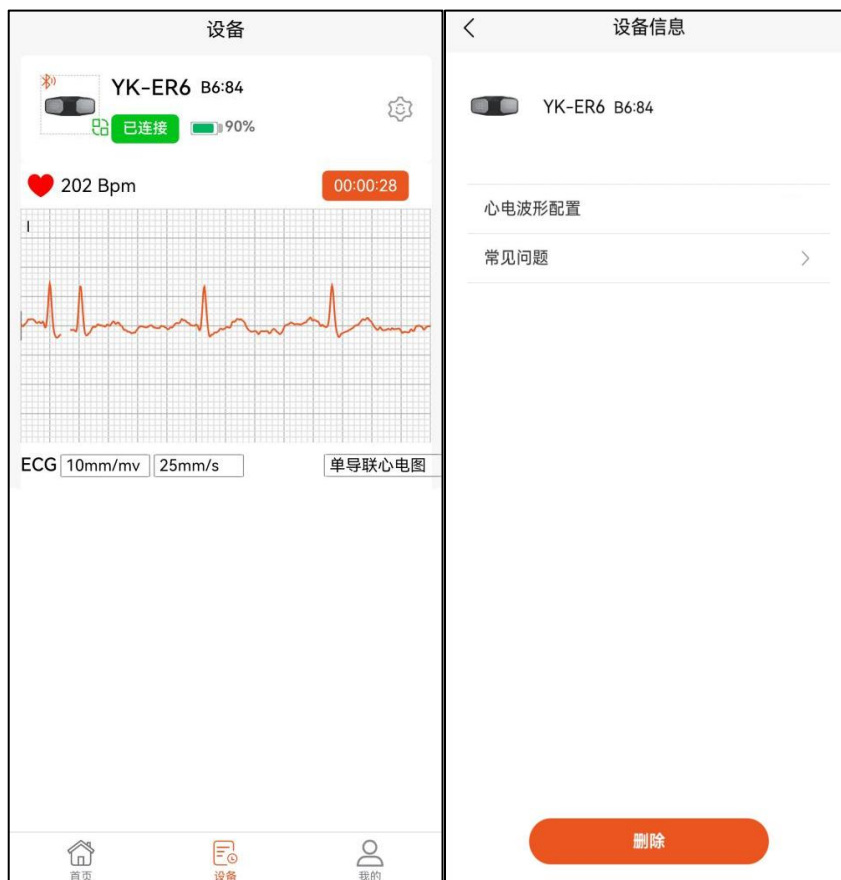
3.7.5 Page Search

Select the start/end date, and use the dropdown menu "全部" to search by product model, as shown in the image below:



3.7.6 Device Removal

On the bound device page, click the "⚙️" in the upper right corner to enter the device management page, click "Delete" at the bottom of the interface, and a pop-up window will ask "Confirm whether to unbind this device". Select "Confirm" to delete the bound device.



3.7.7 Personal Information Settings

The screenshot shows a mobile application interface. On the left is a sidebar menu titled '我的' (My) with options: '用户反馈' (User Feedback), '关于我们' (About Us), and '设置' (Settings). The main area is titled '修改用户信息' (Edit User Information). It features a user profile card at the top with the name 'Yonker', email '57494701@qq.com', and physical attributes: '年龄:0岁' (Age: 0 years), '身高:150cm' (Height: 150cm), and '体重:40kg'. Below the profile card is an '编辑' (Edit) button. The form contains the following fields: '昵称:' (Nickname) with the value '来来来'; '性别:' (Gender) with a dropdown menu showing '请选择性别' (Please select gender); '身高:' (Height) with a dropdown menu showing '150cm'; '体重:' (Weight) with a dropdown menu showing '40kg'; and '出生日期:' (Date of Birth) with a date picker showing '2025-06-13'. A red '保存' (Save) button is located at the bottom right of the form.

After logging in, your personal information will be displayed on the "My" page. Clicking on your avatar will take you to the page shown in the image, where you can set the following information: avatar, nickname, gender, height, weight, and date of birth.

3.7.8 User Feedback

If you have any other issues you'd like to report to our company or our backend system, you can go to the "My" page, click "User Feedback," edit the text content of your feedback, or click



to upload an image. Click "Submit" at the bottom of the page to complete your feedback.



3.7.9 about Us

Clicking "About Us" will display the following information: current software version number, official website, email address, service hotline, service hours, privacy policy, user login agreement, and check for new version.

To update the software, click "Check for new versions". If an update is available, click to update. If the current version is already the latest, a pop-up window will appear saying "This is already the latest version".



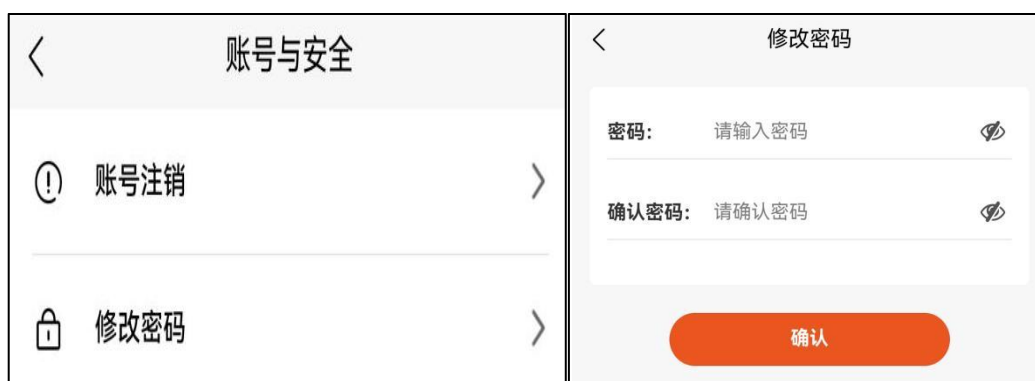
3.7.10 Account cancellation

On the "My" page, click "Settings" → "Account and Security" → "Account Deregistration" → "Logout". A pop-up window will appear prompting "Confirm deregistration of this user". Click "OK" to complete the deregistration process.



3.7.11 Change password

On the "My" page, click "Settings" → "Account and Security" → "Change Password". Enter your password twice and click "Confirm" to complete the password change.



4. Regarding charging

Charging is done via a Type-C interface. The indicator light flashes green while charging and remains on when fully charged.



Notice

- When the dashcam's battery is low, the indicator light will flash yellow for 10 seconds and then automatically shut down. Please charge it promptly to avoid affecting its use. The battery level will be displayed on the app screen after connection.
- If the device is not to be used for an extended period (more than 3 months), please fully charge it before storing it.
- This equipment requires a Class II adapter that meets the requirements of IEC 60601-1 or GB 9706.1-2020 standards, and the adapter must meet the 2 MOPP insulation requirement.

5. Maintenance and upkeep

5.1 maintenance

5.1.1 Daily cleaning and disinfection

- When dust or dirt appears on the product surface, please wipe it with a dry, clean, soft cloth.
- When the main unit is heavily soiled, wipe it with a soft cloth dampened with water or neutral detergent, wrung out thoroughly. After wiping away the dirt, wipe it again with a dry, soft cloth.
- If the electrodes are heavily soiled, wipe them with a soft cloth dampened with alcohol disinfectant.
- Please use a clean cloth that will not produce lint.
- Do not use abrasives.
- If there is a temperature difference between the place of use and the place of storage, please let it sit for 30 minutes before use.



Notice

- When multiple people are using the product, please disinfect it with 75% medical alcohol before use. Be careful not to let water or alcohol seep into the product.
- Do not store the computer in the following places:
 1. Places where water is likely to splash.
 2. Places with high temperature, humidity, direct sunlight, high dust, and high salt content.
 3. Tilt, places that will vibrate or impact.
 4. Places where chemicals or corrosive gases are stored.
- Disposal Recommendation : Please dispose of the main unit, accessories, and separately sold items in accordance with the relevant environmental protection regulations of the city .

5.1.2 Routine inspection

To record an accurate electrocardiogram, please perform the following checks :

1. Before use, please check whether the main unit has any abnormal appearance such as deformation, damage, electrode corrosion, or dirt.
2. When recording an electrocardiogram, please make sure that recording begins as soon as the electrodes touch the skin.

3. During use, please check for any unusual odors or noises.

5.1.3 repair

If you experience any abnormalities during use or routine checks, please stop using the product and contact our company for assistance.

5.2 Common Faults and Solutions

Fault phenomenon	Possible reasons	Solution
The phone cannot connect recorder	1. The recorder battery is low. 2. Turn off Bluetooth on your phone. 3. The recorder is damaged.	1. Charge the recorder 2. Turn on your phone's Bluetooth. 3. Contact customer service
The ECG waveform has large noise and the displayed waveform is abnormal.	1. Skin that is too dry or oily 2. There are excessively strong interference sources in the environment. 3. Excessive muscle tension causes electromyographic interference. 4. The device is too far away from the mobile phone.	1. Clean your hands properly, making them moist but not oily. 2. Try using it in a different environment. 3. Relax your shoulders, back, and fingers. 4. Bring your phone close to the dashcam.
Historical data cannot be viewed on mobile phones	1. Insufficient phone storage space 2. Software issues	1. Clear the cache and delete useless data. 2. Contact customer service
The recorder cannot be turned on.	1. Low battery power 2. The recorder is damaged.	1. Charge the recorder 2. Contact customer service
Other issues	/	Contact customer service

6. Electromagnetic compatibility

The electromagnetic compatibility (EMC) specifications of the recorder (YK-ER6) fully comply with YY 9706.102-2021 and YY standards. Clause 202 of 9706.247-2023 stipulates that the verification method for electromagnetic compatibility indicators shall also be carried out in accordance with this standard.

When the recorder operates in the electromagnetic environment specified in this EMC technical datasheet, its basic performance is unaffected.

Basic performance of the recorder (YK-ER6): detection of electrocardiogram waveform and heart rate.

Magnetic fields may interfere with the normal operation of the instrument. Furthermore, this recorder may cause electromagnetic interference to other electronic products. Therefore, please note the following points when the instrument is in operation:



warn

- Purchasers or users of this device should use the recorder (YK-ER6) in the electromagnetic environment specified in Tables 1, 2, 3, and 4 (see YY 9706.102-2021) , otherwise the recorder (YK-ER6) may malfunction.
- Portable and mobile radio frequency communication devices may affect the normal use of the recorder (YK-ER6) . Please use the recorder (YK-ER6) in the recommended electromagnetic environment .
- Using accessories and cables other than those provided by the recorder (YK-ER6) manufacturer may result in increased emissions or reduced immunity of the recorder (YK-ER6) .
 - The recorder (YK-ER6) should not be used near or stacked with other devices. If it must be used near or stacked, its normal operation under the configuration in which it is used should be observed and verified.
 - The following cables must be used to meet the requirements for electromagnetic emission and interference immunity:

name	Cable length (m)	Should I block it?
charging cable	1.0	no

Table 1

Guidelines and Manufacturer's Statements—Electromagnetic Launch		
The recorder (YK-ER6) is intended for use in the electromagnetic environments specified below, and the purchaser or user shall ensure that it is used in such electromagnetic environments.		
Launch test	Compliance	Electromagnetic Environment - Guide

Radio frequency transmission GB /T 4824 (CISPR 11)	Group 1	The recorder (YK-ER6) uses RF energy for its internal functions. Therefore, its radio frequency radiation is very low and the possibility of interfering with nearby electronic equipment is minimal.
Radio frequency transmission GB /T 4824 (CISPR 11)	Category B	The recorder (YK-ER6) is suitable for use in all facilities, including home facilities and those directly connected to the public low-voltage power grid of residential homes.
Harmonic emission GB /T 17625.1	Category A	
Voltage fluctuation/scintillation emission GB /T 17625.2 (IEC 61000-3-3)	conform to	

Table 2

Guidelines and Manufacturer's Statements – Electromagnetic Immunity			
The recorder (YK-ER6) is intended for use in the electromagnetic environments specified below, and the purchaser or user shall ensure that it is used in such electromagnetic environments.			
Anti-interference test	IEC 60601 test level	Compliance Level	Electromagnetic Environment – Guide
electrostatic discharge GB/T 17626. 2 (IEC61000-4-2)	$\pm 6\text{kV}$ contact discharge $\pm 8\text{kV}$ air discharge	$\pm 6\text{kV}$ contact discharge $\pm 8\text{kV}$ air discharge	The floor should be made of wood, concrete, or tile. If the floor is covered with a synthetic material, the relative humidity should be at least 30%.
Electric Fast Transient Second Charge Group GB/T 17626. 4 (IEC61000-4-4)	$\pm 2\text{kV}$ power supply line $\pm 1\text{kV}$ input/output lines	$\pm 2\text{kV}$ power supply line not applicable	The mains power supply should have the quality typically used in commercial or hospital environments.
surge GB/T 17626. 5 (IEC61000-4-5)	$\pm 1\text{ kV}$ line-to-line $\pm 2\text{ kV}$ line to ground	$\pm 1\text{kV}$ line-to-line not applicable	The mains power supply should have the quality typically used in commercial or hospital environments.

Voltage dips, short interruptions and voltage variations on power input lines GB/T 17626.11 (IEC61000-4-11)	< 5% UT , lasting 0.5 cycles (>95% transient decrease in UT) . 40% UT , for 5 consecutive cycles (60% temporary decrease in UT) . 70% UT , lasting for 25 cycles (30% temporary drop in UT) . <5% UT , lasting 5 seconds (>95% transient decrease in UT) .	< 5% UT , lasting 0.5 cycles (> 95% sag on UT) 40% UT , lasting for 5 cycles (60% temporary drop in UT) . 70% UT , for 25 cycles (30% sag on UT). < 5% U _T , lasting 5 seconds (On U _T , >95% temporary drop)	The mains power supply should have the quality typical of commercial or hospital environments. If the user of the equipment needs continuous operation during power outages, it is recommended that the equipment be powered by an uninterruptible power supply (UPS) or battery.
Power frequency magnetic field (50/60Hz) GB/T 17626.8	3 A/m	3 A/m	The power frequency magnetic field should have the power frequency magnetic field level characteristics of typical locations in a typical commercial or hospital environment.
Note: UT refers to the AC mains voltage before the test voltage is applied .			

Table 3

Guidelines and Manufacturer's Statements - Electromagnetic Immunity			
The recorder (YK-ER6) is intended for use in the electromagnetic environments specified below, and the purchaser or user shall ensure that it is used in such electromagnetic environments.			
Anti-interference test	IEC 60601 test level	Compliance Level	Electromagnetic Environment - Guide
Radio frequency conduction GB/T 17626.6 (IEC61000-4-6) Radio frequency radiation GB/T	3 V (RMS value) 150 kHz~80 MHz 3 V/m 80 MHz ~ 2.5 GHz	3 V (RMS value) 3 V/m	Portable and mobile radio frequency communication devices, including cables, should not be used closer to any part of the recorder (YK-ER6) than the recommended isolation distance . This distance should be calculated using a formula corresponding to the transmitter frequency. Recommended isolation distance $d = 1.2\sqrt{P}$

17626.3 (IEC61000-4-3)			$d = 1.2\sqrt{P} \text{ 80 MHz to 800 MHz}$ $d = 2.3\sqrt{P} \text{ 800 MHz to 2.5 GHz}$ In the formula: P—The maximum rated output power of the transmitter as provided by the transmitter manufacturer, in watts (W). d—Recommended isolation distance, in meters (m) The field strength of a fixed radio frequency transmitter is determined by electromagnetic field survey ^(a) and should be lower than the compliance level in each frequency range ^(b).  Interference may occur near devices marked with the following symbols .
Note 1: At the 80MHz and 800MHz frequencies, the formula for the higher frequency band is used. Note 2: These guidelines may not be suitable for all situations, as electromagnetic propagation is affected by absorption and reflection from buildings, objects, and the human body.			
For fixed transmitters, such as base stations for wireless (cellular, cordless) telephones and terrestrial mobile radios, amateur radio, AM and FM radio broadcasting, and television broadcasting, the electromagnetic field strength cannot be accurately predicted in theory. To assess the electromagnetic environment of a fixed RF transmitter, an electromagnetic field survey should be considered. If the field strength at the location of the recorder (YK-ER6) is measured to be higher than the applicable RF compliance level, the recorder (YK-ER6) should be observed to verify its normal operation. If abnormal performance is observed, supplementary measures may be necessary, such as readjusting the orientation or position of the recorder (YK-ER6) . b. The electric field strength should be less than 3V/m across the entire frequency range of 150kHz to 80MHz.			

Table 4

Recommended isolation distance between portable and mobile radio frequency communication devices and recorders (YK-ER6)			
The recorder (YK-ER6) is intended for use in electromagnetic environments where radio frequency radiated interference is controlled. Based on the maximum rated output power of the communication equipment, purchasers or users can prevent electromagnetic interference by maintaining the minimum distance between the portable and mobile radio frequency communication equipment (transmitter) and the recorder (YK-ER6) as recommended below .			
The transmitter's maximum rated output	Isolation distance (m) corresponding to different frequencies of the transmitter		
	150 kHz~80 MHz $d = 1.2\sqrt{P}$	80MHz~800MHz $d = 1.2\sqrt{P}$	800MHz~2.5GHz $d = 2.3\sqrt{P}$

power W			
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	twenty three

For transmitters whose maximum rated output power is not listed in the table above, the recommended isolation d , in meters (m), can be determined using the formula in the corresponding transmitter frequency column. Here, P is the transmitter's maximum rated output power provided by the transmitter manufacturer, in watts (W).

Note 1: At the 80MHz and 800MHz frequencies, the formula for the higher frequency band is used.

Note 2: These guidelines may not be suitable for all situations, as electromagnetic propagation is affected by absorption and reflection from buildings, objects, and the human body.

7. appendix

7.1 Product List

Serial Number	Name	quantity	Remark
1	electrocardiogram recorder	1	
2	charging cable	1 item	
3	manual	1 copy	
4	Certificate of Conformity	1	
5	storage bag	1	

8. After-sales service

8.1 illustrate

- 1) The company promises users a one-year free warranty and lifetime maintenance.
- 2) If the recorder malfunctions, do not attempt to disassemble or reassemble it yourself. Please contact the manufacturer's customer service center immediately. In special circumstances requiring repair by qualified technicians other than those from the manufacturer, our company can provide product circuit diagrams, component lists, etc. Please contact our customer service center for assistance.
- 3) The company is not responsible for free repair or replacement of any direct or indirect damage caused by improper use of the equipment. The user shall pay for

the repair (including transportation costs).

The following situations are not covered by the warranty:

1. Unable to produce a warranty card, invoice, or proof of purchase.
2. Damage caused by improper use or other human factors
3. Damage caused by unforeseen natural disasters

For products beyond the warranty period, we will provide paid repair services. Our company reserves the right to interpret this warranty information.

8.2 Manufacturer Information

Registrant Name/Manufacturer Name/After-Sales Service Provider Name: Xuzhou Yongkang Electronic Technology Co., Ltd.

Registered Address : 2&3rd Floor, Block B, Huaihai Biomedical Industry Park, No. 5 Tengzhai North Rd., Xuzhou, China

Production Address/After-sales Service Unit Address: 2&3rd Floor, Block B, Huaihai Biomedical Industry Park, No. 5 Tengzhai North Rd., Xuzhou, China

Production date: See product label

Service life: 5 years

Telephone: 0516-87892766

Fax: 0516-87892766-606

Postal code: 22100

Website: www.yonker.cn

Email: office@yonker.cn

Appendix A Safety

Product Name			electrocardiogram recorder
Product Model			YK-ER6
Protection level			IP22
Classification by level of protection against electric shock			CF type equipment
Classification by type of electric shock protection			Class II, Internal power supply equipment
Classification by operating mode			Continuous operation equipment
Does the equipment have an application section that protects against defibrillation discharge effects?			This equipment does not have any application section for defibrillation discharge effect protection.
Permanent installation equipment or non-permanent installation equipment			Non-permanent installation equipment
Classified according to the level of safety when used in flammable anesthetic gases mixed with air or flammable anesthetic gases mixed with oxygen or nitrous oxide.			It cannot be used in the presence of flammable anesthetic gases mixed with air or flammable anesthetic gases mixed with oxygen or nitrous oxide.
Charging power supply			External power supply : Input 100V-240V; 50/60Hz, Output 5V  2A
Electrical parameters	Internal power supply	DC 3.7V	
	Battery capacity	180 mAh	
	Automatic shutdown	The recorder automatically shuts down after 3 minutes of inactivity.	
Low voltage warning	When the voltage is 3.3V±0.1V , the indicator light will flash yellow for 10 seconds and then automatically shut down.		
Charging time	Approximately 3 hours		
Working hours	>24 hours		

Use period	5 years
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Appendix B Environmental Requirements

Work environment	Ambient temperature	5°C ~ 45°C	1. If stored or used outside the temperature and humidity range specified by the manufacturer, the system may not achieve the claimed performance. 2. During transportation, avoid strong impacts, direct collisions, exposure to sunlight or rain. After packaging, the recorder should be stored in an environment that meets the temperature, humidity and atmospheric conditions, free from corrosive gases and in a well-ventilated indoor environment.
	relative humidity	10 % ~ 95 % (Non-condensing)	
	Atmospheric pressure	70 kPa ~ 106 kPa	
Transportation and storage environment	Ambient temperature	-20°C~+55°C	
	relative humidity	≤ 95% (non-condensing)	
	Atmospheric pressure	7.0 kPa ~ 10.6 kPa	

Appendix C Product Specifications

Product Dimensions	90*35*9mm		
Product weight	27g		
Number of leads	Single lead, six leads; dual-channel; I, II, III, aVL, aVR, aVF		
Heart rate measurement range	30-300 bpm		
Heart rate measurement error	±2bpm		
Input impedance	≥10MΩ		
System noise	<25 μV (peak-to-valley value)		
Impulse response	overshoot <10%		
Frequency response	Sine wave signal 0.67Hz~40Hz (+3dB~-3dB)		
Rated input amplitude	Input frequency and waveform	amplitude changes	

2.0mv	0.67Hz~40Hz, sine wave	140%~70% ^a	
1.5mv	1Hz, triangular wave, 40ms bottom width	70 %~ 110 % ^b	
a is the output amplitude relative to a 5 Hz sinusoidal input signal. b is the output amplitude relative to a triangular wave input signal with a bottom width of 200ms.			
Gain accuracy	With all possible gain settings, the output signal is equivalent to the input test signal, with a maximum amplitude error of $\pm 10\%$.		
Mobile software	Software Name	Dynamic electrocardiogram recorder software	
	Model/Specification	YK-ER6	
	Release version	V1	
Embedded software	Software Name	ECG recording software	
	Applicable models/specifications	Y onker Health	
	Release version	1	
Communication methods	Bluetooth connection		
Gain control	5 mm/mv , 1 0mm/mv , 2 0mm/mv		
Speed Management	25mm/s		
Bluetooth module	frequency	2402~2480MHz	
	Modulation type	GFSK	
	Effective radiated power	≤20dBm	

FCC Warning

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.