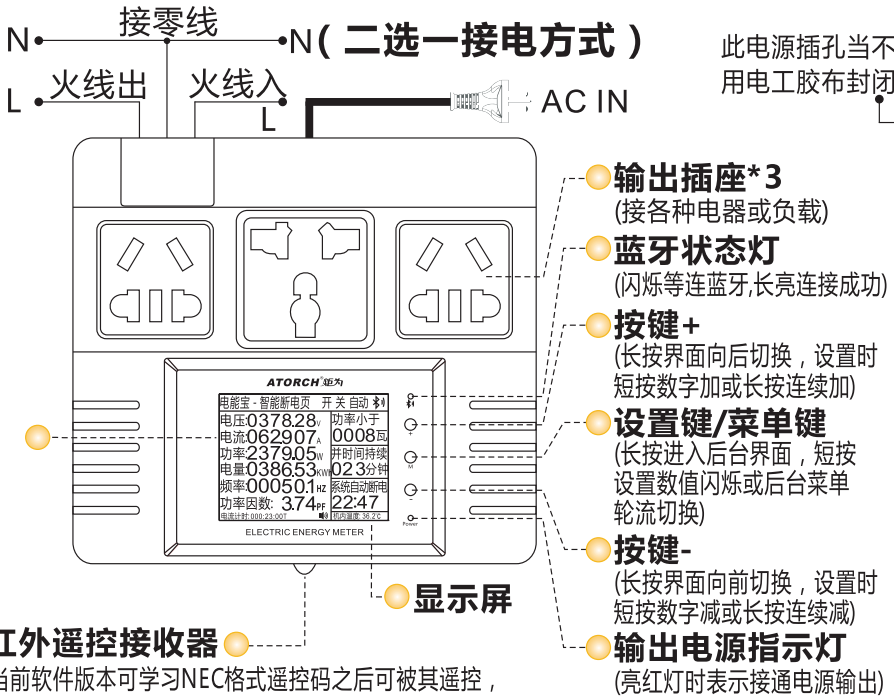
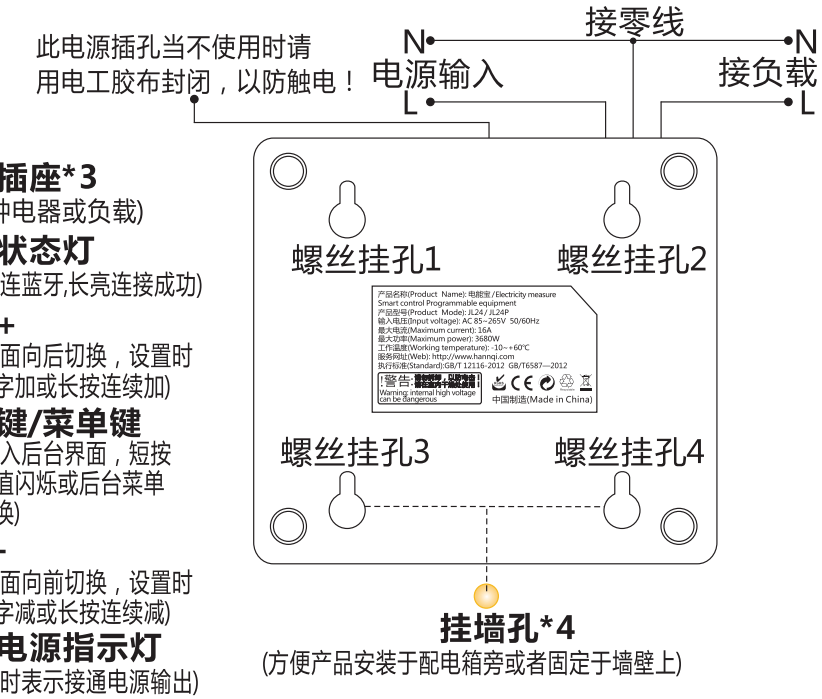
电能宝

- 应用说明 -

本设备用以对各种电器的智能通断控制、安全保护控制、可编程控制、物联数传与无线控制、累计电量、计算电费以及测量当前电压电流功率频率等详尽参数

产品连接应用与各功能按键与接口说明:





功能界面切换与测量界面数值设置的操作简介:

按上图方式接通电源显示屏亮起, 长按 + 或 - 按键是向前或者向后循环切换各功能显示界面, 长按M键进入系统后台的设置界面, 在前台界面短按M键, 被设置相应数字闪烁, 再通过短按+/-按键进行数值调整, 闪烁中也可继续短按M键切换位数而调整后面的数字, 当闪烁停止时系统自动保存并显示OK字样,也可长按M键当即保存; 在平时短按+/-键是左右循环切换"常开-常关-自动"等几种开关模式

后台设置界面的操作简介:

在长按M键进入后台界面后, 短按M键是变色的方式向下循环切换所需设置的菜单, 在变色选定的菜单后, 短按+/-键单次调整当前数值或长按连续调整, 在后台界面时也可以长按M键快速退出后台设置界面而快速的返回前台功能测量界面。

红外遥控学码方法和遥控功能应用:

在长按M键进入后台界面后, 短按M键变色显示到"红外遥控学习并存储"栏, 再短按"+"键后, 此时会显示"+键"学码等待中, 这时用你家NEC格式(目前大多遥控器使用这种格式)的遥控器对准本产品的遥控接收窗按下第一个你认为方便操作"+"位置的按键一次就会成功学码第一个按键并存储到系统, 接下来会自动跳跃到第二个"-"按键的显示并等待你遥控器按下第二个遥控器按键学码成功存储后跳跃到第三个"M”键学码, 3个按键学码完成后会显示3个绿色圆点表示全部学码完成, 这是再长按M键退出后台到前台界面就可以用你刚才学码成功的几个按键远程遥控本产品(由于不少遥控器不具备长按连续发码, 所以目前还不能用遥控器按键长按控制功能界面的切换作用)。鉴于市场上遥控器种类繁多, 目前只是开放了通用型NEC码遥控器的学码与操控, 但是由于产品应用场景的需要, 其它未学码的按键或者非NEC格式的遥控器也具有在断电模式下复活产品进入主界面原设定的通电下的功能模式, 以实现更多的电视空调以及其它具有遥控功能的更多电器的智能断电后的遥控复活功能, 以满足用户的实际应用。

辨别是否NEC格式遥控器的小技巧: 对准产品接收窗按下你的遥控器, 显示屏底栏处, 显示黄色圆点表示为NEC格式可被学习，如果显示红色圆点为非NEC格式不可被学习

安全保护功能的设置方法与应用:

长按"＋"键到安全保护页面, 短按"M"键过压自动断电栏的电压百位值闪烁, 再短按"＋"或"-" 按键调整数值, 再次短按"M"键, 电压十位闪烁并可调整, 按此方法继续向后闪烁过流过功率栏的数值并可调整, 调整完毕后长按"M"键保存或者闪烁停止系统自动保存 ，所设置保护门限值可根据你所应用值上增加5~10%为为宜, 以能保障能正常使用的同时还具备断电保护作用(所设保护值也会在其它界面的后台运行), 当输入电压或流过电流功率值超出你所设置的门限值时, 系统瞬间断电并喇叭提示的同时显示屏显示报警信息供给你查看, 这时如果没有接受到用户的按键信号或者红外遥控信号, 产品会持续断电, 直到用户解除危险并按主机任意键或遥控键, 系统才会返回保护界面并自动在关闭状态, 等待用户重新设置或重新开启通电。

智能断电(A类)应用于电动车或者手机充满断电等充电类的安全保护设置技巧

长按"＋"键到智能断电A类页面并选到"开"接通状态, 观察记录一次被充电设备在充满电后续充时的充电功率值, 然后在此值基础上加2~5W就是你的充满自动断电设置小于多少瓦特的功率值持续值并开启"自动"档位, 这样当系统检测当前功率值小于你所设置的功率值并持续你所设置的续充时间后, 系统显示断电图标并切断电源输出, 从而保护你的设备. (你所设置的持续时间越长表示充满电后续充时间更长, 以保证设备能足够充满电的同时又能双重监测实现准确自动断电而实现安全充电保护的目的)。

显示界面右下角进度条与倒计时查看小技巧: 当系统侦测到所测量的功率值小于你所设置的功率值时, 系统开始倒计时, 并进度条计算按你所设置的持续时间比例进度条以逐格减少并变色黄色到红色直到断电结束, 当系统中途所测量的功率值某瞬间大于你所设置的功率值时, 倒计时立即清零, 进度条瞬间填满后 ，再重新进行新一轮的侦测。

智能断电(A类)应用于带有红外遥控的电视机空调机等同类设备节电设置技巧

长按"＋"键到智能断电A类页面并选到"开"接通状态, 观察记录一次输出所连接的电视机空调机等设备在遥控关闭后的待机漏电功率值, 然后在此值基础上加2~5W就是你设备的应设置小于多少瓦特的功率值并开启到"自动"档位, 这样当系统检测当前功率值小于你所设置的功率值时就判断你已经用遥控关闭了用电设备并进入待机状态, 这时系统开始倒计时达到你所设置的持续时间值, 系统就判断你当前不会再使用设备从而自动断开电源, 以达到节约设备待机功率时的电能浪费和安全保护的目的。当自动断开电源后系统喇叭提示几声的同时显示红色的断电信息界面, 这时如果系统检测到任意按键信号或者你设备的遥控信号以及手机APP等按键信号都可以复活返回智能断电界面, 并自动再次接通电源后启动下一轮的智能断电流程。

智能断电(A类)应用于办公电脑与工业电烙铁等同类设备省电的设置技巧

长按"＋"键到智能断电A类页面并选到"开"接通状态, 观察记录一次输出所连接的台式电脑笔记本电脑等设备在系统关机后的待机漏电功率值, 然后在此值基础上加5~15W就是你电脑的应设置小于多少瓦特的功率值并开启到"自动"档位, 这样当系统检测当前功率值小于你所设置的功率值时就判断你的电脑已经关机了, 这时系统开始倒计时达到你所设置的持续时间值, 系统就判断你本人已经离开电脑从而自动断开电源, 以达到减少电脑电源的漏电功耗的电能浪费和安全保护的目的。当自动断开电源后系统喇叭提示几声的同时显示红色的断电信息界面, 这时如果系统检测到任意按键信号或者你设备的遥控信号以及手机APP等按键信号都可以复活返回智能断电界面, 并自动再次接通电源后启动下一轮的智能断电流程。

智能断电(B类)应用于避免人因长时间离家又遗忘关闭设备而电费损失的设置技巧

长按"+"键到智能断电B类页面并选到"开"接通状态, 观察记录一次输出所连接的设备在在开机运行时的最低功率值, 然后在此值基础上减5~25W就是你所连接应设置大于多少瓦特的功率值并开启到"自动"档位, 这样当系统检测当前功率值大于你所设置的功率值时就判断你的设备一直在开机运行中, 这时系统开始倒计时达到你所设置的持续时间值, 系统就判断你本人也许是因离家而忘记关闭设备从而自动切断电源, 以达到人们因不小心遗忘关闭设备而造成无人时设备长期运行消耗掉巨大电能量造成的巨大损失风险的目的。当自动断开电源后系统喇叭提示几声的同时显示红色的断电信息界面, 这时如果系统检测到任意按键信号或者你设备的遥控信号以及手机APP等按键信号都可以复活返回智能断电界面, 并自动再次接通电源后启动下一轮的智能断电流程。

此功能来自于一个真实小故事: 有位常出差工作者, 在某次出差前因大意而忘记关闭家中的空调器, 出差几月时间空调被连续开启几月, 回家后发现使用了几千度电费造成损失几千元。

几种编程定时开关的区别

电能宝 - 定时供电页: 按用户所设定的时间倒计时运行结束后断开供电

电能宝 - 循环定时开关: 按用户所设定不同的开关时长倒计时关闭-开启-关闭的自动循环供电

电能宝 - 倒计时开关页: 按用户所设定不同的开关时长一次性倒计时开启再关闭供电

定时供电页应用于给手机或者电动车等定时充电类设备的设置方法

长按"+"键到定时供电页, 设置你被充电设备预估充满的时长, 然后按"+"键到自动模式, 系统接通电源并开始倒计时达到你所设置的时长, 系统按时自动切断电源输出的同时喇叭发出提示音并显示屏显示红色切断电源的界面。

循环定时开关应用于间断给鱼塘鱼缸加氧或排风扇以及电灯路灯电器类等应用

你可以利用这个功能设置给养鱼塘或家用鱼缸间断加氧, 给电风扇间断供电实现类似自然风的氛围, 还给一些排气扇间断供电以节省电费, 给其它一些需要间断供电的设备进行时间编程后被其时间轴自动控制, 开启或关闭时长可根据情况不同按需设置你所需要的任意时长, 从而达到有些用电场合不需要长时间供电就用本产品去改变成任意时长间断供电从而节约电能减少电费的用

倒计时开关页应用于普通电饭煲电热毯烤火炉暖风机等同类电器的应用案例

1）输出连接上你家准备好水米的电饭煲, 先设置预估需要开启电饭煲的时长与煮饭需要的时长, 这样系统按你所设置的时间轴在一段时间后自动开启电饭煲并煮饭一段时间之后再自动关闭电源, 这样冷却你所预想的时间,回到家就能吃到刚好温度的熟米饭。

2）输出连接上你家的电热毯, 先设置好你预估需要用电热毯提前给床褥加热的时长与上床后自动关闭的时长, 这样系统按你所设置的时间轴在一段时间后自动开启电热毯并给你暖好床褥, 这样在寒冷的冬季时上床也已经准备了暖暖的被窝, 过一个幸福的冬天。

3）输出连接上你家的烤火炉暖风机等, 系统按你所设置的时间轴在你回家前提前给你家空间升温, 让你回家能有一个舒服的环境温度。

产品首页的电能电度电费电力监测页面适用于各种电器的电能电费电参测量与统计

通过产品后面接线端口串接到你家的总配电箱, 可以实现电度统计和计算电费以及当前电压电流功率等数值的查看, 还能起到当遇到过压过流过功率自动断电的24小时全安全保护; 也可串接到合租房不同房间作为电费分摊依据, 也或者插座输出接上你家的电冰箱、洗衣机、电磁炉等用电器, 统计其功耗以及计算其电费消耗情况等各种详尽信息。

APP连接蓝牙:

在苹果应用搜索E_test或安卓扫码下载并安装, 再点击图标打开APP后点击界面左上角的蓝牙图标, 选择JL24-BLE型号后自动返回APP主界面, 这时主机蓝牙图标由原灰色变蓝色, 表示连接通讯成功.

敬告：如果在电能表的APP上无法找到JL24-BLE的蓝牙型号，请务必在手机设置里面打开此设备本APP的存储权限和位置信息选项！全开启！

电性参数:

输入电压: AC 85~265V 50/60Hz

最大电流: 16A

最大功率: 3680W

工作温度: -10~+60℃

APP软件与下载地址: http://www.hannqi.com/download

售后服务以及建议: 手机 13399807188 / VX 13798213637

敬告: 因产品的硬件或软件代码会不断升级与更新, 如果当前时间段的实际产品与本说明有细微差异, 本司不作另行通知, 敬请谅解！

安全警告: 如果启用产品左上角的电线接线口时, 请用电工胶布封闭另外电源口, 以防触电！如是因为用户自行使用不当或者故意金属物接触所导致的触电事故, 需用户自行承担后果！

电能宝

Electricity measure Smart control Programmable equipment

执行标准: GB/T 12116-2012

保 修 卡

Warranty card

尊敬的用户

感谢您购买本公司的电能宝多功能测量控制仪，本公司所有产品均享受15天包换、6个月保修的售后服务政策，为了确保您的合法利益，请详细阅读本保修卡并妥善保管。

使用说明

1.此保修卡作为本公司产品保修的唯一凭证
2.产品自售出之日起15天内, 如发生性能故障, 产品本身及包装完整、无划伤, 即可更换同型号的产品 (人为因素除外)
3.产品自出售之日起6个月内，如发生性能故障，可享受有偿保修服务
4.超出产品保修期的不在保修范围内
5.配件不在保修范围内
6.非工作人员自行拆机的不在保修范围内
7.未能提供保修卡的不在保修范围内

保修记录

Warranty record

产品型号 Model		购买日期 Date of Purchase	
保修内容 Warranties		维修日期 Warranty Date	

合格证

Certificate

出厂日期 Date of manufacture: _____

检验员 Inspecto: 1-01

品名: 电能宝 型号: JL24/P
经销商: 深圳市欧炬科技有限公司
电话: 0755-29550897
生产商: 东莞市星科电子科技有限公司
地址: 东莞市清溪镇三中村顺峰路59号
执行标准: GB/T 12116-2012

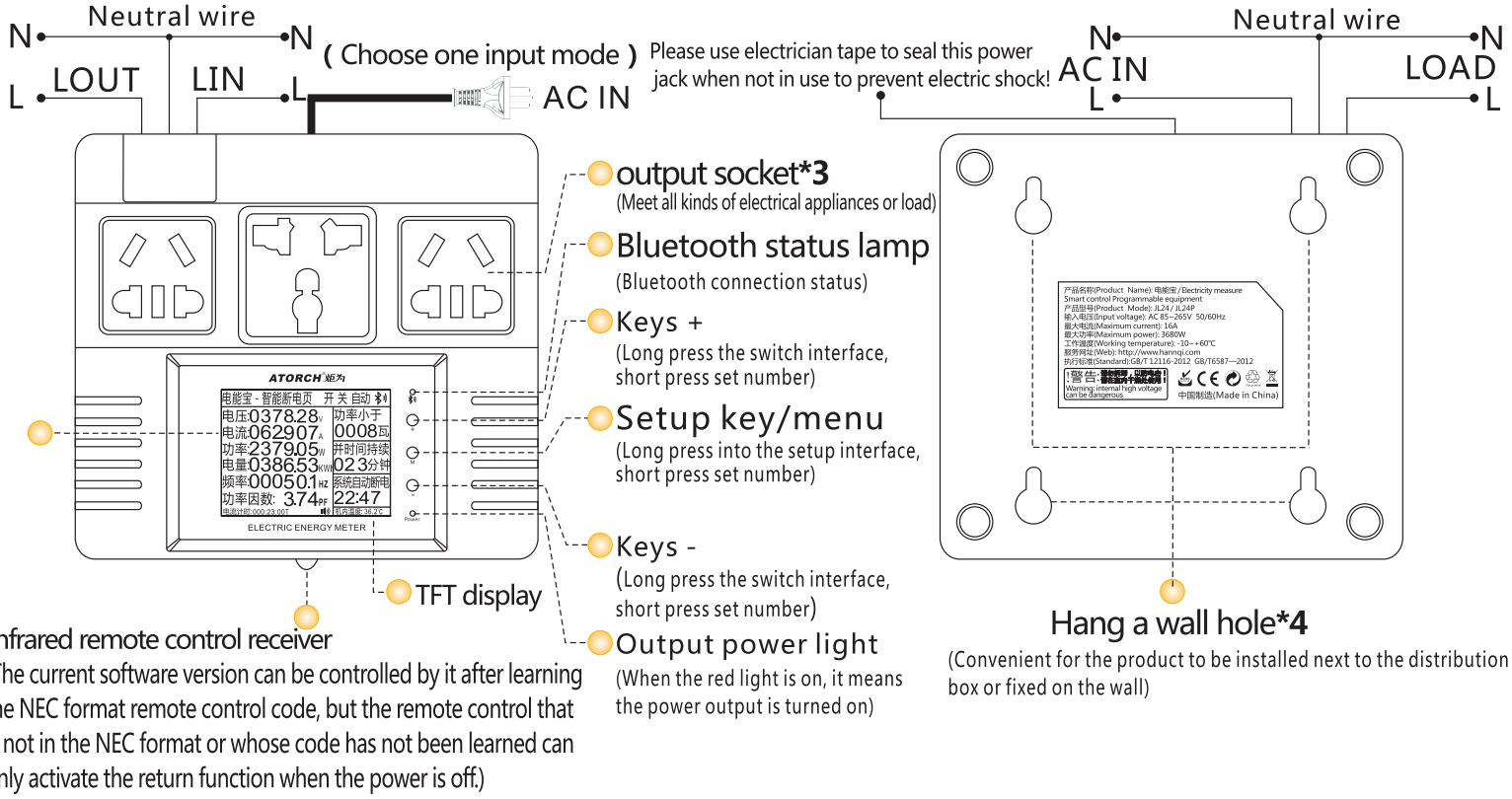
6 954118 407524

Electricity measure Smart control Programmable equipment

(Instruction Manual)

This equipment is used for Smart on-off control, safety protection control,Programmable control, Internet of Things data transmission and wireless control, accumulative power, calculation of electricity bill And measure detailed parameters such as current voltage, current, power and frequency

Description of Product Connection Application and Each Function Button and Interface:



Introduction to the operation of function interface switching and measurement interface value setting:

Turn on the power as shown in the figure above, the display will light up, long press the "+" or "-" button to switch the display interface of each function forward or backward. Long press the "M" key to enter the setting interface of the system background. Short press the "M" key on the front-end interface, the set corresponding number flashes, and then short press the +/- keys to adjust the value. While flashing, continue to short press the "M" key to switch the number of digits and then adjust the following numbers. When the flashing stops, the system will automatically save and display OK, long press the "M" key to save immediately; In normal times, short press the "+/-" key to switch between "normally open-normally closed-auto" and other switching modes.

Introduction to the operation of the background setting interface:

After long press the "M" key to enter the background interface, short press the "M" key to cycle down to switch the desired setting menu in a color-changing manner. After changing the color of the selected menu, short press the "+/-" key to adjust the current value once or long press to continuously adjust the current value. When in the background interface, long press the "M" key to quickly exit the background setting interface and quickly return to the foreground function measurement interface.

Infrared remote control code-learning method and remote control function application:

After long pressthe "M" key to enter the background interface, short press the "M" key until the color changes and the "Infrared remote control learning and storage" column is displayed; Then short press the "+" button, it will display that the "+ " button is waiting for code learning, then use your NEC format (most remote controllers currently use this format) to aim at the remote control receiving window of this product, and press the first button that you think is convenient to operate the "+" position, the code can be learned successfully only once; The first button is

stored in the system, and then it will automatically jump to the display of the second "-" button and wait for you to press the second remote control button on the remote control. When the code is successfully learned and stored, it will jump to the third "M" key to learn the code. After 3 keystrokes are completed, 3 green dots will be displayed, indicating that all the codes have been learned. At this time, long press the "M" key to exit the background to the foreground interface, and you can remotely control this product with the keys that have been successfully learned just now(Because many remote controllers do not have the ability to send codes continuously by long press, it is currently not possible to use the remote control buttons to long press the control function interface switching function). In view of the wide variety of remote controls on the market, only the universal NEC code remote control has been opened for code-learning and control. However, due to the needs of product application scenarios, other keys whose codes have not been learned or remote controllers in non-NEC format also have the function of resurrecting the product in the power-off mode and entering the original setting of the main interface, so as to realize the remote resurrection function of more TV air conditioners and other appliances with remote control function after samrt power failure, thereby meeting the actual application of users.

Tips for distinguishing whether it is NEC format remote control: aim at the product receiving window and press your remote control. If a yellow dot is displayed in the bottom bar of the display, it means that it is in NEC format and can be learned; if it is displayed in red, it is non-NEC format and cannot be learned.

Setting method and application of safety protection function:

Long press the "+" key to go to the security protection page, short press the "M" key, and the voltage hundred digits of the overvoltage automatic power-off bar will flash, then short press the "+" or "-" keys to adjust the value, short press the "M" key again, the voltage tens will flash and can be adjusted. Continue with this method, flashing the value of the over-current power column and can be adjusted, after the adjustment is completed, long press the "M" key to save or flash to stop the system to automatically save. The set protection threshold value can be increased by 5~10% according to your application value, so as to ensure normal use and also have the power-off protection function (the set protection value will also run in the background of other interfaces). When the input voltage or the power value of the current flow exceeds the threshold you set, the system will instantly cut off the power and use the horn to prompt, and at the same time display an alarm message on the display for you to check. At this time, if the user's button signal or infrared remote control signal is not received, the product will continue to power off. Until the user releases the danger and presses any key or remote control key on the host, the system will return to the protection interface and automatically be in the off state, waiting for the user to reset or restart the power.

Security protection settings skills for charging, such as applying smart power off (Category A) to electric vehicles or full power failure of mobile phones:

Long press the "+" button to go to the smart power-off category A page and select the "on" state, observe and record the charging power value of the charged device once after it is fully charged; Then, add 2~5W on the basis of this value, which is the power value of how many watts of your full automatic power-off setting is less than the continuous value and turn on the "auto" gear. In this way, when the system detects that the current power value is less than the power value you set and continues for the recharge time you set, the system displays the power-off icon and cuts off the power output, thereby protecting your device(The longer the

duration you set, the longer the subsequent charging time is when it is fully charged, so as to ensure that the device can be fully charged and at the same time double-monitoring to achieve accurate and automatic power-off for safe charging protection).

Tips for viewing the progress bar and countdown in the lower right corner of the display interface:

When the system detects that the measured power value is less than the power value you set, the system starts counting down, and the progress bar is calculated according to the duration ratio you set. The progress bar decreases and changes color from yellow to red until the end of the power failure. When the power value measured by the system is greater than the power value you set at a certain moment, the countdown will be cleared immediately, and the progress bar will fill up instantly, and then a new round of detection will be performed.

Power saving setting skills, such as applying smart power off (Category A) to TV air conditioners with infrared remote control, etc.:

Long press the "+" button to go to the smart power-off category A page and select the "on" state, observe and record the standby leakage power value of the connected TV, air conditioner and other equipment after the remote control is turned off. Then, add 2~5W to this value. This is how much watts of power your device should be set to and turn it on to the "auto" gear. In this way, when the system detects that the current power value is less than the power value you set, it will judge that you have used the remote control to turn off the electrical equipment and enter the standby state. At this time, the system starts to count down to the duration value you set, and the system judges that you will not use the device anymore and automatically disconnects the power supply to save power waste and safety protection when the device is in standby power. When the power is automatically disconnected, the system horn prompts several times, and at the same time, it displays a red power-off information interface. At this time, if the system detects any key signal or your device's remote control signal and mobile phone APP and other key signals, it can resurrect and return to the smart power-off interface, and automatically turn on the power again and start the next round of smart power-off process.

setting skills, such as applying smart power off (Class B) to avoid loss of electricity bills caused by people leaving home for a long time and forgetting to turn off the device:

Long press the "+" button to go to the smart power-off type B page and select the "on" state. Observe and record the minimum power value of the connected device when it is powered on. Then, subtract 5~25W on the basis of this value. This is how many watts of power should be set for your connection and turn it on to the "auto" gear. In this way, when the system detects that the current power value is greater than the power value you set, it will judge that your device has been powered on. At this time, the system starts to count down to the duration value you set, and the system determines that you may have forgotten to turn off the device because you left home and automatically cut off the power, so as to achieve the purpose of people accidentally forgetting to turn off the equipment and causing the equipment to run for a long time when no one is left, which consumes huge electric energy and causes huge loss risks. When the power is automatically disconnected, the system horn will beep several times, and at the same time, a red power-off information interface will be displayed. At this time, if the system detects any key signal or your device's remote control signal and mobile phone APP and other key signals, it can resurrect and return to the smart power-off interface, and automatically turn on the power again and start the next round of smart power-off process.

This feature comes from a real story: A worker who travels frequently, carelessly forgot to

turn off the air conditioner at home before a business trip. The air conditioner was turned on for a few months during the business trip. After returning home, he found that he had used thousands of kilowatt-hours of electricity and caused a loss of thousands of yuan.

Setting method, such as applying the timing power supply page to timing charging devices such as mobile phones or electric vehicles:

Long press the "+" button to go to the timing power supply page, set the time you are expected to be fully charged by the charging device, and then press the "+" button to enter the automatic mode. The system is powered on and the countdown reaches the time you set. When the system automatically cuts off the power output on time, the speaker emits a beep and the display shows a red cut off interface.

Applying the cyclic timer switch in intermittent oxygen addition to fish ponds or exhaust fans, electric lights, street lights, electrical appliances, etc.:

This feature can be used to intermittently add oxygen to fish ponds or household fish tanks, to provide intermittent power supply to electric fans to achieve a natural wind-like atmosphere, and to provide intermittent power supply to some exhaust fans to save electricity bills, and to program time for other devices that require intermittent power supply and then be automatically controlled by their time axis. The opening or closing time can be set to any time you need according to different situations. In some occasions that do not need to use electricity for a long time, you can use this product to change it to any time, with intermittent power supply, thereby saving power and reducing costs.

Difference between several programming timing switches:

Timing power supply page: The power supply will be disconnected after the countdown operation ends according to the time set by the user;
Cycle timing switch: according to the different switch duration set by the user, the countdown is turned off-on-off automatic cycle power supply;
Countdown switch page: According to the different switch duration set by the user, a countdown is turned on and then turned off.

The electrical energy monitoring page of the product homepage is suitable for measuring and statistics of electrical energy and electricity parameters of various electrical appliances:

It can be connected to the main distribution box of your home through the wiring port on the back of the product. It can realize electricity statistics, electricity bill calculation, and current voltage, current, and power values. It can also provide 24-hour full safety protection for automatic power-off when encountering overvoltage or overcurrent power; It can be connected to different rooms of the shared house as a basis for sharing electricity charges. It can also be connected to your home appliances such as refrigerators, washing machines, induction cookers, etc. through the socket output, so as to count its power consumption and calculate its electricity consumption and other detailed information.

APP Connect the bluetooth

Search "E_test" in Apple APP or scan the bar code of Android to download and install, click the icon to open the APP, then click the Bluetooth icon in the upper left corner of the interface, and select JL24-BLE model to return to the main interface of APP automatically. At this time, the bluetooth icon of your phone will change from gray to blue, and that means communication is successfully connected.

Warning: If the bluetooth model of JL24-BLE cannot be found in the electricity meter APP, please make sure to turn on storage permission and location information options of this APP in your phone Settings! Make sure All open!