

[illegible]

1、产品外观描述

1 手電筒及信息指示區域	9 電源開關
2 顯示屏	10 運行、暫停/保存按鍵
3 上、下、左、右按鍵	11 功能快捷鍵
4 模式按鍵	12 手電筒/自動亮度按鍵
5 亮度調節按鍵	13 喇叭口
6 柔性電流鉗輸入端口	14 信號輸出孔
7 COM公共端	15 信號輸出位置
8 探頭夾正端	

3. LCD 符号说明

	交流电压、直流电压测量模式
	电阻、通断、二极管测量模式
	电容测量模式
	交流毫伏、直流毫伏测量模式
	柔性电流钳电流测量模式
	电压档位模式
	输入端口提示

		触发电压		上升沿、下降沿	
2. 直流电压					
量程	分辨率	准确度			
60.00mV	0.01mV	±(1.2%读数+5字)			
600.00mV	0.1mV	±(1.2%读数+5字)			
6.000V	0.001V	±(1.2%读数+5字)			
60.00V	0.01V	±(1.2%读数+5字)			
600.0V	0.1V	±(1.2%读数+5字)			
输入阻抗: 10MO					
最大输入电压: 600V					
3. 交流电压(真有效值测量)					
量程	分辨率	准确度			
60.00mV	0.01mV	±(1.2%读数+5字)			
600.00mV	0.01mV	±(1.2%读数+5字)			
6.000V	0.001V	±(1.2%读数+5字)			
60.00V	0.01V	±(1.2%读数+5字)			
600.0V	0.1V	±(1.2%读数+5字)			
输入阻抗: 10MO					
最大输入电压: 600V					
频率范围: 40~1000Hz					

7.	其他	说明
	频率 500Hz	蜂鸣器发声
	V ₂	探测感应到的信号强度。蜂鸣器发出不同频率报警。图标 α_{dB} 改变颜色为绿、黄、红，分别对应低、中、高信号强度。
	二极管	0.000V~3.000V
	自动关机	可在菜单中设置为5分钟、30分钟、60分钟或者不关机。

Figure 1 is a front view of the instrument. It shows a handheld device with a screen and several buttons. The labels and their corresponding parts are as follows:

- 1. AC, DC Cut-off switch
- 2. Voltage, Frequency, Diode Cut-off switch
- Voltage, Frequency, Diode, Diode Cut-off switch
- Cut-off display, waveform
- Measurement range, Max, Min, Average, and Range
- Functional input port
- Screen, Touch screen, Display, On/Off
- Buttons: Numeric, Long Press, Save
- Measurement of AC voltage, DC voltage, Frequency, AC/DC voltage, and AC/DC voltage

测量模式图标

当前量程

自动量程

测量模式。按此键可切换为电压

当前模式电压表使用的接口

单位

上下左右，配合功能键可设置

短按：暂时停止
长按：打开

切换万用表功能

功能选择：温度、频率、电阻、电容、电感

通过式菜单设置

短按：RL
ST
长按：SEL

三端插式电压输入此两孔。COM为负电压，INPUT为正电压。
额定输入电压为≤300V。

↑STOP: 停止采集

↑START: 开始采集

↑VOLTAGE: 电压

↑CURRENT: 电流

↑TEMPERATURE: 温度

↑PRESSURE: 压力

↑ACCELERATION: 加速度

↑ROTATION: 旋转

↑TILT: 倾斜

↑ANGLE: 角度

↑DISTANCE: 距离

↑TIME: 时间

↑FREQUENCY: 频率

↑PERIOD: 周期

↑PHASE: 相位

↑MODULUS: 模数

↑SIGN: 符号

↑UNIT: 单位

↑MODE: 模式

↑FUNCTION: 功能

↑PARAMETER: 参数

↑VALUE: 值

↑TEXT: 文本

↑IMAGE: 图像

↑VIDEO: 视频

↑AUDIO: 音频

↑NETWORK: 网络

↑SECURITY: 安全

↑LOG: 日志

↑HELP: 帮助

↑ABOUT: 关于

↑EXIT: 退出

↑RESTART: 重新启动

↑UPDATE: 更新

↑RESET: 重置

↑SAVE: 保存

↑LOAD: 加载

↑DELETE: 删除

↑COPY: 复制

↑PASTE: 粘贴

↑PRINT: 打印

↑SCAN: 扫描

↑FIND: 查找

↑REPLACE: 替换

↑SORT: 排序

↑FILTER: 过滤

↑GROUP: 分组

↑UNGROUP: 取消分组

↑LINK: 链接

↑UNLINK: 取消链接

↑WATCH: 监视

↑UNWATCH: 取消监视

↑TRACE: 跟踪

↑UNTRACE: 取消跟踪

↑DEBUG: 调试

↑UNDEBUG: 取消调试

↑TEST: 测试

↑UNTEST: 取消测试

↑CALIBRATE: 校准

↑UNCALIBRATE: 取消校准

↑VERIFY: 验证

↑UNVERIFY: 取消验证

↑BACKUP: 备份

↑RESTORE: 恢复

↑FORMAT: 格式化

↑UNFORMAT: 取消格式化

↑LOCK: 锁定

↑UNLOCK: 取消锁定

↑PASSWORD: 密码

↑UNPASSWORD: 取消密码

↑LANGUAGE: 语言

↑UNLANGUAGE: 取消语言

↑THEME: 主题

↑UNTHEME: 取消主题

↑SOUND: 声音

↑UNSOUND: 取消声音

↑VIBRATE: 振动

↑UNVIBRATE: 取消振动

↑BRIGHTNESS: 亮度

↑UNBRIGHTNESS: 取消亮度

↑CONTRAST: 对比度

↑UNCONTRAST: 取消对比度

↑SATURATION: 饱和度

↑UNSATURATION: 取消饱和度

↑HUE: 色相

↑UNHUE: 取消色相

↑TEMPERATURE: 温度

↑UNTEMPERATURE: 取消温度

↑PRESSURE: 压力

↑UNPRESSURE: 取消压力

↑ACCELERATION: 加速度

↑UNACCELERATION: 取消加速度

↑ROTATION: 旋转

↑UNROTATION: 取消旋转

↑TILT: 倾斜

↑UNTILT: 取消倾斜

↑ANGLE: 角度

↑UNANGLE: 取消角度

↑DISTANCE: 距离

↑UNDISTANCE: 取消距离

↑TIME: 时间

↑UNTIME: 取消时间

↑FREQUENCY: 频率

↑UNFREQUENCY: 取消频率

↑PERIOD: 周期

↑UNPERIOD: 取消周期

↑PHASE: 相位

↑UNPHASE: 取消相位

↑MODULUS: 模数

↑UNMODULUS: 取消模数

↑SIGN: 符号

↑UNSIGN: 取消符号

↑UNIT: 单位

↑UNUNIT: 取消单位

↑MODE: 模式

↑UNMODE: 取消模式

↑FUNCTION: 功能

↑UNFUNCTION: 取消功能

↑PARAMETER: 参数

↑UNPARAMETER: 取消参数

↑VALUE: 值

↑UNVALUE: 取消值

↑TEXT: 文本

↑UNTEXT: 取消文本

↑IMAGE: 图像

↑UNIMAGE: 取消图像

↑VIDEO: 视频

↑UNVIDEO: 取消视频

↑AUDIO: 音频

↑UNAUDIO: 取消音频

↑NETWORK: 网络

↑UNNETWORK: 取消网络

↑SECURITY: 安全

↑UNSECURITY: 取消安全

↑LOG: 日志

↑UNLOG: 取消日志

↑HELP: 帮助

↑UNHELP: 取消帮助

↑ABOUT: 关于

↑UNABOUT: 取消关于

↑EXIT: 退出

↑UNEXIT: 取消退出

↑RESTART: 重新启动

↑UNRESTART: 取消重新启动

↑UPDATE: 更新

↑UNUPDATE: 取消更新

↑RESET: 重置

↑UNRESET: 取消重置

↑SAVE: 保存

↑UNSAVE: 取消保存

↑LOAD: 加载

↑UNLOAD: 取消加载

↑DELETE: 删除

↑UNDELETE: 取消删除

↑COPY: 复制

↑UNCOPY: 取消复制

↑PASTE: 粘贴

↑UNPASTE: 取消粘贴

↑PRINT: 打印

↑UNPRINT: 取消打印

↑SCAN: 扫描

↑UNSCAN: 取消扫描

↑FIND: 查找

↑UNFIND: 取消查找

↑REPLACE: 替换

↑UNREPLACE: 取消替换

↑SORT: 排序

↑UNSORT: 取消排序

↑FILTER: 过滤

↑UNFILTER: 取消过滤

↑GROUP: 分组

↑UNGROUP: 取消分组

↑LINK: 链接

↑UNLINK: 取消链接

↑WATCH: 监视

↑UNWATCH: 取消监视

↑TRACE: 跟踪

↑UNTRACE: 取消跟踪

↑DEBUG: 调试

↑UNDEBUG: 取消调试

↑TEST: 测试

↑UNTEST: 取消测试

↑CALIBRATE: 校准

↑UNCALIBRATE: 取消校准

↑VERIFY: 验证

↑UNVERIFY: 取消验证

↑BACKUP: 备份

↑UNBACKUP: 取消备份

↑RESTORE: 恢复

↑UNRESTORE: 取消恢复

↑FORMAT: 格式化

↑UNFORMAT: 取消格式化

↑LOCK: 锁定

↑UNLOCK: 取消锁定

↑PASSWORD: 密码

↑UNPASSWORD: 取消密码

↑LANGUAGE: 语言

↑UNLANGUAGE: 取消语言

↑THEME: 主题

↑UNTHEME: 取消主题

↑SOUND: 声音

↑UNSOUND: 取消声音

↑VIBRATE: 振动

↑UNVIBRATE: 取消振动

↑BRIGHTNESS: 亮度

↑UNBRIGHTNESS: 取消亮度

↑CONTRAST: 对比度

↑UNCONTRAST: 取消对比度

↑SATURATION: 饱和度

↑UNSATURATION: 取消饱和度

↑HUE: 色相

↑UNHUE: 取消色相

↑TEMPERATURE: 温度

↑UNTEMPERATURE: 取消温度

↑PRESSURE: 压力

↑UNPRESSURE: 取消压力

↑ACCELERATION: 加速度

↑UNACCELERATION: 取消加速度

↑ROTATION: 旋转

↑UNROTATION: 取消旋转

↑TILT: 倾斜

↑UNTILT: 取消倾斜

↑ANGLE: 角度

↑UNANGLE: 取消角度

↑DISTANCE: 距离

↑UNDISTANCE: 取消距离

↑TIME: 时间

↑UNTIME: 取消时间

↑FREQUENCY: 频率

↑UNFREQUENCY: 取消频率

↑PERIOD: 周期

↑UNPERIOD: 取消周期

↑PHASE: 相位

↑UNPHASE: 取消相位

↑MODULUS: 模数

↑UNMODULUS: 取消模数

↑SIGN: 符号

↑UNSIGN: 取消符号

↑UNIT: 单位

↑UNUNIT: 取消单位

↑MODE: 模式

↑UNMODE: 取消模式

↑FUNCTION: 功能

↑UNFUNCTION: 取消功能

↑PARAMETER: 参数

↑UNPARAMETER: 取消参数

↑VALUE: 值

↑UNVALUE: 取消值

↑TEXT: 文本

↑UNTEXT: 取消文本

↑IMAGE: 图像

↑UNIMAGE: 取消图像

↑VIDEO: 视频

↑UNVIDEO: 取消视频

↑AUDIO: 音频

↑UNAUDIO: 取消音频

↑NETWORK: 网络

↑UNNETWORK: 取消网络

↑SECURITY: 安全

↑UNSECURITY: 取消安全

↑LOG: 日志

↑UNLOG: 取消日志

↑HELP: 帮助

↑UNHELP: 取消帮助

↑ABOUT: 关于

↑UNABOUT: 取消关于

↑EXIT: 退出

↑UNEXIT: 取消退出

↑RESTART: 重新启动

↑UNRESTART: 取消重新启动

↑UPDATE: 更新

↑UNUPDATE: 取消更新

↑RESET: 重置

↑UNRESET: 取消重置

↑SAVE: 保存

↑UNSAVE: 取消保存

↑LOAD: 加载

↑UNLOAD: 取消加载

↑DELETE: 删除

↑UNDELETE: 取消删除

↑COPY: 复制

↑UNCOPY: 取消复制

↑PASTE: 粘贴

↑UNPASTE: 取消粘贴

↑PRINT: 打印

↑UNPRINT: 取消打印

↑SCAN: 扫描

↑UNSCAN: 取消扫描

↑FIND: 查找

↑UNFIND: 取消查找

↑REPLACE: 替换

↑UNREPLACE: 取消替换

↑SORT: 排序

↑UNSORT: 取消排序

↑FILTER: 过滤

↑UNFILTER: 取消过滤

↑GROUP: 分组

↑UNGROUP: 取消分组

↑LINK: 链接

↑UNLINK: 取消链接

↑WATCH: 监视

↑UNWATCH: 取消监视

↑TRACE: 跟踪

↑UNTRACE: 取消跟踪

↑DEBUG: 调试

↑UNDEBUG: 取消调试

↑TEST: 测试

↑UNTEST: 取消测试

↑CALIBRATE: 校准

↑UNCALIBRATE: 取消校准

↑VERIFY: 验证

↑UNVERIFY: 取消验证

↑BACKUP: 备份

↑UNBACKUP: 取消备份

↑RESTORE: 恢复

↑UNRESTORE: 取消恢复

↑FORMAT: 格式化

↑UNFORMAT: 取消格式化

↑LOCK: 锁定

↑UNLOCK: 取消锁定

↑PASSWORD: 密码

↑UNPASSWORD: 取消密码

↑LANGUAGE: 语言

↑UNLANGUAGE: 取消语言

↑THEME: 主题

↑UNTHEME: 取消主题

↑SOUND: 声音

↑UNSOUND: 取消声音

↑VIBRATE: 振动

↑UNVIBRATE: 取消振动

↑BRIGHTNESS: 亮度

↑UNBRIGHTNESS: 取消亮度

↑CONTRAST: 对比度

↑UNCONTRAST: 取消对比度

↑SATURATION: 饱和度

↑UNSATURATION: 取消饱和度

↑HUE: 色相

↑UNHUE: 取消色相

↑TEMPERATURE: 温度

↑UNTEMPERATURE: 取消温度

↑PRESSURE: 压力

↑UNPRESSURE: 取消压力

↑ACCELERATION: 加速度

↑UNACCELERATION: 取消加速度

↑ROTATION: 旋转

↑UNROTATION: 取消旋转

↑TILT: 倾斜

↑UNTILT: 取消倾斜

↑ANGLE: 角度

↑UNANGLE: 取消角度

↑DISTANCE: 距离

↑UNDISTANCE: 取消距离

↑TIME: 时间

↑UNTIME: 取消时间

↑FREQUENCY: 频率

↑UNFREQUENCY: 取消频率

↑PERIOD: 周期

↑UNPERIOD:

3. 触发边沿：按MENU弹出设置窗口，再按方向键左、右，边沿选项，方向键上下，用于选择不同的触发边沿，分别如下：

上升沿触发：触发系统识别到信号从小变到大变化，并的触发电压时，触发成功。

下降沿触发：触发系统识别到信号从大变小变化，并的触发电压时，触发成功。

耦合方式：

按ON/OFF，选中屏下方小窗右边菜单选项，显示为垂直或水平方向时，上下切换；按菜单退出信号时选择垂直耦合信号时选择水平耦合信号。

衰减：

按MENU弹出设置窗口，再按方向键左、右选中衰减选项的菜单项，再按方向键上下，选择1-10dB，调整衰减量。

选择1-10dB时，当信号大于240V时选择10×衰减比例，大输入信号时，不得小于300V。

系统设置：

按ON/OFF，进入或者退出菜单模式，菜单模式的菜单项如下：选择菜单项目，按方向键右，调整该菜单项。

低功耗模式：

低功耗模式设置为关时，屏幕亮度为恒定，调整亮度按方向键上下，1分钟内没有操作，屏幕亮度自动调暗以节约电。

恢复默认：

操作按系统默认，菜单设置的所有内容恢复为出厂默认值。

1. 在菜单中選擇导出选项，屏幕显示“USB MODE”。
2. 用TYPE-C数据线将设备与电脑连接，电脑上生成一个D盘的符值。
3. 打开“PHOTO”文件查看图片。
4. 退出USB模式，按方向键的右键。

自校准：

当环境温度偏差大或者长时间未使用等情况发现基线有偏移时进行基线校准后再使用。基线校准时请勿插入基线或者输出附件引起误差。

波形输出：

信号直接输出，输出固定方波信号，参数为3V/1KHz，测量正负极性值，并避免接触金属部分。

(后续版本将升级支持正弦波、三角波以及PWM波形，恕不另

1. 一般保养与维护

- ★ 定期清洁仪表外壳，请勿化学溶剂清洁仪表外壳。
- ★ 保持仪表接入端处于干燥清洁。
- ★ 如发现仪表异常，请停止使用并送回校准维修。

2. 更换保险丝

本仪表内置可更换保险管，如果保险管损坏，则需要拆开仪表新的保险管后继续使用。可替换的保险管型号为250V/10A、5x20mm，在专业人士指导下进行。

3. 充电

当仪表指示电量不足或者低电时，请先充电后再使用。

- ★ 关闭仪表电源，移除表盖。
- ★ 打开充电底座。
- ★ 使用Type-C电源线插入充电口充电，充电时指示灯为红色。

001-20021: It belongs to separate pollution and its over-voltage protection is CATIII 300V

Heads for safety: before operation guide and ensure safe use for this meter.

Proper use and maintenance for meter **will** give you a satisfied service.

1. Users should follow the standard safety rules when using it:

- 1.1. Do not use universal protection for the meter.
- 1.2. To avoid misuse the meter:
- 1.3. Do not use the meter on this meter or not in the process of transportation when received it.
- 1.4. Check for any damage on this meter or not in when preserved, loaded and delivered in its poor condition.
- 1.5. Check for any damage in a good condition Check whether there is any damage on its insulation or not if any 's' metal wire is exposed or not before using it.
- 1.6. The meter is not allowed to be used in the following conditions:
- 1.6.1. 'I' overtake the indicating value of protection extent of every measuring range.
- 1.6.2. The meter is not allowed to be used in the following conditions:
- 1.6.3. 'I' touch the top of test lead (the metal part) when linked with meter.
- 1.6.4. The meter is not allowed to be used in the following conditions:
- 1.7. When testing, if the voltage tested is over 60V DC or 30V AC (RMS), please keep your fingers behind the test lead protector.
- 1.8. When testing, if the voltage tested is over 60V DC or 60V AC (RMS), please stop testing voltage.
- 1.9. The meter is not mode only supports a maximum voltage of a 300V, please do not input a higher voltage.
- 1.10. When using the switch to change the testing function, the test lead removed from the measuring circuit.
- 1.11. The meter is not allowed to be used in the maximum input voltage cannot exceed 300V DC or AC.
- 1.12. The meter is not allowed to be used in the following conditions:
- 1.13. The meter is not allowed to be used in the following conditions:
- 1.14. The meter is not allowed to be used in the following conditions:
- 1.15. The meter is not allowed to be used in the following conditions:
- 1.16. The meter is not allowed to be used in the following conditions:
- 1.17. The meter is not allowed to be used in the following conditions:
- 1.18. The meter is not allowed to be used in the following conditions:
- 1.19. The meter is not allowed to be used in the following conditions:
- 1.20. The meter is not allowed to be used in the following conditions:
- 1.21. The meter is not allowed to be used in the following conditions:
- 1.22. The meter is not allowed to be used in the following conditions:
- 1.23. The meter is not allowed to be used in the following conditions:
- 1.24. The meter is not allowed to be used in the following conditions:
- 1.25. The meter is not allowed to be used in the following conditions:
- 1.26. The meter is not allowed to be used in the following conditions:
- 1.27. The meter is not allowed to be used in the following conditions:
- 1.28. The meter is not allowed to be used in the following conditions:
- 1.29. The meter is not allowed to be used in the following conditions:
- 1.30. The meter is not allowed to be used in the following conditions:
- 1.31. The meter is not allowed to be used in the following conditions:
- 1.32. The meter is not allowed to be used in the following conditions:
- 1.33. The meter is not allowed to be used in the following conditions:
- 1.34. The meter is not allowed to be used in the following conditions:
- 1.35. The meter is not allowed to be used in the following conditions:
- 1.36. The meter is not allowed to be used in the following conditions:
- 1.37. The meter is not allowed to be used in the following conditions:
- 1.38. The meter is not allowed to be used in the following conditions:
- 1.39. The meter is not allowed to be used in the following conditions:
- 1.40. The meter is not allowed to be used in the following conditions:
- 1.41. The meter is not allowed to be used in the following conditions:
- 1.42. The meter is not allowed to be used in the following conditions:
- 1.43. The meter is not allowed to be used in the following conditions:
- 1.44. The meter is not allowed to be used in the following conditions:
- 1.45. The meter is not allowed to be used in the following conditions:
- 1.46. The meter is not allowed to be used in the following conditions:
- 1.47. The meter is not allowed to be used in the following conditions:
- 1.48. The meter is not allowed to be used in the following conditions:
- 1.49. The meter is not allowed to be used in the following conditions:
- 1.50. The meter is not allowed to be used in the following conditions:
- 1.51. The meter is not allowed to be used in the following conditions:
- 1.52. The meter is not allowed to be used in the following conditions:
- 1.53. The meter is not allowed to be used in the following conditions:
- 1.54. The meter is not allowed to be used in the following conditions:
- 1.55. The meter is not allowed to be used in the following conditions:
- 1.56. The meter is not allowed to be used in the following conditions:
- 1.57. The meter is not allowed to be used in the following conditions:
- 1.58. The meter is not allowed to be used in the following conditions:
- 1.59. The meter is not allowed to be used in the following conditions:
- 1.60. The meter is not allowed to be used in the following conditions:
- 1.61. The meter is not allowed to be used in the following conditions:
- 1.62. The meter is not allowed to be used in the following conditions:
- 1.63. The meter is not allowed to be used in the following conditions:
- 1.64. The meter is not allowed to be used in the following conditions:
- 1.65. The meter is not allowed to be used in the following conditions:
- 1.66. The meter is not allowed to be used in the following conditions:
- 1.67. The meter is not allowed to be used in the following conditions:
- 1.68. The meter is not allowed to be used in the following conditions:
- 1.69. The meter is not allowed to be used in the following conditions:
- 1.70. The meter is not allowed to be used in the following conditions:
- 1.71. The meter is not allowed to be used in the following conditions:
- 1.72. The meter is not allowed to be used in the following conditions:
- 1.73. The meter is not allowed to be used in the following conditions:
- 1.74. The meter is not allowed to be used in the following conditions:
- 1.75. The meter is not allowed to be used in the following conditions:
- 1.76. The meter is not allowed to be used in the following conditions:
- 1.77. The meter is not allowed to be used in the following conditions:
- 1.78. The meter is not allowed to be used in the following conditions:
- 1.79. The meter is not allowed to be used in the following conditions:
- 1.80. The meter is not allowed to be used in the following conditions:
- 1.81. The meter is not allowed to be used in the following conditions:
- 1.82. The meter is not allowed to be used in the following conditions:
- 1.83. The meter is not allowed to be used in the following conditions:
- 1.84. The meter is not allowed to be used in the following conditions:
- 1.85. The meter is not allowed to be used in the following conditions:
- 1.86. The meter is not allowed to be used in the following conditions:
- 1.87. The meter is not allowed to be used in the following conditions:
- 1.88. The meter is not allowed to be used in the following conditions:
- 1.89. The meter is not allowed to be used in the following conditions:
- 1.90. The meter is not allowed to be used in the following conditions:
- 1.91. The meter is not allowed to be used in the following conditions:
- 1.92. The meter is not allowed to be used in the following conditions:
- 1.93. The meter is not allowed to be used in the following conditions:
- 1.94. The meter is not allowed to be used in the following conditions:
- 1.95. The meter is not allowed to be used in the following conditions:
- 1.96. The meter is not allowed to be used in the following conditions:
- 1.97. The meter is not allowed to be used in the following conditions:
- 1.98. The meter is not allowed to be used in the following conditions:
- 1.99. The meter is not allowed to be used in the following conditions:
- 1.100. The meter is not allowed to be used in the following conditions:

1. Part Name

1: Flashlight and voltage sensing area
2: LCD screen
3: Up, down, left, and right buttons
4: Mode button
5: Menu button
6: Flexible current clamp input terminal
7: COM terminal
8: Positive input terminal

9: Power button
10: Run/Stop/Save button
11: Function switching button
12: USB terminal
13: USB terminal
14: Signal output negative
15: Signal output positive

1 Flashlight and voltage sensing area	9 Power button
2 LCD screen	10 Run/Stop/Save button
3 Up, down, left, and right buttons	11 Function switching button
4 Mode button	12 USB terminal
5 Menu button	13 USB terminal
6 Flexible current clamp input terminal	14 Signal output negative
7 COM terminal	15 Signal output positive
8 Positive input terminal	

Function switching button:
Short press: Press this button to switch between different measurement functions in the multimeter mode, including voltage, resistance, capacitance, millivolt voltage, flexible current clamp current, and voltage sensing. Oscilloscope mode: Press this button to adjust and select the oscilloscope functions, including voltage/time base, movement, triggering, and coupling (DC/AC).

Run/Stop/Save button:
Short press: The multimeter mode is the HOLD function; The oscilloscope mode is selected as RUN/STOP.
Long press for 2 seconds: Save current screen as an image.

Specification

Overview

1. Display: 2.8 inch TFT screen.
2. Support multimeter mode and oscilloscope mode.
3. Auto range.
4. True RMS display.
5. Support data hold.
6. Maximum display value of the multimeter: 6000 digits.
7. Polarity indication: Automatic indication, with '-' indicating negative polarity.
8. Over range display: 'OL' or '- OL'.
9. Sampling rate: approximately 3 times per second.
10. Auto Power Off can be set to 10 minutes, 30 minutes, 60 minutes, and no powerdown.
11. Working temperature and humidity: 0~40 °C, 0~80% RH.
12. Storage temperature and humidity: -10~60 °C, 0~70% RH.
13. Power supply: Built in 2500mAh lithium battery.
14. Working height: up to 2000 meters.
15. Size: 187mm * 74mm * 40.5mm.
16. Weight: 209g.

Vertical	Low-frequency response	≥10 Hz	
	Gain accuracy	±2%	
Measure	Automatic measurement	Frequency, period, peak to peak, maximum, minimum, rms value	
	Trigger Mode	Automatic, normal, single shot	
Trigger	Trigger Edge	Rising edge, falling edge	

2. DC voltage

Range	Resolution	Accuracy
60.0mV	0.01mV	±1.0% (±3counts)
600.0mV	0.1mV	±1.0% (±3counts)
6.000V	0.001V	±0.8% (±3counts)
60.00V	0.01V	±1.0% (±3counts)
600.0V	0.01V	±1.0% (±3counts)

Input impedance: 10MΩ
Maximum input voltage: 600V

3. AC voltage (True RMS)

Range	Resolution	Accuracy
60.0mV	0.01mV	±1.2% (±5counts)
600.0mV	0.01mV	±1.2% (±5counts)
6.000V	0.001V	±1.0% (±3counts)
60.00V	0.01V	±1.2% (±5counts)
600.0V	0.01V	±1.2% (±5counts)

Input impedance: 10MΩ
Maximum input voltage: 600V
Frequency range: 40~1000Hz

6. Capacitance		
Range	Resolution	Accuracy
99.99F	0.01nF	± (5.0%-20counts)
999.9nF	0.01nF	± (4.5%-5counts)
9.999uF	0.001uF	± (4.5%-5counts)
99.99uF	0.01uF	± (4.5%-5counts)
999.9uF	0.01uF	± (4.5%-5counts)
9.99mF	0.001mF	± (5.0%-10counts)
99.99mF	0.01mF	± (5.0%-10counts)

7. Other	
Function	Explanation
Continuity	If the resistance <50Ω the buzzer sounds.
V _{CE} , Voltage limit	Based on the sensed signal strength, the buzzer emits different frequency alarms, and the color changes color to green, yellow, and red corresponding to low, medium, and high signal strength.
Diode	0.000V ~ 0.009V
Auto power	It can be set to 5 minutes, 30 minutes, 60 minutes or not to shut down in the menu.

Multimeter operation:

- 1** AC and DC switching
- 2** Resistance, Continuity, Diode switching
- Voltage, resistance, capacitance, Millivolt voltage, current Voltage sensing function switching
- Switch to oscilloscope mode
- Clear the current maximum, minimum and average values and recallability
- Flexible current clamp input
- Short press: No function Long press: Turn on/off the flashlight
- Short press: Hold read Long press: Save data
- Off Mode (Auto power off)
- DC voltage, AC voltage, resistance, connectivity, diode, capacitance, DC millivolt voltage, and AC millivolt voltage

When measuring AC voltage, DC voltage, resistance, connectivity, diode, capacitance, DC millivolt voltage, and AC millivolt voltage, insert the probes into these two terminals

The diagram shows the DC 0.000 display with labels for Measurement mode, Current range, Auto range, and Measurement mode switched mode highlighted in red. A red box highlights the terminal required for the current mode, and a label points to the unit.

Oscilloscope operation:

- Up, down, left, and right: used in conjunction with functions
- Short press: Automatic Osc. parameter
- Long press: switch on and flashlight
- Function: VOLTAGE, TRIGGER
- Short press: RUN, Press Save
- Enter/Exit Menu Setting
- Switch to millimeter mode
- DC Mode (Auto Scale)

Insert the oscilloscope mode probes into these two terminals, with COM as the negative end and Input as the p positive end.

STOP: Look waveform and storage begin

H: Horizontal Time Base Scale
T: Trigger voltage value
C: Coupling state
DC

F: Frequency
VPP: Peak to Peak Voltage
V: Voltage
W: Waveform
R: Resolution
P: Persistence
Ph: Period

Trigger edge
Polarity
Deinterleave parameter set

triggering level, the triggering system will lock the waveform at the triggering level. The scope will continue to collect data. After triggering again, the screen will update to the current new waveform. Single time: Press the **Single** key. The scope will collect one signal and then stop triggering level. The triggering system will lock the display at the screen. The system will stop waiting for another STOP. To trigger again, press the **RUN** key to start waiting until next trigger.

3. Trigger edge: Press the **MENU** key to pop up the settings window, and then press the direction keys to select the trigger edge, left and right. Press the direction keys up and down are used to select different trigger edges, with up and down options.

Rising edge: When the trigger system recognizes a signal rising from small to large and reaches the set trigger level, the trigger is successful.

Falling edge: When the triggering system recognizes the changes from large to small and reaches the set trigger level, the trigger is successful.

Coupling method: Press the **FUNC** key, select the far right menu option at the bottom of the screen, and display it as DC or AC. Press the direction keys to select it. It is recommended to choose DC coupling when DC signals and AC coupling when measuring AC signals.

Coupling method: Press the **FUNC** key, select the far right menu option at the bottom of the screen, and display it as DC or AC. Press the direction keys up and down. It is recommended to choose DC coupling when DC signals and AC coupling when measuring AC signals.

Attenuation: Press the **MENU** key to pop up the settings window, and then arrow keys to select the attenuation option left and right. The arrow keys up and down are used to select the attenuation level. It is recommended to choose $\times 1$ attenuation ratio when the measured signal is less than 40V, and $\times 10$ attenuation ratio when the signal is more than 40V. The maximum input signal of the oscilloscope should exceed $\pm 300V$.

Press the MENU key in oscilloscope mode to enter or exit menu mode, press the arrow keys left and right to select menu item, press the arrow keys up and down to adjust the settings.

Low power mode:
When the low-power mode is set to off, the screen brightness remains constant, that is, the brightness remains unchanged according to the image; When set to on, there is no operation within 1 minute, and screen brightness is automatically dimmed to save power.

Restore default:
After restoring the default operation, all menu settings will be restored to the factory default values, and the USB flash drive will also be formatted.

Save images and export:
Long press and hold the SAVE key for 2 seconds, and the current display will be saved as an image in the memory. To view saved images, press the connect the device to the computer via USB and on the computer.

1. Select the export option in the menu, and the screen displays MODE
2. Open the PHOTO file data cable to connect the device to the computer, generate a USB drive with the "CD" DISK" file letter on the computer
3. Use the "PHOTO" file to view the image.
4. Exit USB mode and press the up button of the directional keys.

be performed before use. Do not insert a probe or input signal
baseline calibration, as it may cause deviation.

The signal output port outputs a fixed square wave signal with
parameter of 3V/1KHz. Please pay attention to the positive and
polarity during measurement and avoid contact with metal parts
(The terminals will upgrade to support sine wave, triangular wave
waveforms without prior notice).

5. Maintenance

1. General maintenance

- Clean the meter casing regularly. Do not clean with chemicals.
- Keep the meter input jack dry and clean.
- If the meter is abnormal, please stop using it and return it to calibration and maintenance.

2. Replace the fuse

This meter has a replaceable fuse built-in. If the fuse is damaged, instrument casing needs to be opened and replaced with a new one before use. The replaceable fuse model is 250V/10A, 5x20mm. Be sure to proceed under the guidance of professional personnel.

3. Charge

When the device prompts low or low battery, please charge it first before using it.

- Shut down the meter and remove test leads.
- Remove the protection case.
- Plug the Type-C power cord into the charging port for charging, and the indicator light will be red when charging.