FNIRSi 菲尼瑞斯

GC-03

多功能辐射检测仪说明书 V1.0

MULTIFUNCTIONAL RADIATION DETECTOR USER MANUAL

目 录

CONTENTS

一、安全要求

1.1 环境要求

ⓘ 注意事项

● 避免高温、明火、腐蚀性气体、潮湿或多尘环境，以防设备故障。

● 测量时请勿遮挡设备检测口，避免影响测量结果。

⚠ 远离以下物品

● 加热器：避免过热或火灾风险。

● 水源、化学品：溶剂：泄漏可能损坏设备或引发火灾。

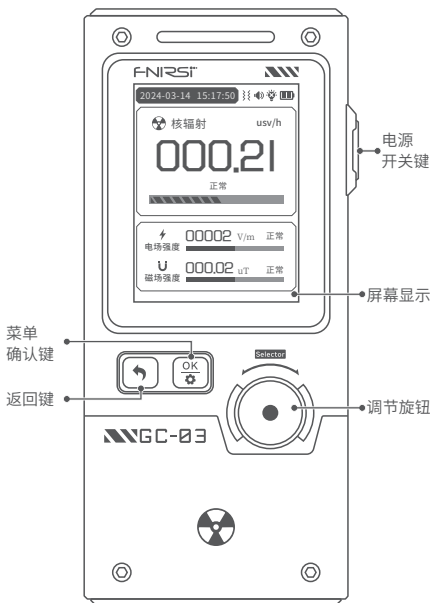● 强磁性设备：防止磁场干扰设备正常运行。

♻ 废旧处理

请勿随生活垃圾丢弃废旧电池或设备，应按国家或当地法规处理。

二、产品概览

2.1 产品简介

GC-03是一款多功能辐射检测仪，是测量核辐射的专业仪表，主要用于家庭、办公室、车内、户外环境等多种场合下应用。采用2.4寸高清彩屏，支持核辐射、电场强度、磁场强度实时监测。设备支持声音、震动、灯光三种报警模式。

电源开关键

屏幕显示

菜单确认键

返回键

调节旋钮

FNIRSI

2024-03-14 15:17:50

☢ 核辐射　　usv/h

000.21

正常

⚡ 电场强度　00002 V/m 正常

∪ 磁场强度　000.02 uT 正常

Selector

GC-03

2.3 主页面示意图

①**电量指示:**指示系统电量。

②**指示灯:**此区域显示报警指示灯开启情况。

③**声音指示:**此区域显示报警声音开启情况。

④**震动指示:**此区域显示报警震动开启情况。

⑤**时间日期:**此区域显示年月日时间,可以再系统设置调节时间。

⑥**核辐射检测:**此区域实时显示设备测量的核辐射值与对应单位,并根据设置的报警阈值进行危险判定。

⑦**电场强度检测:**此区域显示设备所处环境监测电场强度测量值与对应单位,并根据设置的报警阈值进行危险判定。

⑧**磁场强度检测:**此区域显示设备所处环境监测磁场强度测量值与对应单位,并根据设置的报警阈值进行危险判定。

按键	操作	功能
⏻	短按	设备开机
	长按	设备关机
OK ⚙	短按	进入设置菜单界面
⊙	拨动	可进行数据曲线界面、数据列表界面、主界面的前后切换。不同的监测界面,数据分析多样可靠。

① **页面返回指示:**可通过返回键,退出该界面。

② **页面介绍区:**说明该操作界面类别,设置界面。

③ **报警设置:**包含核辐射设置与电磁场设置。

④ **报警记录:**记录测量过程中报警的测量数据与时间。

⑤ **单位设置:**设置显示测量单位,可设置核辐射单位、磁场单位。

⑥ **功能设置:**可设置风格设置、自动关机时间。

⑦ **系统设置:**包含语言切换、显示|音量、报警方式、系统时钟。

⑧ **关于:**显示设备信息与恢复出厂设置相关。

按键	操作	功能
⏻	短按	设备开机
	长按	设备关机
$\frac{OK}{✿}$	短按	确认进入选择对应的功能模块设置
⊙	拨动	调节旋钮进行实现选择功能
↰	短按	返回操作,退出界面

① **核辐射设置:** 此区域高亮显示,表示进入核辐射设置并显示对应的调节设置。

② **电磁场设置:** 若此区域高亮显示,则表示进入核辐射设置并显示对应的调节设置。

③ **当前剂量报警值:** 通过旋钮调节当前剂量报警值,保存数据后,若检测值达到报警值设备进行报警。

报警设置

① 核辐射设置 ② 电磁场设置

0.50usv/h
当前剂量报警值 ③

10.00usv/h
累积剂量报警值 ④

累积剂量清零 ⑤

④ **累积剂量报警值:** 通过旋钮调节累积剂量报警值,保存数据后,若检测值累积达到报警值设备进行报警提示。

⑤ **累积剂量清零:** 选择该选项,进行累积剂量清零操作。

按键	操作	功能
⏻	短按	设备开机
	长按	设备关机
OK ✿	短按	确认进入选择对应的功能模块设置
⊙	拨动	调节旋钮进行实现选择功能
↩	短按	返回操作,退出界面

2.6 报警记录页面示意图

① **序号:** 记录报警记录先后顺序, 从小到大递增。

② **记录类型:** 记录触发报警的数据类型, 例如核辐射、电场强度、磁场强度等。

③ **时间:** 记录每一次触发报警的触发时间:年月日时间。

	报警记录	
序号	记录类型	时间
01	电场强度	2025/02/07
02	磁场强度	2025/02/07
03	核辐射	2025/02/07
04	电场强度	2025/02/07
05	磁场强度	2025/02/07
06	电场强度	2025/02/07
①	②	③

按键	操作	功能
⏻	短按	设备开机
	长按	设备关机
◉	拨动	调节旋钮进行实现选择功能
↰	短按	返回操作, 退出界面

2.7 单位设置页面示意图

① **页面介绍区:** 说明该操作界面类别,单位设置。

② **核辐射单位:** 此区域高亮显示,表示进入核辐射单位设置并显示对应的单位,通过旋钮与确认键可选择对应单位,单位包括:usv/h、uGy/h、mR/h、CPS、CPM等。

③ **磁场单位:** 此区域高亮显示,表示进入磁场单位设置并显示进入磁场单位设置并显示对应的单位,通过旋钮与确认键可选择对应单位,单位包括:uT、mG等。

① 单位设置
② 核辐射单位 ③ 电磁场单位

- ☑ usv/h
- ☐ uGy/h
- ☐ mR/h
- ☐ CPS
- ☐ CPM

按键	操作	功能
⏻	短按	设备开机
	长按	设备关机
OK ⚙	短按	确认进入选择对应的功能模块设置
◎	拨动	调节旋钮进行实现选择功能
↰	短按	返回操作,退出界面

2.8 功能设置页面示意图

① **页面介绍区:** 说明该操作界面类别，单位设置。

② **风格设置:** 此区域高亮显示，表示进入风格设置并显示其对应的功能选项，通过旋钮与确认键可选择深色模式、浅色模式。

③ **自动关机:** 此区域高亮显示，表示进入自动关机设置并显示对应的设置内容，

通过旋钮与确认键可选择对应自动关机时间，可选项包括：5min、10min、15min、关闭等。

按键	操作	功能
⏻	短按	设备开机
	长按	设备关机
OK ⚙	短按	确认进入选择对应的功能模块设置
◉	拨动	调节旋钮进行实现选择功能
↩	短按	返回操作，退出界面

2.9 系统设置页面示意图

①**页面介绍区：**说明该操作界面类别，系统设置。

②**语言切换：**此区域高亮显示，表示进入语言切换并显示其对应的功能选项，通过旋钮与确认键可选择中文、English。

③**显示|音量：**此区域高亮显示，表示进入显示|音量设置并显示对应的设置内容，通过旋钮与确认键可选择调节对应选项，音量与亮度为十档调节，其中音量可调节至静音，亮度最小可调节至10%。

④**报警方式：**此区域高亮显示，表示进入报警方式设置并显示对应的设置内容，通过旋钮与确认键可选择调节对应选项，有三种报警方式：指示灯、震动、音量报警，三种可互相搭配，根据用户随心选择。

⑤**系统时钟：**通过操作按键旋钮、确认、返回键，可以完成时间设置，设置项包括年、月、日、时、分、秒。

按键	操作	功能
⏻	短按	设备开机
	长按	设备关机
OK ⚙	短按	确认进入选择对应的功能模块设置
⊙	拨动	调节旋钮进行实现选择功能
↩	短按	返回操作，退出界面

三、技术规格

3.1 机型参数

参数	规格
屏幕材质	2.4寸彩屏
背光	背光亮度可调
供电电源	TYPE-C (5V/1A)
电池	1500mAh
语言	中文, English
产品尺寸	≈138×63×32mm
裸机重量	≈141g

3.2 测量参数

参数	核辐射	电场	磁场
单位	usv/h (微西弗/小时)	V/m (伏/米)	μT (微特斯拉)
精度	0.01usv/h	1V/m	0.01μT
量程	0.01usV/h- 999.99usV/h	1V/m - 1999V/m	0.01μT - 99.99μT
辐射功率	0.2-1000mW/m²		

参数	规格
探测射线种类	电离辐射（γ射线等）
探测器	能量补偿GM管（盖革计数管）
剂量当前率	0.00-10000uSv/h（10mSv/h）
累积剂量当量	0.00uSv-500.0mSv
能量范围	48keV-1.5Mev≤±30%（对137Cs-）
灵敏度	80CPM/uSv
剂量单位	uSv/h、uGy/h、mR/h、cps、cpm
报警方式	灯光、震动、声音

四、操作指南

4.1 开机

短按电源开关键开机,等待系统加载,进入多功能辐射检测仪主界面。

主界面

4.2 语言设置

在主界面短按**OK**确认键,进入系统菜单,拨动旋钮选择系统设置,短按**OK**确认键进入系统设置,拨动旋钮选择选择语言切换,后短按**OK**确认键进入语言切换,拨动旋钮选中中英文,短按**OK**确认键确认即可。

菜单界面
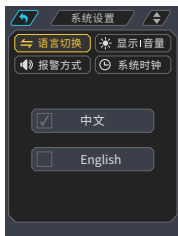
短按 ^{OK}
短按 ↩

系统设置界面

4.3 设置核辐射、电磁场的报警阈值

核辐射报警设置：

在主界面短按 **OK** 确认键，进入系统菜单，拨动旋钮选择报警设置，短按 **OK** 确认键进入报警设置，拨动旋钮选择核辐射设置，短按 **OK** 确认键进入。通过操作键旋钮、确认键、返回键进行调整报警值，短按返回键保存并退出。

电磁场报警设置：

在主界面短按 **OK** 确认键，进入系统菜单，拨动旋钮选择报警设置，短按 **OK** 确认键进入报警设置，拨动旋钮选择核辐射设置，短按 **OK** 确认键进入。通过操作键旋钮、确认键、返回键进行调整报警值，短按返回键保存并退出。

通用设置其他功能调节：

对应功能选择与开启同以上两点操作导航大致相同，省略步骤描述。

4.4 亮度调节

亮度调节：

在主界面短按**OK**确认键，进入系统菜单，拨动旋钮选择系统设置。短按**OK**确认键进入系统设置，拨动旋钮选择显示|音量。短按**OK**键进入显示|音量，通过操作键旋钮、确认键、返回键进行显示亮度的调节，短按返回键保存并退出。

系统设置其他功能调节：

对应功能选择与开启同以上操作导航大致相同，省略步骤描述。

五、快速入门

5.1 快速测量

1、开启多功能辐射检测仪，设备开启后，实时测量设备所处环境核辐射、磁场强度、电场强度等。

2、查看屏幕主界面测量数据，拨动旋钮切换曲线页面，数据可视化，分析数据与记录数据。

3、短按**OK**确认键选择，进入系统菜单。可设置核辐射、电磁场强度上限值与其他参数设置等。

5.2 固件升级

●设备关机，同时按住**OK**键和电源键，此时设备会弹出固件更新update界面，插入USB Type-c数据线连接电脑，进入固件更新update界面进行固件升级。

●进入固件更新update后，电脑识别出U盘，把固件文件直接拷贝到U盘即可。

●在固件更新update界面长按关机键可进行关机。

六、故障排查

6.1 设备无法开机

可能原因：

• 电池电量耗尽　　　• 电池连接松动或损坏

解决方法：

① 检查电池电量，若电量不足请充电。

② 如果电池无法充电或设备依然无法开机，尝试重新安装电池，或更换电池。

6.2 屏幕无法显示

可能原因：

• 屏幕背光关闭　　　• 显示屏硬件故障　　　• 系统软件异常

解决方法：

① 按照手册检查并调节背光亮度设置。

② 尝试重启设备，确保系统恢复正常。

③ 如果屏幕仍无法正常显示，可能需要维修或更换显示屏。

七、维护保养

清洁设备外部

● **频率：** 每月清洁一次，具体取决于使用环境。

● **方法：** 使用柔软的布轻轻擦拭设备表面。避免使用化学清洁剂，特别是含有酒精或强酸、强碱的清洁剂，以免损坏外壳或屏幕。

● **注意事项：**

• 定期清理设备和按钮周围的灰尘，以保持设备良好状态。

• 确保设备无任何液体、灰尘或杂物进入设备接口。

检查电池与电源

- ●**电池保养：**对于内置电池的仪表，定期检查电池的健康状态。避免电池完全放电，建议定期充电并避免长时间不使用设备。
- ●**充电规范：**使用官方提供的充电器进行充电，避免过充或过放，确保电池处于适宜的工作电压范围。
- ●**电池更换：**若电池表现出过度衰减（如无法正常充电或极快放电），应及时更换。

存放与携带

- ●**存放环境：**仪表应存放在干燥、通风的环境中，避免高温、高湿或剧烈的温度变化。避免将其放置在阳光直射的地方。
- ●**携带：**使用时应小心避免摔落，尤其是在携带过程中。推荐使用保护套或专用包进行携带。

软件更新

- ●定期检查设备是否有新的固件更新。最新的固件可以修复已知的BUG并提升设备性能。
- ●更新时确保操作步骤正确，使用官方发布的固件文件，并避免断电或其他干扰。

恢复出厂设置

- ●若设备出现异常或无法正常工作，可尝试恢复出厂设置。恢复设置后，设备将清除所有自定义配置，恢复到初始状态。
- ●恢复出厂设置的方法可以参考用户手册或联系厂商客服。

八、生产信息

产品名称：多功能辐射检测仪

品牌/型号：FNIRSI/GC-03

服务电话：0755-28020752

生产商：深圳市菲尼瑞斯科技有限公司

地址：广东省深圳市龙华区大浪街道伟达工业园C栋西边8楼

服务邮箱：support@fnirsi.com

商务邮箱：business@fnirsi.com

官方网站：www.fnirsi.cn

执行标准：GB/T 12787-2020

九、保修说明

感谢您选择本公司产品，本产品自销售之日起计保修期。在产品保修期内，凡按照产品使用说明书安装使用于正常环境、条件使用之下，因原物料及加工过程中之瑕疵而导致故障，可依据本保条款的内容享受无偿维修服务，本保修卡请用户妥善保存，以作保凭证，丢失恕不补发。

以下情况将实施有偿维修服务：

● 不能出示有效保修卡原件；

● 产品安装不符合产品要求、标准和相关规范造成的损坏；

● 产品安装环境中相关配件不符合产品要求、标准和相关规范造成的损坏；

● 用户对产品使用不当、保管不妥或擅自拆机、私自维修等原因造成的损坏；

● 超过保修期。

1.Safety Requirements

1.1 Environmental Requirements

ⓘ Precautions

- Avoid high temperatures, open flames, corrosive gases, humid or dusty environments to prevent equipment failure.
- Do not block the detection port of the meter during measurement to avoid affecting the measurement results.

⚠ Keep away from the following items:

- Heaters: Avoid overheating or fire risks.
- Water, chemicals: Solvents: Leakage may damage the meter or cause a fire.
- Strong magnetic meters: Prevent magnetic fields from interfering with the normal operation of the meter.

♻ Waste Disposal

Do not discard used batteries or meters with household waste. Dispose of in accordance with national or local regulations.

2.Product Overview

2.1 Product Introduction

GC-03 is a multifunctional radiation detector, a professional instrument for measuring nuclear radiation, mainly used in various occasions such as home, office, car, outdoor environment, etc. It uses a 2.4-inch high-definition color screen and supports real-time monitoring of nuclear radiation, electric field strength, magnetic field strength, etc. The meter supports three alarm modes: sound, vibration, and light.

Power switch button

Screen display

Menu confirmation button

Return button

Rotatable knob

FNIRSI

2024-03-14 15:17:50

☢ Radiation   usv/h

000.21

Normal

⚡ 00002 V/m Normal
Electric

∪ 000.02 uT Normal
Magnetic

Selector

GC-03
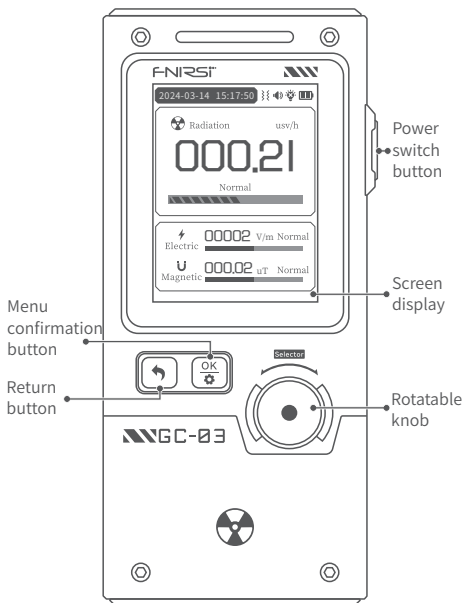
① **Power Indicator:** Indicates the system power.

② **Indicator Light:** This area displays the activation status of the alarm indicator light.

③ **Sound Indicator:** This area displays the activation status of the alarm sound.

④ **Vibration Indicator:** This area displays the activation status of the alarm vibration.

⑤ **Time and Date:** This area displays the year, month, day, and time. The time can be adjusted in the system settings.

⑥ **Nuclear Radiation Detection:** This area displays the nuclear radiation value and corresponding unit measured by the meter in real time, and makes a danger judgment based on the set alarm threshold.

⑦ **Electric Field Strength Detection:** This area displays the measured value and corresponding unit of the electric field strength of the environment where the meter is located, and makes a danger judgment based on the set alarm threshold.

⑧ **Magnetic Field Strength Detection:** This area displays the measured value and corresponding unit of the magnetic field strength of the environment where the meter is located, and makes a danger judgment based on the set alarm threshold.

Button	Operation	Function
⏻	Short Press	Power On
	Long Press	Power Off
OK ⚙	Short Press	Enter the setup menu interface
◉	Rotate	Can switch between the data curve interface, data list interface, and the main interface. Different monitoring interfaces provide diverse and reliable data analysis.

2.4 Menu Page

① **Page Return Indicator:** You can exit this interface by pressing the Return key.

② **Page Introduction Area:** Indicates that this operation interface category is a setting interface.

③ **Alarm Settings:** Contains nuclear radiation settings and electromagnetic field settings.

④ **Alarm Record:** Records the measurement data and time of the alarm during the measurement process.

⑤ **Unit Settings:** Set the display measurement unit, you can set the nuclear radiation unit and magnetic field unit.

⑥ **Function Settings:** You can set the style settings and automatic shutdown time.

⑦ **System Settings:** Contains language switching, display | volume, alarm mode, system clock.

⑧ **About:** Displays meter information and information related to restoring factory settings.

Button	Operation	Function
⏻	Short Press	Power On
	Long Press	Power Off
OK ☼	Short Press	Confirm to enter and select the corresponding function module settings
◉	Rotate	Adjust the knob to implement the selected function.
↩	Short Press	Return operation and exit the interface

2.5 Alarm Setting

① **Nuclear Radiation Setting:** This area is highlighted, indicating that the nuclear radiation setting has been entered and the corresponding adjustment settings are displayed.

② **Electromagnetic Field Setting:** If this area is highlighted, it means that the nuclear radiation setting has been entered and the corresponding adjustment settings are displayed.

③ **Current Dose Alarm Value:** Use the knob to adjust the current dose alarm value. After saving the data, if the detection value reaches the alarm value, the meter will alarm.

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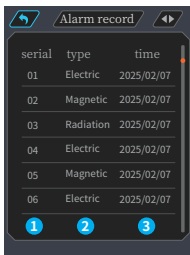
④**Cumulative Dose Alarm Value:**Use the knob to adjust the cumulative dose alarm value. After saving the data, if the detection value reaches the alarm value, the meter will alarm.
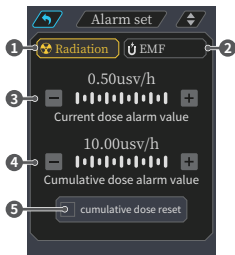
⑤**Cumulative Dose Clear:**Select this option to clear the cumulative dose.

Button	Operation	Function
⏻	Short Press	Power On
	Long Press	Power Off
OK ⚙	Short Press	Confirm to enter and select the corresponding function module settings
◉	Rotate	Adjust the knob to implement the selected function.
↰	Short Press	Return operation and exit the interface

2.6 Alarm Record

①**Serial Number:**Record the order of alarm records, increasing from small to large.

②**Record Type:**Record the type of data that triggers the alarm, such as nuclear radiation, electric field strength, magnetic field strength, etc.

③**Time:**Record the trigger time of each alarm: year, month, day, time.

serial	type	time
01	Electric	2025/02/07
02	Magnetic	2025/02/07
03	Radiation	2025/02/07
04	Electric	2025/02/07
05	Magnetic	2025/02/07
06	Electric	2025/02/07

Alarm record

❶ ❷ ❸

Button	Operation	Function
⏻	Short Press	Power On
	Long Press	Power Off
◉	Rotate	Adjust the knob to implement the selected function.
↩	Short Press	Return operation and exit the interface

2.7 Unit Setting

①**Page Introduction Area:**Explain the operation interface category and unit setting.

②**Nuclear Radiation Unit:**This area is highlighted, indicating that the nuclear radiation unit setting is entered and the corresponding unit is displayed. The corresponding unit can be selected by the knob and confirmation key. The units include: usv/h, uGy/h, mR/h, CPS, CPM, etc.

③**Magnetic Field Unit:**This area is highlighted, indicating that the magnetic field unit setting is entered and the corresponding unit is displayed. The corresponding unit can be selected by the knob and confirmation key. The units include: uT, mG, etc.

① Units set
② ☢ Radiation ③ Ⓤ Magnetic

- ☑ usv/h
- ☐ uGy/h
- ☐ mR/h
- ☐ CPS
- ☐ CPM

Button	Operation	Function
⏻	Short Press	Power On
	Long Press	Power Off
OK ⚙	Short Press	Confirm to enter and select the corresponding function module settings
◉	Rotate	Adjust the knob to implement the selected function.
↶	Short Press	Return operation and exit the interface

2.8 Function Setting

① **Page Introduction Area:** Explain the category of the operation interface and unit settings.

② **Style Setting:** This area is highlighted, indicating that the style setting is entered and the corresponding function options are displayed. The dark mode and light mode can be selected by the knob and confirmation button.

③ **Auto Powe Off:** This area is highlighted, indicating that the auto shutdown setting is entered and the corresponding setting content is displayed. The corresponding auto shutdown time can be selected by the knob and confirmation button. The options include:5min, 10min, 15min, off, etc.。

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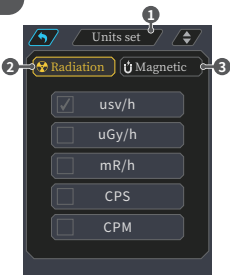| Button	Operation	Function
⏻	Short Press	Power On
	Long Press	Power Off
OK ⚙	Short Press	Confirm to enter and select the corresponding function module settings
◉	Rotate	Adjust the knob to implement the selected function.
↰	Short Press	Return operation and exit the interface

2.9 System Setting

①**Page Introduction Area:** Explain the category of the operation interface and system settings.

②**Language Switch:** This area is highlighted, indicating that the language switch is entered and the corresponding function options are displayed. Chinese and English can be selected through the knob and confirmation button.

③**Display | Volume:** This area is highlighted, indicating that the display | volume setting is entered and the corresponding setting content is displayed. The corresponding options can be selected and adjusted through the knob and confirmation button. The volume and brightness are adjusted in ten levels, among which the volume can be adjusted to mute and the minimum brightness can be adjusted to 10%.
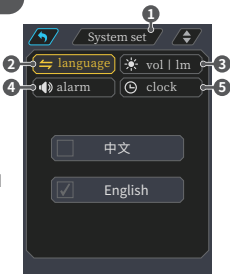
④**Alarm Mode:**This area is highlighted, indicating that the alarm mode setting is entered and the corresponding setting content is displayed. The corresponding options can be selected and adjusted through the knob and confirmation button. There are three alarm modes: indicator light, vibration, and volume alarm. The three can be matched with each other and can be selected according to the user's wishes.

⑤**System Time:**By operating the knob, confirmation, and return buttons, the time setting can be completed. The setting items include year, month, day, hour, minute, and second.

| Button	Operation	Function
⏻	Short Press	Power On
	Long Press	Power Off
$\frac{OK}{\text{⚙}}$	Short Press	Confirm to enter and select the corresponding function module settings
◉	Rotate	Adjust the knob to implement the selected function.
↰	Short Press	Return operation and exit the interface

3.Technical Specifications

3.1 Model Parameters

Parameters	Specifications
Screen material	2.4-inch color screen
Backlight	Brightness Adjustable
Power supply	TYPE-C (5V/1A)
Battery	1500mAh
Languages	中文, English
Product size	≈138×63×32mm
Net weight	≈141g

3.2 Measurement Parameters

Parameters	Nuclear Radiation	Electric Field	Magnetic Field
Units	usv/h	V/m	μT
Accuracy	0.01usv/h	1V/m	0.01μT
Range	0.01usV/h-999.99usV/h	1V/m - 1999V/m	0.01μT-99.99μT
Radiation Power	0.2-1000mW/㎡		

Parameters	Specifications
Detection Radiation Type	Ionizing radiation (gamma rays, etc.)
Detector	Energy compensation GM tube (Gege counter tube)
Dose Current Rate	0.00-10000uSv/h (10mSv/h)
Cumulative Dose Equivalent	0.00uSv-500.0mSv
Energy Range	48keV-1.5Mev≤±30% (对137Cs-)
Sensitivity	80CPM/uSv
Dose Unit	uSv/h、uGy/h、mR/h、cps、cpm
Alarm Mode	Light, vibration, sound

4. Operating Instructions

4.1 Boot

Short press the power button to turn on the device, wait for the system to load, and enter the main interface of the multifunctional radiation detector.
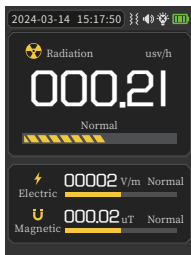
Main Page

4.2 Language Settings

On the main interface, short press the **OK** button to enter the system menu, rotate the knob to select system settings, short press the **OK** button to enter system settings, rotate the knob to select language switching, then short press the **OK** button to enter language switching, rotate the knob to select Chinese or English, and short press the **OK** button to confirm.

Short Press
OK

Short Press

Menu Page

System Setting Page
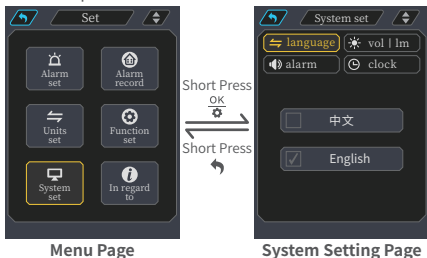
4.3 Setting the alarm thresholds for

nuclear radiation and electromagnetic fields

Nuclear radiation alarm settings:
Short press the **OK** confirmation button on the main interface to enter the system menu, rotate the knob to select alarm settings, short press the **OK** confirmation button to enter the alarm settings, rotate the knob to select nuclear radiation settings, and short press the **OK** confirmation button to enter. Adjust the alarm value by

rotating the knob, confirmation buttonn, and returning the button, and short press the return button to save and exit.
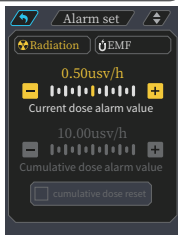
Electromagnetic field alarm settings:

Short press the OK confirmation button on the main interface to enter the system menu, rotate the knob to select alarm settings, short press the OK confirmation button to enter the alarm settings, rotate the knob to select nuclear radiation settings, and short press the OK confirmation button to enter. Adjust the alarm value by rotating the knob, confirming the button, and returning the button, and short press the return button to save and exit.

General Settings Other Function Adjustments:

The corresponding function selection and activation are roughly the same as the above two points of operation navigation, and the step description is omitted.

4.4 Brightness Adjustment

Brightness Adjustment:

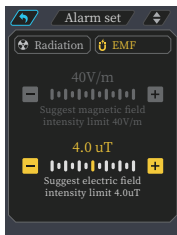Short press the OK button on the main interface to enter the system menu, and rotate the knob to select System Settings. Short press the OK button to enter the system settings, and rotate the knob to select Display | Volume. Short press the OK button to enter Display | Volume, and adjust the display brightness by rotating the knob, confirming the button, and returning the button. Press the Return button to save and exit.

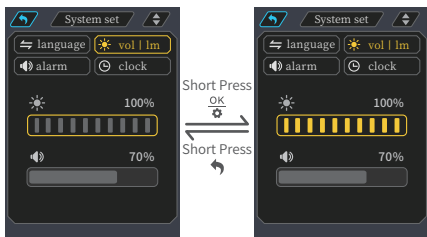**System Settings Other Function Adjustment:**

The corresponding function selection and activation are roughly the same as the above operation navigation, and the step description is omitted.

5. Quick Start Guide

5.1 Quick Measurement

1. Turn on the multifunctional radiation detector. After the meter is turned on, it measures the nuclear radiation, magnetic field strength, electric field strength, etc. of the environment in which the meter is located in real time.
2. View the measurement data on the main screen interface, rotate the knob to switch the curve page, visualize the data, analyze the data and record the data.
3. Short press the OK confirmation button to select and enter the system menu. You can set the upper limit of nuclear radiation, electromagnetic field strength and other parameter settings.

5.2 Firmware Upgrade

● Turn off the device, long press the OK button and the power button at the same time, the device will pop up the firmware update interface, insert the USB Type-c data cable to connect the computer, enter the firmware update interface to upgrade the firmware.
● After entering the firmware update interface, the computer recognizes the USB flash drive, and the firmware file can be directly copied to the USB flash drive.
● In the firmware update interface, long press the power button to shut down.

6.Troubleshooting

6.1 Unable to boot

Possible causes:
•Battery exhausted.
•Loose or damaged battery connection

Solution：
①Check battery charge and charge if low.
②If battery fails to charge or device still does not power on, try reinstalling or replacing the battery.

6.2 Screen does not display

Possible causes:
•The screen backlight is off
•Display hardware malfunction
•System software abnormality

Solution：
①Check and adjust the backlight brightness settings according to the manual.
②Try restarting the device to ensure the system returns to normal.
③If the screen still does not display properly, the display may need to be repaired or replaced.

7. Maintenance

Cleaning the outside of the device

●**Frequency：**Clean once a month, depending on the usage environment.
●**Method：**Use a soft cloth to gently wipe the surface of the device. Avoid using chemical cleaners, especially those containing alcohol or strong acids or alkalis, to avoid damaging the casing or screen.

●Note:
•Clean the dust around the device and buttons regularly to keep the device in good condition.
•Ensure that no liquid, dust or debris enters the device interface.

Check the battery and power
●**Battery maintenance:** For meter with built-in batteries, check the health of the battery regularly. Avoid complete battery discharge. It is recommended to charge regularly and avoid not using the device for a long time.
●**Charging specifications:** Use the official charger to charge, avoid overcharging or over-discharging, and ensure that the battery is in the appropriate operating voltage range.
●**Battery replacement:** If the battery shows excessive attenuation (such as failure to charge normally or extremely fast discharge), it should be replaced in time.

Storage and Carrying
●**Storage environment:** The meter should be stored in a dry and ventilated environment, avoiding high temperature, high humidity or drastic temperature changes. Avoid placing it in direct sunlight.
●**Carrying:** Be careful to avoid falling when using, especially when carrying. It is recommended to use a protective case or a special bag for carrying.

Software Update
●Regularly check whether the device has new firmware to update. The latest firmware can fix known bugs and improve device performance.
●When updating, make sure the operation steps are correct, use the officially released firmware files, and avoid power outages or other interference.

Restore factory settings

● If the device is abnormal or does not work properly, try to restore the factory settings. After restoring the settings, the device will clear all custom configurations and return to the initial state.
● For methods to restore factory settings, please refer to the user manual or contact the manufacturer's customer service.

8.Contact Us

Any FNIRSI users who contact us with questions will receive our promise of a satisfactory solution, plus an extra 6-month warranty as a token of our appreciation for your support! By the way, we have created an exciting community, and we welcome you to contact FNIRSI staff to join.

SHENZHEN FNIRSI TECHNOLOGY CO.,LTD

Add.: West of Building C , Weida Industrial Park , Dalang Street , Longhua District , Shenzhen , Guangdong , China
Tel: 0755-28020752
Web：www.fnirsi.com
E-mail：business@fnirsi.com (Business)
E-mail：service@fnirsi.com(Equipment Service)

http://www.fnirsi.com/

9.Warranty Information

※**This page is the basic warranty card. Please keep it.**
Thank you for choosing our company's products. The warranty period of this product starts from the date of sale. During the product warranty period, if the product is installed and used in accordance with the product manual and used in normal environment and conditions, and the fault is caused by defects in the original materials and processing, you can enjoy free repair services according to the content of this warranty clause. Please keep this warranty card properly as a warranty certificate. No reissue will be issued if it is lost.

The following situations will

incur paid repair services

1. Unable to present the original valid warranty card.
2. Damage caused by improper installation not meeting product requirements, standards, or relevant specifications.
3. Damage caused by accessories in the installation environment not meeting product requirements, standards, or relevant specifications.
4. Damage caused by improper use, improper storage, unauthorized disassembly, or unauthorized repairs by the user.
5. Expiration of the warranty period.

- - - - - - - - - - - - **保修卡** - - - - - - - - - - ✂

产品型号	GC-03	数量	
渠道商名称 （购买商店）			
联系方式			
渠道商地址			
发票号 （订单号）			
购买时间	年	月	日

客户姓名：	地址： 📍
联系方式： ☎	故障说明： ⓘ

Product Model	GC-03	Qty.	
Distributor Name (where to buy)			
Contact			
Address			
Invoice Number (Order Number)			
Purchase Date (as per invoice)	Year	Month	Day
User Name:	**Address:** 📍		
Contact: ☎	**Fault Description:** ⓘ		

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