Kemi 操作使用说明 V0 (**Android版**)

Operating instructions V0 (**Version Android**)

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Kemi 说明

KEMI采用智能传感器、物联网的远程实时采集水质数据方案，采集水质的PH\ORP\TDS\UV\TEMP的实时数值，同时根据第三方水质服务商的测量数据CA,TA值， KEMI的APP间接计算水质的LSI\余氯的数据，用于第三方水质服务商的维护数据参考。

KEMI内带物联网模块（WIFI），通过局域网、互联网远程采集实时数据，KEMI定时向服务器发送每天的ORP值，形成历史的数据曲线，方便用户跟踪水质的变化状态。

KEMI通APP进行设置水质报警阀值，定时向用户报警，让用户实时掌控水质的状态，方便用户水质管理与维护。

KEMI提供第三方维护数据平台，具备安全管理、用户管理、数据管理等功能，用户把KEMI的Kemi授权码，提供给第三方的服务商，第三方的服务商得到授权后，远程登录KEMI的系统平台，进行分组管理与维护的服务，实时监控到客户的水质状态。进行点对点的一一实时服务。

KEMI的功能描述：

（一）KEMI的Kemi连接模式三种：
a): 手机直连，可直接读取Kemi数据。
b): 手机连接路由器，可局域网内读取Kemi数据。
c): 手机连接互联网，可远程读取Kemi数据。

（二）KEMI的Kemi数据刷新：
a): 手动刷新，APP每次刷新一分钟，一分钟中内连续刷三次。
b): KEMI每一个小时定时向服务器上报ORP值。
c): APP在后台运行时，KEMI每小时定时向APP推送警报信息。

（三）KEMI的Kemi无线通讯：
a): 无线频率：2.4GHz。
b): 通讯协议： 802.11b/g/n TCP/IP 。
c): 模式：Soft-AP , Station。
d): SSID: ESP+MAC后六位。
e): 连接距离：80米（直线无障碍）。

（四）KEMI的Kemi电源管理：
a): 采用安全、环保、高容量的锂离子电池组进行供电。
b): 电池标称电压3.7V，充满电压4.2V，容量4*2200mAH。
c): 充电器电压：5±0.25 VDC。
d): 太阳能电池：5V /100mA/0.5W。
e): 平均工作电流： 40mA。

（五）KEMI的传感器：
a): PH精度：±0.3 @25° (6.2—8.2)
b): ORP精度：±10% mv (350—775)
c): TDS : ±15@25° (<200) (0—3000)
d): UV : ±1 (0—15)
e): TEMP: ±1@25 (10—40) (当检测温度低于10℃或者高于40℃请将Kemi取出来，妥善存放)
f): Cl : (0.05 —3)

Kemi Instructions

KEMI adopts the remote real-time water quality data collection scheme of intelligent sensors and Internet of Things to collect real-time values of PH \ ORP \ TDS \ UV \ TEMP of water quality, and at the same time, based on the measured data CA, TA values of third-party water quality service providers, KEMI 's APP The LSI \ residual chlorine data for water quality calculation is used for maintenance data reference of third-party water quality service providers.

KEMI has an Internet of Things module (WIFI), which collects real-time data remotely through the local area network and the Internet. KEMI regularly sends the daily ORP value to the server to for m a historical data curve, which is convenient for users to track the changing status of water quality.

KEMI sets the water quality alarm threshold through the APP, and regularly alerts the user, allowing the user to control the status of the water quality in real time, which is convenient for the user's water quality management and maintenance.

KEMI provides a third-party maintenance data platform with functions such as security managementuser management, and data management. The user provides the KEMIKemi authorization code to a third-party service provider. After the third-party service provider is authorized, remotely log in to the KEMI system platform , Group management and maintenance services, real-time monitoring of the customer's water quality status. Provide one-to-one real-time service.

(1) KEMI function description:

a): The mobile phone is directly connected and can read Kemi data directly.
b): The mobile phone is connected to the router, and Kemi data can be read in the local area network.
c): The mobile phone is connected to the Internet and can read Kemi data remotely.

(2) Kemi's Kemi data refresh

a): Manual refresh, the APP refreshes for one minute each time, and brushes three times in a minute.
b): KEMI reports ORP value to the server regularly every hour.
c): When the APP is running in the background, KEMI regularly pushes alarm information to the APP every hour.

(3) Wireless communication of KEMIKemi:

a): Wireless frequency: 2.4GHz.
b): Communication protocol: 802.11b / g / n TCP / IP.
c): Mode: Soft-AP, Station.
d): SSID: last six digits of ESP + MAC.
e): Connection distance: 80 meters (straight-line barrier-free).

(4) KEMI Kemi power management:

a): Powered by a safe, environmentally friendly, high-capacity lithium-ion battery pack.
b): The nominal voltage of the battery is 3.7V, the full voltage is 4.2V, and the capacity is 4*2200mAH.
c): Charger voltage: 5 ± 0.25 VDC.
d): Solar cell: 5V / 100mA / 0.5W.
e): Average working current: 40mA.

(5) KEMI sensors:

a): PH accuracy: ± 0.3 @ 25° (6.2—8.2)
b): ORP accuracy: ± 10% mv (350—775)
c): TDS: ± 15 @ 25° (<200) (0 —3000)
d): UV: ± 1 (0-15)
e): TEMP: ± 1 @ 25 (10-40) (When the detection temperature is lower than 10℃ or higher than 40℃ please take out Kemi and store it properly)
f): Cl: (0.05 -3)

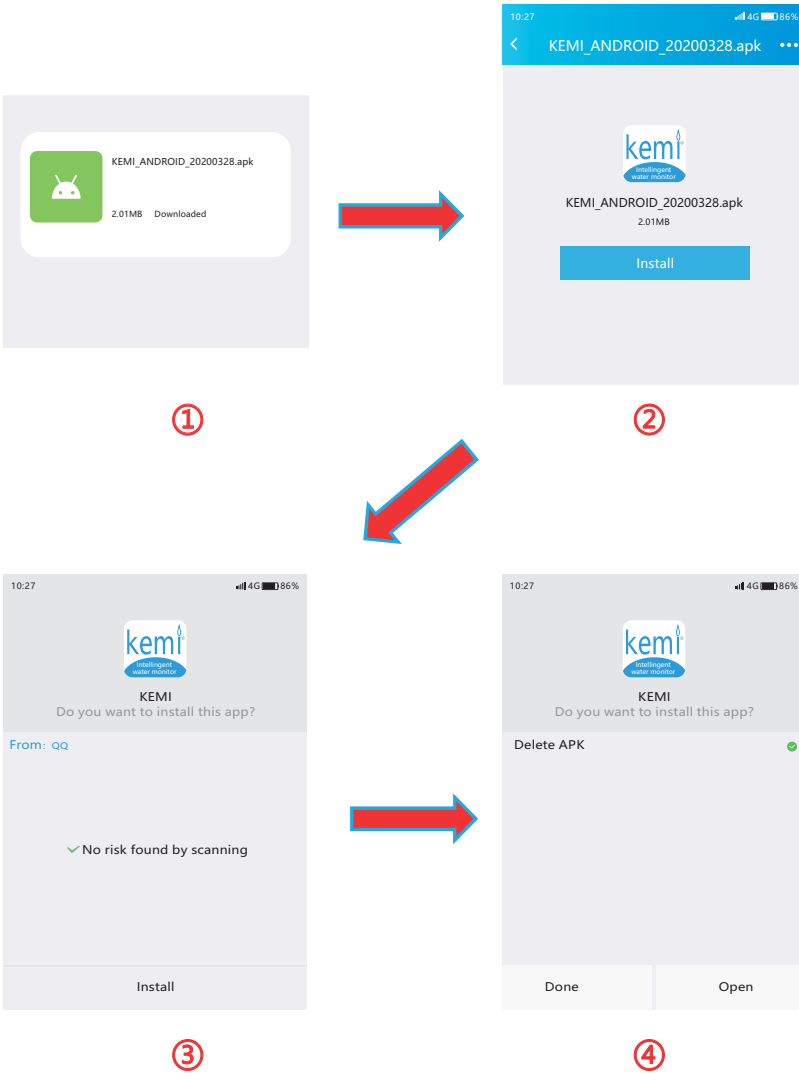
2、APP安装、APP注册、登录
2. APP installation, APP registration, login

Android版本扫码安装：
Android version scan code installation:

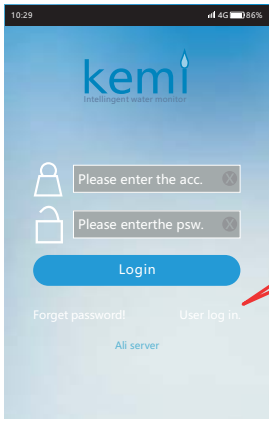
Android(美国版本)
(US version)

Android(欧洲版本)
(European version)

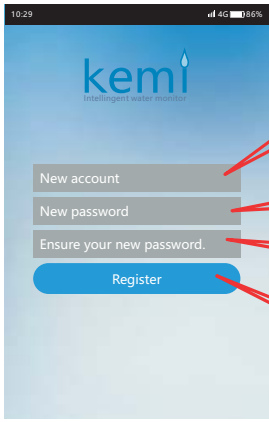
KEMI_ANDROID_20200328.apk（程序安装）
KEMI_ANDROID_20200328.apk (program installation)



注册、登录
Registered 、Log in



首先选择用户注册
Select user registration

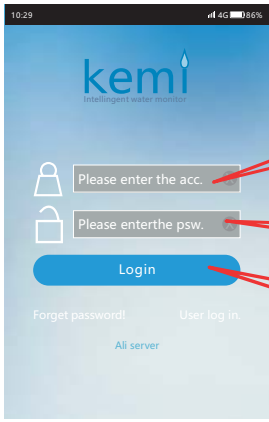


设置账号:设置任意账号
Set up an account

设置密码
Password

确认密码
Confirm password

注册
Registered

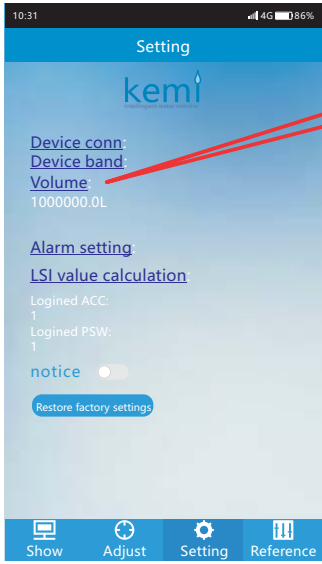


输入账号
Account

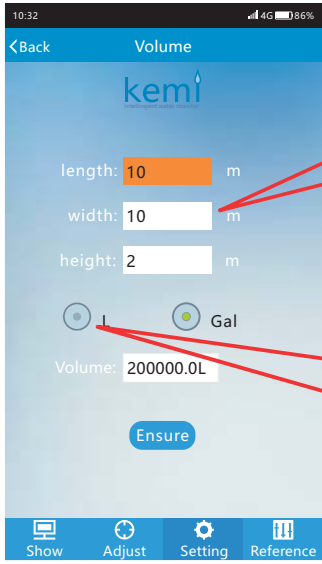
输入密码
Password

登录
Log in

3、体积设置
3. volume setting



设置体积
Set volume



根据泳池大小设置相关数据（不规则的泳池可估算数值）

Set the relevant data according to the size of the swimming pool (the irregular swimming pool can be estimated)

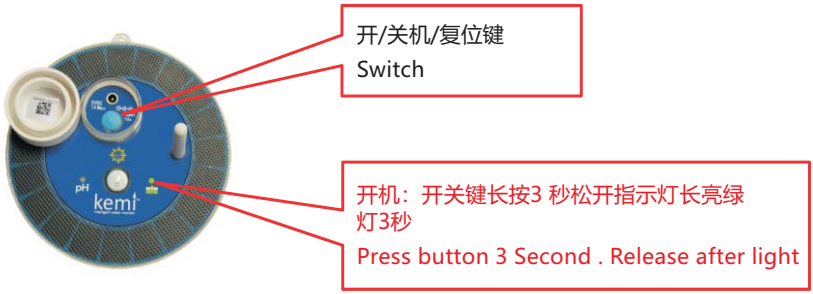
注意选择体积单位，选择单位后，点击确定会自动计算出相应单位的体积

Note to select the volume unit. After selecting the unit, click OK to automatically calculate the volume of the corresponding unit

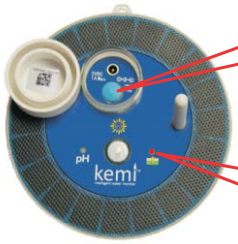
4、Kemi面板功能按键说明
4. Panel function key description

向右旋转打开白色旋钮
Rotate right to turn on the white knob

开机（按开/关机键3秒松开后灯亮）
Turn on (press the on / off button for 3 seconds and the light will be on after releasing)



关机：开关键短按1秒松开，指示灯闪一下（红色）
Shutdown: Open the key for 1 second to release, the indicator flashes red



开/关机/复位键
Switch

关机：开关键短按1秒松开，指示灯闪一下（红色），此时为关机状态
Shutdown: Open the key for 1 second to release, the indicator flashes red

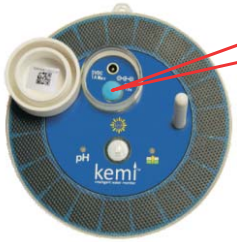
说明：

1. 打开电源：按POWER按钮3秒。
2. 关闭电源：按POWER按钮1秒。
3. 恢复出厂设置：按POWER按钮10秒。
4. 每次开关间隔时间：5秒。
5. 打开电源后，请旋紧白色防水盖。

Instructions:

1. Turn on the power: Press the POWER button for 3 seconds.
2. Turn off the power: Press the POWER button for 1 second.
3. Restore factory settings: Press the POWER button for 10 seconds.
4. Each switch interval: 5 seconds.
5. After turning on the power, tighten the white waterproof cover.

Kimi复位
Reset



Kemi在开机状态下，开关键长按10秒松开，设备复位

Press 10 seconds then release

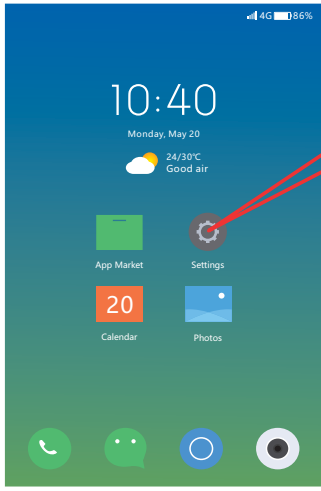
说明：

当Kemi已经与家中路由器连接成功后，若是家中更换路由器，需按此复位键后，重新连接Kemi与新路由器。

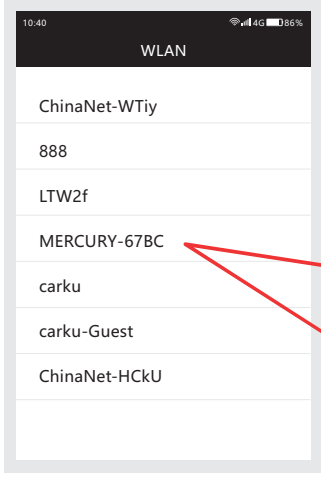
Note:

After Kemi has successfully connected with the home router, if you want to replace the router at home, you need to press this reset button to reconnect Kemi with the new router.

5、连接Kemi
5. Connect product



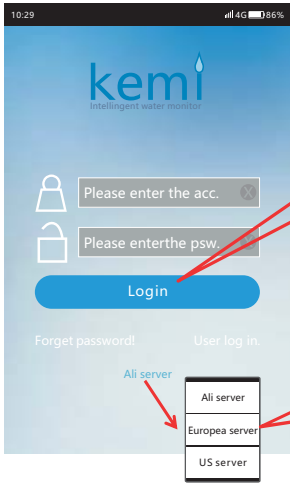
选择手机设置功能
Setting mobile phone



打开WIFI连接功能并搜索KEMI的WIFI名称（WIFI名称看编号，编号详见面盖旋钮内侧和说明书），若连接成功，WIFI将优先选择此网络状态

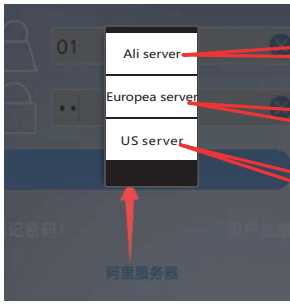
Turn on the WIFI connection function and search for the WIFI name of the product (the WIFI name can be found in the serial number. For the serial number, see the inside of the cover knob and the manual). If the connection is successful, the WIFI will prefer this networkstatus.

连接外网WIFI
Connect to external network WIFI



登录APP
Log in APP

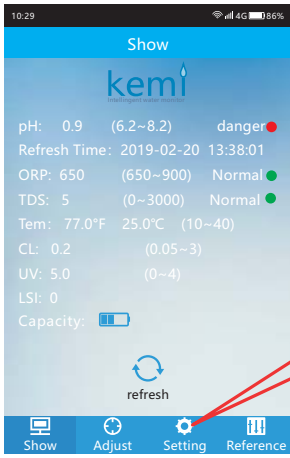
根据设备所在地区选择相应的服务器
Select the corresponding server according to the region of the device



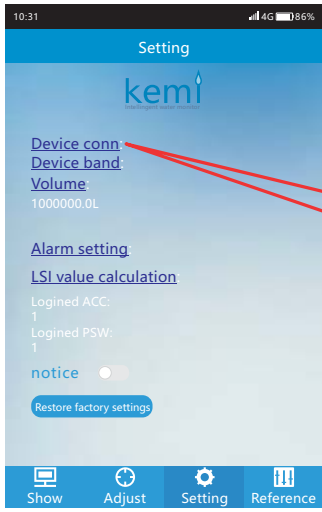
阿里服务器 / Ali server

欧洲服务器 / European Server

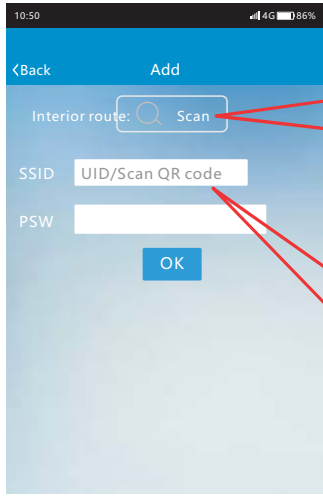
美国服务器 / US server



设置
Setting



进入设备连接
Device connection

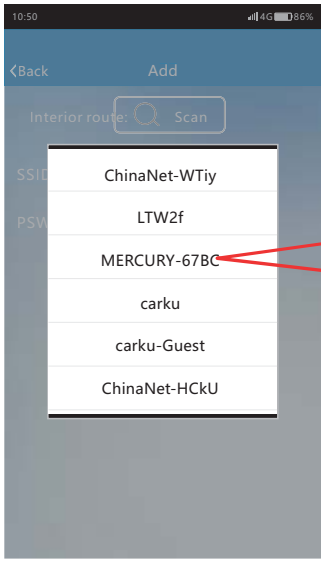


连接方法一：
扫描路由器（家庭正在使用的WIFI名称）、输入路由器的连接密码进行连接

Connection method 1:
Scan the router (the name of the WIFI that the family is using), enter the connection password of the router to connect

连接方法二：
手动输入家庭路由器的名称，输入路由器的连接密码，也可以进行连接

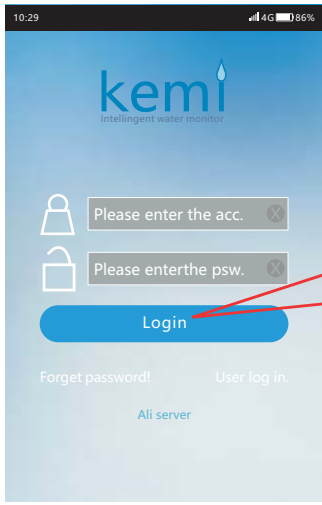
Connection method 2:
manually enter the name of the home router, enter the connection password of the router, you can also connect



选择路由器（家庭正在使用的路由器名称）(Router account) 输入家庭正在使用的路由器密码，选择OK后提示: 设置成功，请退出APP，1分钟后重新启动APP

EnterPassword . Then Restart after exiting APP 1 minute

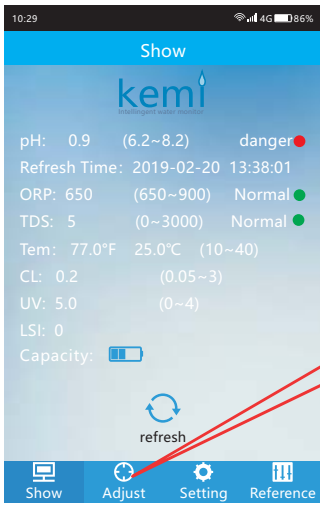
退出APP 后等待1 分钟后再登录APP 进入测试界面
Wait 1 minute after exiting APP and log in to APP again to enter the test interface



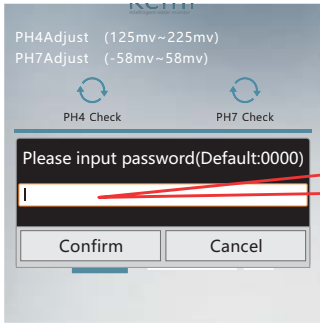
退出APP 等1 分钟后再次登录

Enter Password . Then Restart after exiting APP 1 minute

6、校正 Kemi：（建议每6个月校正一次）
6. Correct Kemi: It is recommended to calibrate every 6 months



选择校正页面
Correction



输入校正密码：0000
Correct password: 0000

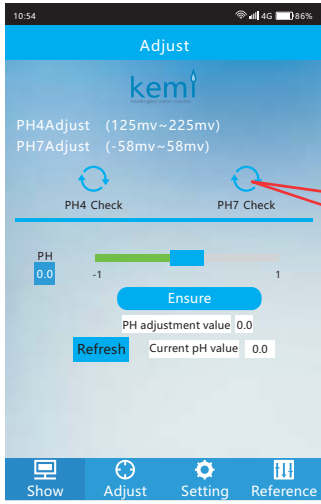
向右旋开蓝色底座
Rotate the blue base to the right

取下电极保护罩,在操作过程中，查看保护帽内是否有保护液，假如没有，请检查传感器是否损坏。保护液为3M浓度的氯化钾液体。（请不要丢弃保护帽！）

Remove the electrode cover, During operation, check the protective cap for protective fluid. If not, check the sensor for damage. The protective liquid is a 3M concentration potassium chloride liquid. (Please don't discard the protective cap!)

将产品测试探头放入PH7标准液中

PH7 test solution

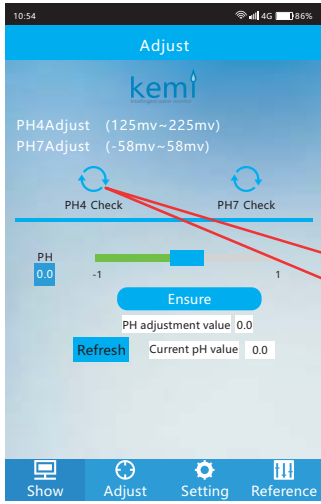


点击PH7校验

PH7 check

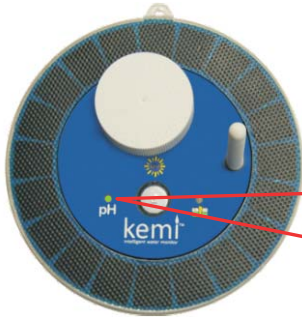
待PH7 校正OK后，取出将探头用清水清洗干净再将产品测试探头放入PH4 标准液中校正

After PH7 calibration is OK, take out and clean the probe with water, then put the product test probe into PH4 standard solution for calibration



点击PH4校验

PH4 check



校正通过指示灯亮绿色，校正不通过则亮红灯(Green light : OK Red light : NG)

The indicator light is green when the calibration is passed, and it is red when the calibration is not passed

校正补偿
Correction compensation

说明:

1. 根据PH实测值与标准液的相差数据进行相关补偿，例如：在标准液PH7中，若实测值为6，在补偿值中加1个PH值并点击确定；

2. PH4的校正无需进行补偿。

3. 当实测值与PH标准液相差 > 1个PH值时无法进行补偿，此时建议更换PH传感头并将换下的传感头交于售后服务商。

Description:

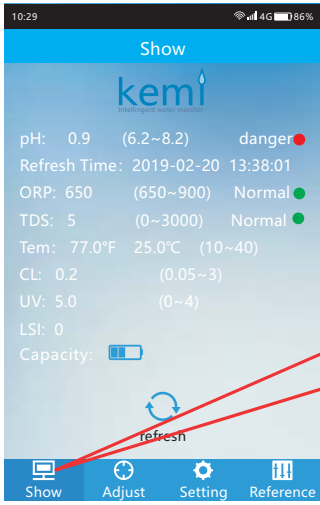
1. According to the difference between the measured value of the PH and the standard solution, for example, in the standard solution PH7, if the measured value is 6, add 1 PH value to the compensation value and click OK;

2. Correction of PH4 does not require compensation

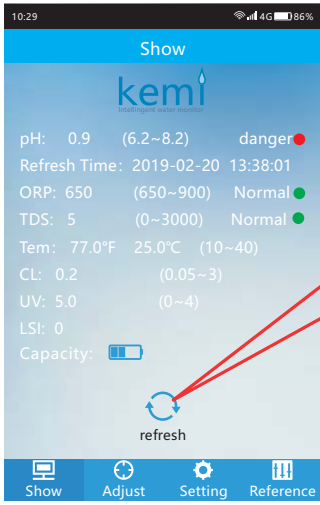
3. When the measured value and the PH standard liquid phase difference is greater than 1 PH value, it is impossible to compensate. At this time, it is recommended to replace the PH sensor head and hand over the replaced sensor head to the after-sales service provider.

7、测试水样
7. Test water samples

显示（测试：刷新）
Display (test: refresh)



进入显示界面
Display



将产品放入待测试的液体中，点击刷新即可测试对应的数值

Real-time refresh

读取测试数值（测试：刷新）
Test Value (test: refresh)

说明：

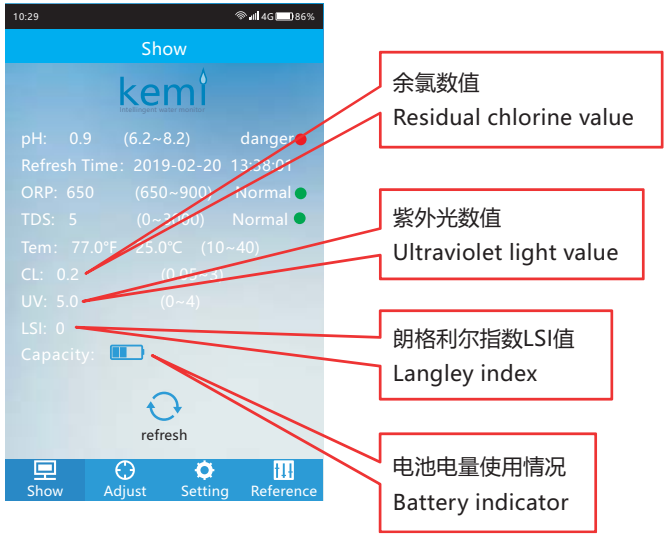
1. 将Kemi放在游泳池固定的位置上，首先用手机搜索用于连接的路由器名称，若手机能够搜索到家中路由器的名称，说明Kemi将在WIFI连接范围内；若手机无法搜索到家中路由器名称，说明已经超出WIFI的连接范围（距离＞80米），此刻尽量将家中路由器向游泳池靠近、直到手机能够搜索到家中路由器的名称，先将Kemi关机、间隔5秒后再开机，等待1分钟后登陆APP测试数据。

2. 若Kemi已经正常连接家中路由器后，Kemi被移动或者断电关机、以及家中路由器断电等原因引起APP不能连接Kemi读取测试数据，此时需将KemiKemi关机后再开机并等待1分钟后再次登录APP，即可自动连接KemiKemi进行测试。

Description:

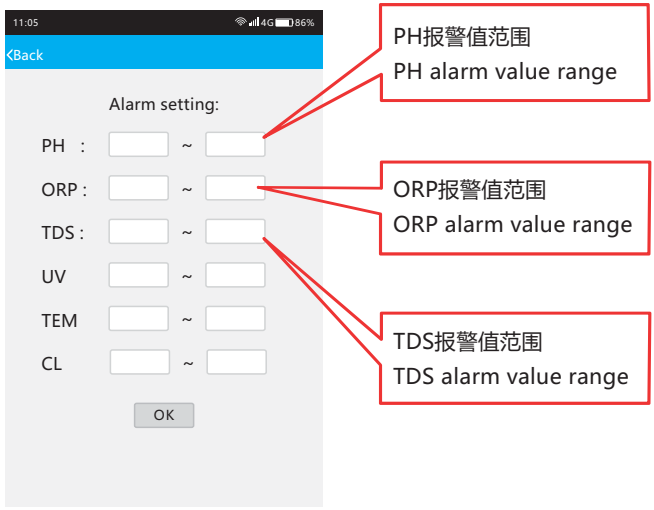
1. Put Kemi in a fixed position in the swimming pool, first use your phone to search for the name of the router used to connect to the router. If the phone can find the name of the router at home, it means that Kemi will be within the range of the WIFIconnection; It means that it has exceeded the WIFI connection range (distance> 80 meters). At this moment, try to move the home router closer to the swimming pool until the mobile phone can find the name of the home router. Turn off Kemi, turn it on after 5 seconds, and then log on after waiting for 1 minute APP test data.

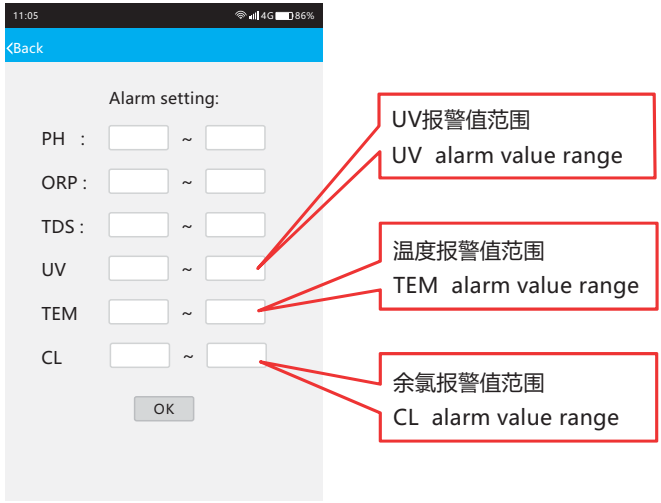
2. If Kemi has been connected to the home router normally, Kemi is moved or powered off, and the home router is powered off, etc., the APP cannot connect to Kemi to read test data. At this time, KemiKemi needs to be turned off and then turned on and wait for 1 minute Log in to the APP again to automatically connect to KemiKemi for testing.

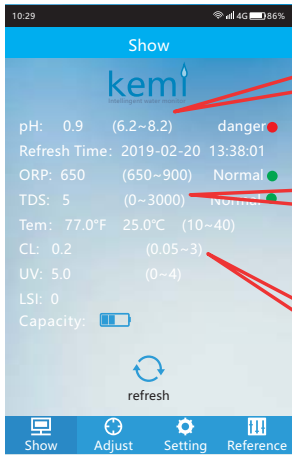


8、报警值设置、恢复出厂设置
8. Alarm value setting, reset

报警值设置 (用户可根据自己的需要进行上下限报警值的调整)
Alarm value setting (Users can adjust the upper and lower limit alarm values according to their needs.)



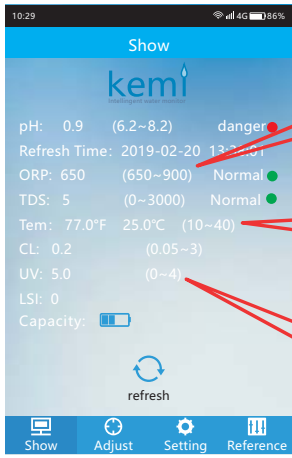




PH报警值范围
PH alarm value range

TDS报警值范围
TDS alarm value range

余氯报警值范围
CL alarm value range

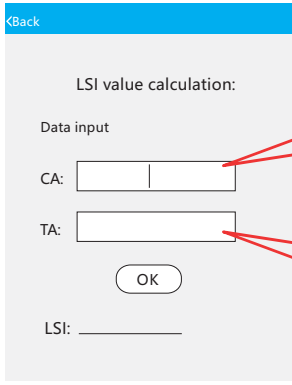


ORP报警值范围
ORP alarm value range

温度报警值范围
TEM alarm value range

UV报警值范围
UV alarm value range

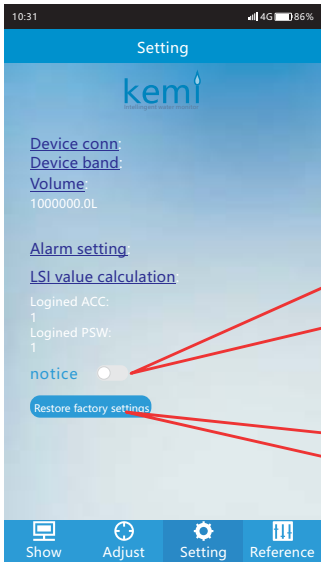
LSI 值计算
LSI value calculation



此项数据由第三方维护提供并输入
This data is provided by third party maintainer

此项数据由第三方维护提供并输入
This data is provided by third party maintainer

恢复出厂设置
Restore Factory Reset



开关打开时：APP每小时自动推送测试数据报警信息，若不需要此功能可以选择关闭

Switch on: APP will automatically send test data alarm information. If you don't need this function, you can choose to close

恢复出厂设置
(Restore Factory Reset)
Remettre aux paramètres d'usine
(Werkseinstellungen wiederherstellen)

说明：

1. 当Kemi进行恢复出厂设置后，再次使用需重复步骤3--步骤7;

2. 当手机断网后再次连网，需要等待1分钟后再登录APP读取KEMI的数据；

3. 当KEMI与路由器的实际距离≥80米后，将KEMI Kemi取回放置与路由器间距＜80米的范围内，关掉KEMI、5秒后再开机，等待1分钟后再登录APP读取KEMI的数据；(实际距离可参照手机与路由器的WIFI连接有效距离)

4. 当路由器断电后再恢复供电，需将KEMIKemi关机再开机，等待1分钟后登录APP即可读取KEMI数据；

Description:

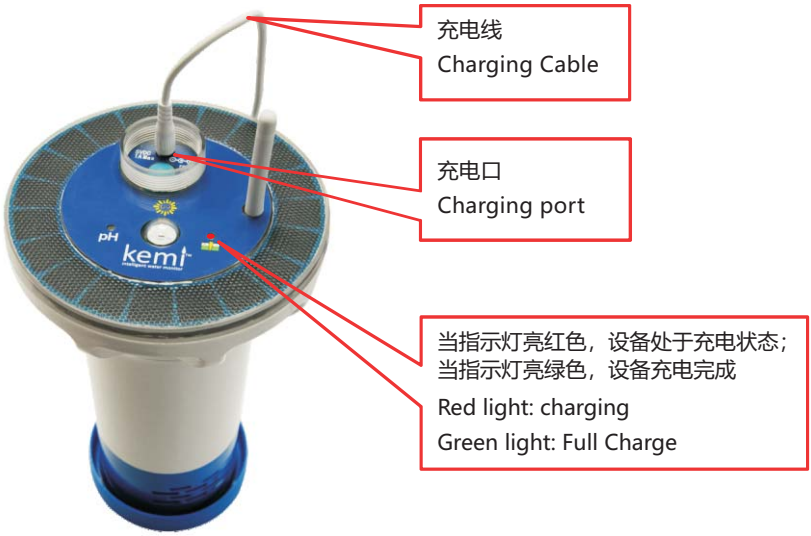
1. After the device is restored to factory settings, repeat steps 3 - 7 again;

2. When the mobile phone is disconnected from the network and connected to the network again, it takes 1 minute to log in to the APP to read the KEMI data;

3. When the actual distance between KEMI and the router is ≥80 meters, the KEMI product is retrieved and placed on the router. In the range of <80 meters, turn off KEMI, turn it on after 5 seconds, wait for 1 minute and then log in to APP.Read KEMI data; (the actual distance can refer to the effective distance of WIFI connection between mobile phone and router)

4. When the router is powered off and then resumes power supply, the KEMI product needs to be powered off and on again, waiting for 1 minute to log in. APP can read KEMI data

9、Kemi充电
9. Kemi charging



说明：

当APP显示电量低或连接不上Kemi、测试数据异常时，请及时连接充电器给Kemi充电

Description:

When the APP shows that the battery is low or Kemi cannot be connected or the test data is abnormal, please connect the charger to charge Kemi in time

10、Kemi存放保管
10. Kemi storage

将设备PH探头用清水冲洗干净， 装上有3M KCl 电极保护液的保护套

Rinse the device's pH probe with clean water and install a protective cover with electrode protection solution.

装上蓝色底座，然后将设备装入原包装彩盒内，放在指定的存放地点

Install the blue base, then place the device in the original packaging box and place it in the designated storage location.

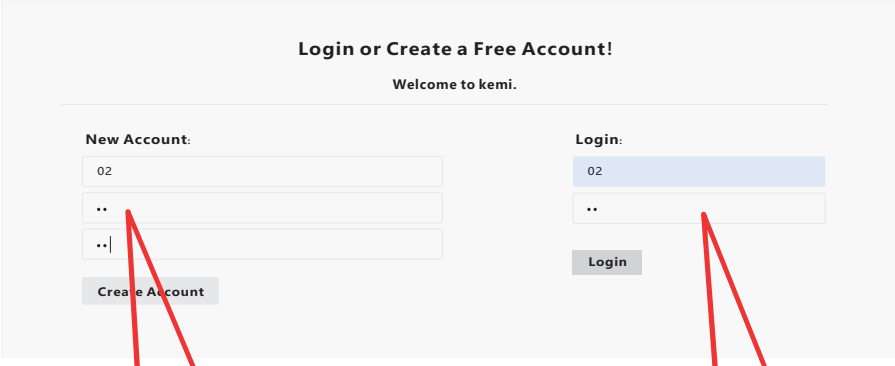
11、第三方维护登录及操作
11. Third-party supervision login and operation

浏览器输入网址，网址由设备商提供

(Enter URL, URL provided by the device manufacturer)

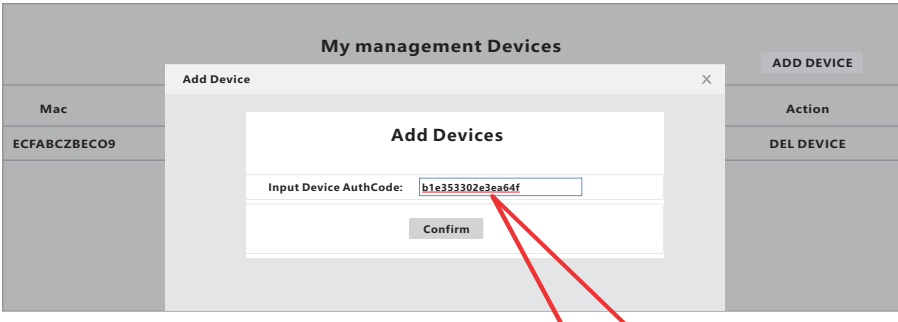
欧洲： http://35.180.39.61/linxinsz/front/index.html
美国： http://18.221.168.148/linxinsz/front/index.html
中国： http://112.74.103.71:8080/linxinsz/front/index.html

European: http://35.180.39.61/linxinsz/front/index.html
US: http://18.221.168.148/linxinsz/front/index.html
China: http://112.74.103.71:8080/linxinsz/front/index.html

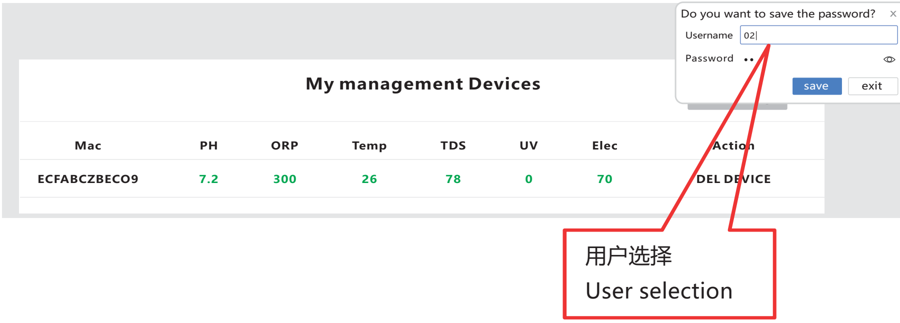


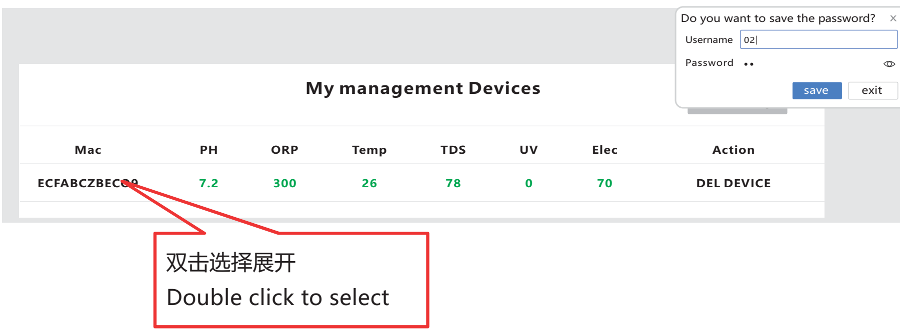
注册账号/密码
Create Account

登录账号
Login

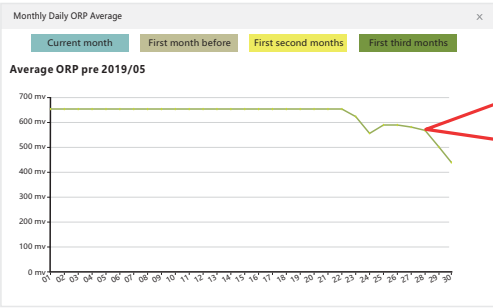


输入产品授权码
Enter product authorization code


Do you want to save the password?
Username 02|
Password ••
save
exit
My management Devices
Mac PH ORP Temp TDS UV Elec Action
ECFABCZBECO9 7.2 300 26 78 0 70 DEL DEVICE
用户选择
User selection

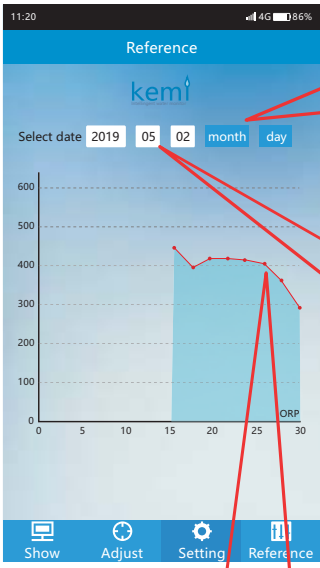

Do you want to save the password?
Username 02|
Password ••
save
exit
My management Devices
Mac PH ORP Temp TDS UV Elec Action
ECFABCZBECO9 7.2 300 26 78 0 70 DEL DEVICE
双击选择展开
Double click to select


Device detailed data
Refresh Data
MAC: ECFABC2BECO9
PH: 7.2
ORP: 300
ORP24: [650,650,650,650,650,650,650,650,650,650,650,650,650,650,
650,650,650,650,650,650,650,650,650,650],650,
Monthly Daily ORP Average: Click View Monthly Daily ORP Average
Temp: 26
TDS: 78
UV: 0
Elec: 70
CL: 0.2
Calculate LSI: CA: TA: Calculate [-]
LinkMan: 01
Phone: 01
Address: 01
详细数据
Detailed data
双击显示ORP/PH值的月均曲线图
Double click to display the
ORP / PH value diagram



ORP 参考值曲线图（第三方监管显示）

ORP reference value curve (third-party regulatory display)



ORP 参考值曲线图（手机APP显示）点击“月”或“日”，会更新参考曲线图界面

ORP reference value curve (displayed by mobile APP) Click "Month" or " Day", the reference curve interface will be updated

ORP参考值曲线图（手机APP显示）点击进入手动切换年、月、日

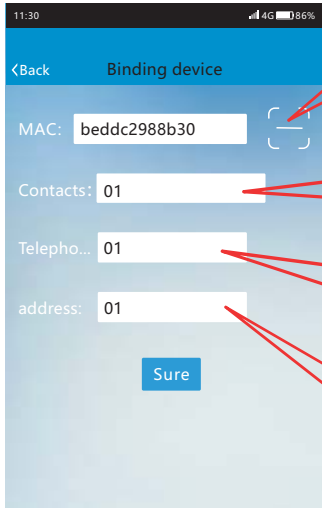
ORP reference value curve (displayed by mobile APP) Click to enter the manual switching of year, month and day

ORP 参考值曲线图（手机APP显示）

ORP reference value curve (displayed by mobile APP)

绑定Kemi
Binding device

KEMI设备MAC码
Code MAC of the KEMI

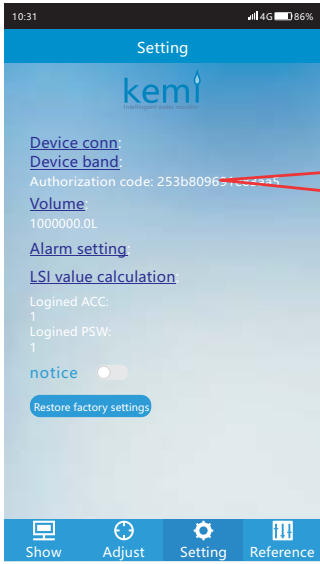


扫描KEMI设备的MAC码
（白色旋钮盖内侧）字母大写
Scan the MAC code of the WIFI module of the device

输入联系人姓名
Enter contact name

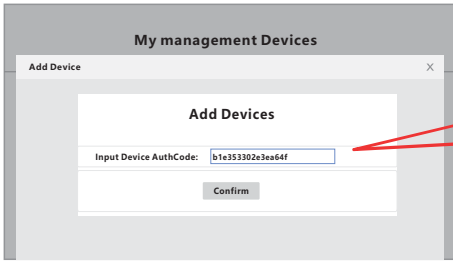
输入联系人电话
Enter contact phone number

输入联系人地址
Enter contact address



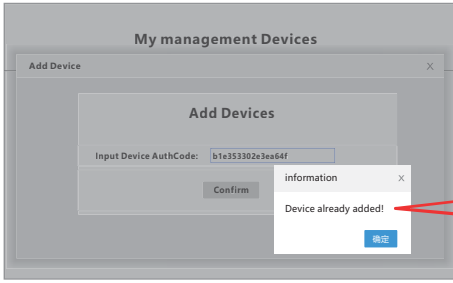
记录授权码

Record authorization code



第三方监管登录输入产品授权码

Enter product authorization code



绑定设备成功

Bind the device successfully

12、常见故障说明
12. Description of common faults

KEMI常见异常及故障排除办法：

1. Kemi连接不上网络
   A: 检查Kemi与路由器的距离是否 > 80m;
   B: 稽查Kemi是否正常开；
   C: 检查网络是否正常；
   D: 复位Kemi，按照说明书步骤重新连接

2. 测试数据出现异常：
   A: 检查Kemi是否正常连接；
   B: 检查Kemi电池电量是否充足（当电芯电压低于3.3V 时，Kemi部分功能因供电不足会导致工作不稳定）
   C: 检查Kemi的传感头是否完好无损，有没有外力导致的机械损伤。

3. 第三方维护电脑端曲线界面显示时间过久：
   A: 属于正常现象，因全球各地不同的服务器响应时间不同。

KEMI common anomalies and troubleshooting methods:

1. Kemi cannot connect to the network
   A: Check whether the distance between Kemi and the router is> 80m;
   B: Check whether Kemi is opened normally;
   C: Check whether the network is normal;
   D: Reset Kemi, and reconnect according to the steps in the manual.

2. Abnormal test data:
   A: Check whether Kemi is connected normally:
   B: Check whether the power of Kemi battery is sufficient (when the cell voltage is lower than 3.3V, some functions of Kemi will cause unstable work due to insufficient power supply)
   C: Check whether Kemi's sensor head is intact and whether there is any mechanical damage caused by external force.

3. The third-party supervision computer-side curve interface display time is too long:
   A: It is a normal phenomenon, because the response time of different servers around the world is different.

kemi

Intellingent water monitor

Kemi 操作使用说明 V0 (**IOS版**)

Operating instructions V0 (**IOS**)

目　录
Directory

Kemi 说明

KEMI采用智能传感器、物联网的远程实时采集水质数据方案，采集水质的PH\ORP\TDS\UV\TEMP的实时数值，同时根据第三方水质服务商的测量数据CA,TA值， KEMI的APP间接计算水质的LSI\余氯的数据，用于第三方水质服务商的维护数据参考。

KEMI内带物联网模块（WIFI），通过局域网、互联网远程采集实时数据，KEMI定时向服务器发送每天的ORP值，形成历史的数据曲线，方便用户跟踪水质的变化状态。

KEMI通APP进行设置水质报警阀值，定时向用户报警，让用户实时掌控水质的状态，方便用户水质管理与维护。

KEMI提供第三方维护数据平台，具备安全管理、用户管理、数据管理等功能，用户把KEMI的Kemi授权码，提供给第三方的服务商，第三方的服务商得到授权后，远程登录KEMI的系统平台，进行分组管理与维护的服务，实时监控到客户的水质状态。进行点对点的一一实时服务。

KEMI的功能描述：

（一）KEMI的Kemi连接模式三种：
a): 手机直连，可直接读取Kemi数据。
b): 手机连接路由器，可局域网内读取Kemi数据。
c): 手机连接互联网，可远程读取Kemi数据。

（二）KEMI的Kemi数据刷新：
a): 手动刷新，APP每次刷新一分钟，一分钟中内连续刷三次。
b): KEMI每一个小时定时向服务器上报ORP值。
c): APP在后台运行时，KEMI每小时定时向APP推送警报信息。

（三）KEMI的Kemi无线通讯：
a): 无线频率：2.4GHz。
b): 通讯协议： 802.11b/g/n TCP/IP 。
c): 模式：Soft-AP , Station。
d): SSID: ESP+MAC后六位。
e): 连接距离：80米（直线无障碍）。

（四）KEMI的Kemi电源管理：
a): 采用安全、环保、高容量的锂离子电池组进行供电。
b): 电池标称电压3.7V，充满电压4.2V，容量4*2200mAH。
c): 充电器电压：5±0.25 VDC。
d): 太阳能电池：5V /100mA/0.5W。
e): 平均工作电流： 40mA。

（五）KEMI的传感器：
a): PH精度：±0.3 @25° (6.2—8.2)
b): ORP精度：±10% mv (350—775)
c): TDS : ±15@25° (<200) (0—3000)
d): UV : ±1 (0—15)
e): TEMP: ±1@25 (10—40) (当检测温度低于10℃或者高于40℃请将Kemi取出来，妥善存放)
f): Cl : (0.05 —3)

Kemi Instructions

KEMI adopts the remote real-time water quality data collection scheme of intelligent sensors and Internet of Things to collect real-time values of PH \ ORP \ TDS \ UV \ TEMP of water quality, and at the same time, based on the measured data CA, TA values of third-party water quality service providers, KEMI 's APP The LSI \ residual chlorine data for water quality calculation is used for maintenance data reference of third-party water quality service providers.

KEMI has an Internet of Things module (WIFI), which collects real-time data remotely through the local area network and the Internet. KEMI regularly sends the daily ORP value to the server to for m a historical data curve, which is convenient for users to track the changing status of water quality.

KEMI sets the water quality alarm threshold through the APP, and regularly alerts the user, allowing the user to control the status of the water quality in real time, which is convenient for the user's water quality management and maintenance.

KEMI provides a third-party maintenance data platform with functions such as security managementuser management, and data management. The user provides the KEMIKemi authorization code to a third-party service provider. After the third-party service provider is authorized, remotely log in to the KEMI system platform , Group management and maintenance services, real-time monitoring of the customer's water quality status. Provide one-to-one real-time service.

(1) KEMI function description:

a): The mobile phone is directly connected and can read Kemi data directly.
b): The mobile phone is connected to the router, and Kemi data can be read in the local area network.
c): The mobile phone is connected to the Internet and can read Kemi data remotely.

(2) Kemi's Kemi data refresh

a): Manual refresh, the APP refreshes for one minute each time, and brushes three times in a minute.
b): KEMI reports ORP value to the server regularly every hour.
c): When the APP is running in the background, KEMI regularly pushes alarm information to the APP every hour.

(3) Wireless communication of KEMIKemi:

a): Wireless frequency: 2.4GHz.
b): Communication protocol: 802.11b / g / n TCP / IP.
c): Mode: Soft-AP, Station.
d): SSID: last six digits of ESP + MAC.
e): Connection distance: 80 meters (straight-line barrier-free).

(4) KEMI Kemi power management:

a): Powered by a safe, environmentally friendly, high-capacity lithium-ion battery pack.
b): The nominal voltage of the battery is 3.7V, the full voltage is 4.2V, and the capacity is 4*2200mAH.
c): Charger voltage: 5 ± 0.25 VDC.
d): Solar cell: 5V / 100mA / 0.5W.
e): Average working current: 40mA.

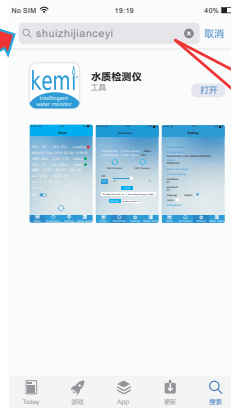
(5) KEMI sensors:

a): PH accuracy: ± 0.3 @ 25° (6.2—8.2)
b): ORP accuracy: ± 10% mv (350—775)
c): TDS: ± 15 @ 25° (<200) (0 —3000)
d): UV: ± 1 (0-15)
e): TEMP: ± 1 @ 25 (10-40) (When the detection temperature is lower than 10℃ or higher than 40℃ please take out Kemi and store it properly)
f): Cl: (0.05 -3)

2、APP安装、APP注册、登录
2. APP installation, APP registration, login

iOS版本扫码安装：
iOS version scan code installation:

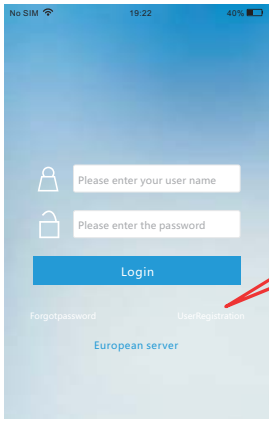
登录APP Store搜索下载及安装APP (iOS version)
(Download and install)



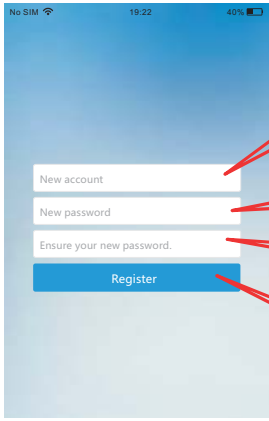
备注：
APP Store 输入中文搜索：水质监测仪或汉语拼音：shuizhijianceyi

Remarks:
APP Store input Chinese search: water quality monitor Or Chinese Pinyin: shuizhijianceyi

注册、登录
Registered 、Log in



首先选择用户注册
Select user registration

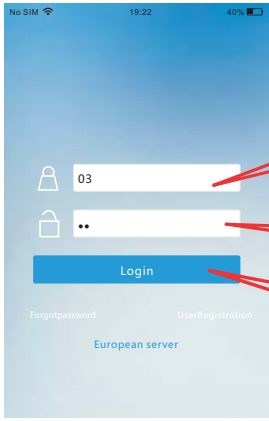


设置账号:设置任意账号
Set up an account

设置密码
Password

确认密码
Confirm password

注册
Registered

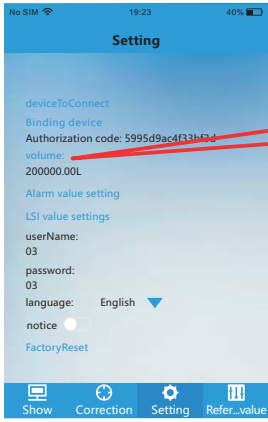


输入账号
Account

输入密码
Password

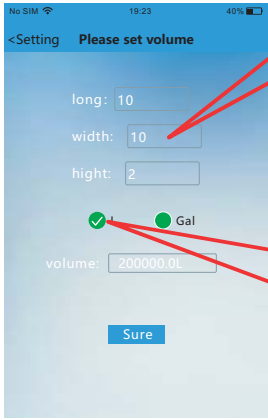
登录
Log in

3、语言设置、体积设置
3. Language setting, volume setting



设置体积

Set volume

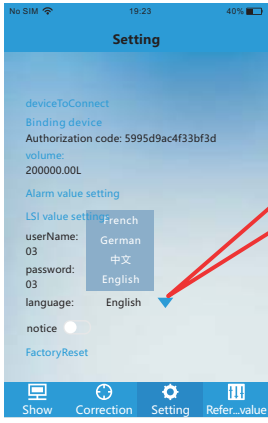


根据泳池大小设置相关数据（不规则的泳池可估算数值）

Set the relevant data according to the size of the swimming pool (the irregular swimming pool can be estimated)

注意选择体积单位，选择单位后，点击确定会自动计算出相应单位的体积

Note to select the volume unit. After selecting the unit, click OK to automatically calculate the volume of the corresponding unit



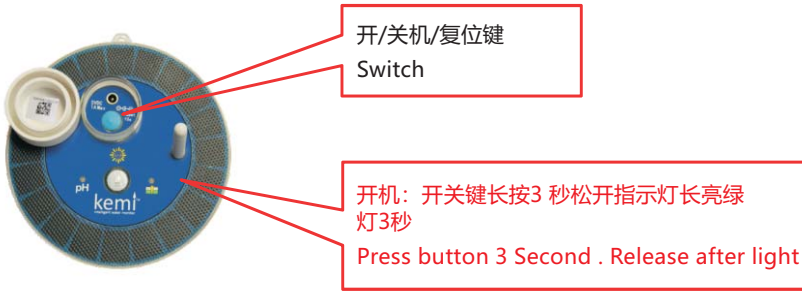
四种语言可供选择：
法语、德语、中文、英文

Four languages are available:
French, German, Chinese, English

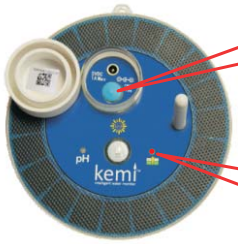
4、Kemi面板功能按键说明
4. Panel function key description

向右旋转打开白色旋钮
Rotate right to turn on the white knob

开机（按开/关机键3秒松开后灯亮）
Turn on (press the on / off button for 3 seconds and the light will be on after releasing)



关机：开关键短按1秒松开，指示灯闪一下（红色）
Shutdown: Open the key for 1 second to release, the indicator flashes red



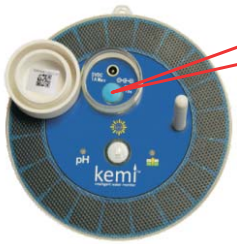
说明：

1. 打开电源：按POWER按钮3秒。
2. 关闭电源：按POWER按钮1秒。
3. 恢复出厂设置：按POWER按钮10秒。
4. 每次开关间隔时间：5秒。
5. 打开电源后，请旋紧白色防水盖。

Instructions:

1. Turn on the power: Press the POWER button for 3 seconds.
2. Turn off the power: Press the POWER button for 1 second.
3. Restore factory settings: Press the POWER button for 10 seconds.
4. Each switch interval: 5 seconds.
5. After turning on the power, tighten the white waterproof cover.

Kimi复位
Reset



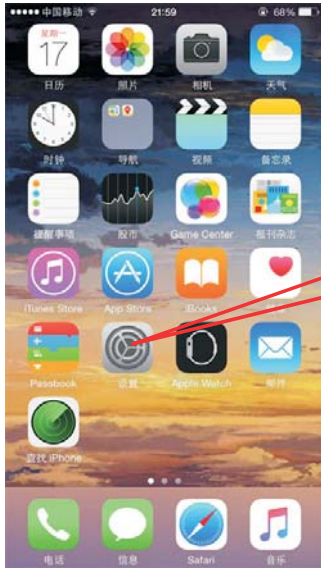
说明：

当Kemi已经与家中路由器连接成功后，若是家中更换路由器，需按此复位键后，重新连接Kemi与新路由器。

Note:

After Kemi has successfully connected with the home router, if you want to replace the router at home, you need to press this reset button to reconnect Kemi with the new router.

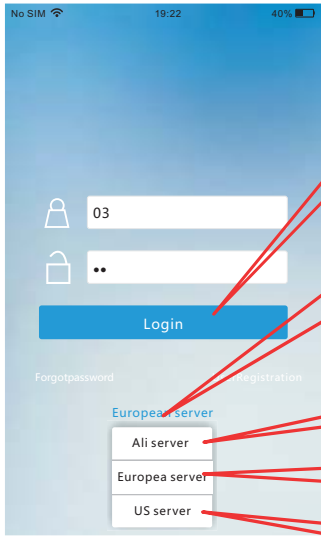
5、连接Kemi
5. Connect product



打开WIFI连接功能并搜索KEMI的WIFI名称（WIFI名称看编号，编号详见面盖旋钮内侧和说明书），若连接成功，WIFI将优先选择此网络状态

Turn on the WIFI connection function and search for the WIFI name of the product (the WIFI name can be found in the serial number. For the serial number, see the inside of the cover knob and the manual). If the connection is successful, the WIFI will prefer this networkstatus.

连接外网WIFI
Connect to external network WIFI



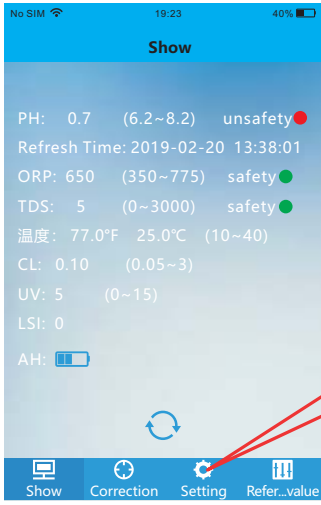
登录APP
Log in APP

根据设备所在地区选择相应的服务器
Select the corresponding server according to the region of the device

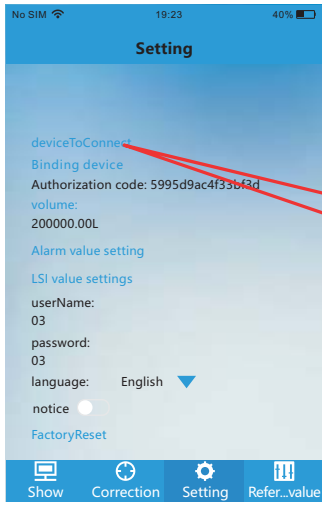
阿里服务器 / Ali server

欧洲服务器 / European Server

美国服务器 / US server

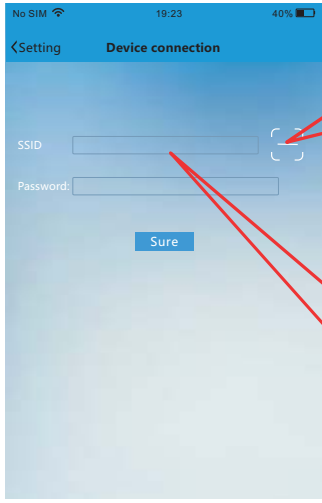


设置
Setting



进入设备连接

Device connection

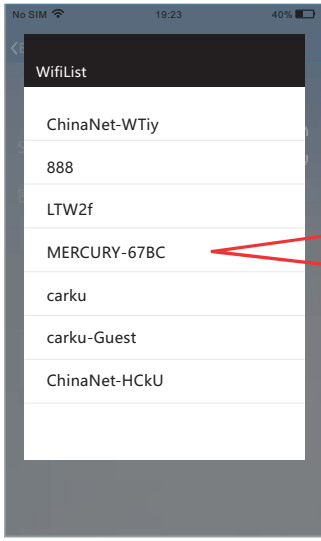


连接方法一：
扫描路由器（家庭正在使用的WIFI名称）、输入路由器的连接密码进行连接

Connection method 1:
Scan the router (the name of the WI FI that the family is using), enter the connection password of the router to connect

连接方法二：
手动输入家庭路由器的名称，输入路由器的连接密码，也可以进行连接

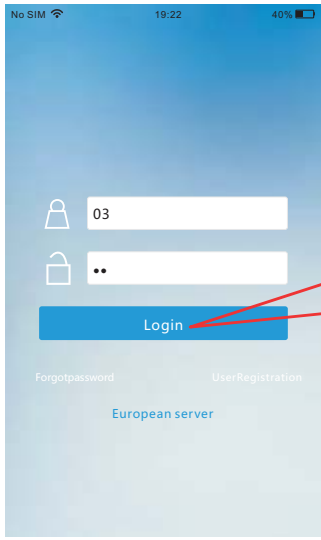
Connection method 2:
manually enter the name of the home router, enter the connection password of the router, you can also connect



选择路由器（家庭正在使用的路由器名称）(Router account) 输入家庭正在使用的路由器密码，选择OK后提示: 设置成功，请退出APP，1分钟后重新启动APP

EnterPassword . Then Restart after exiting APP 1 minute

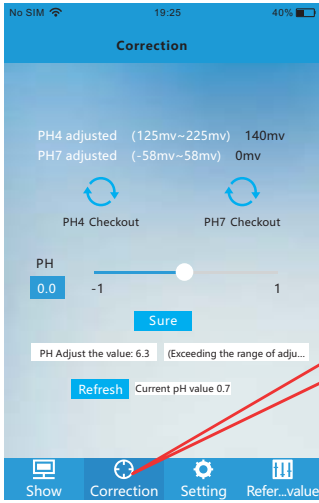
退出APP 后等待1 分钟后再登录APP 进入测试界面
Wait 1 minute after exiting APP and log in to APP again to enter the test interface



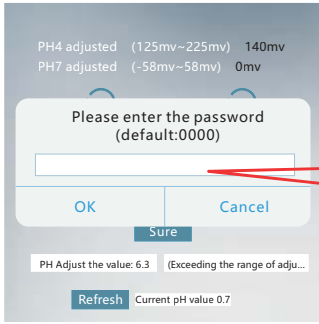
退出APP 等1 分钟后再次登录

Enter Password . Then Restart after exiting APP 1 minute

6、校正 Kemi：（建议每6个月校正一次）
6. Correct Kemi: It is recommended to calibrate every 6 months



选择校正页面
Correction



输入校正密码：0000
Correct password: 0000

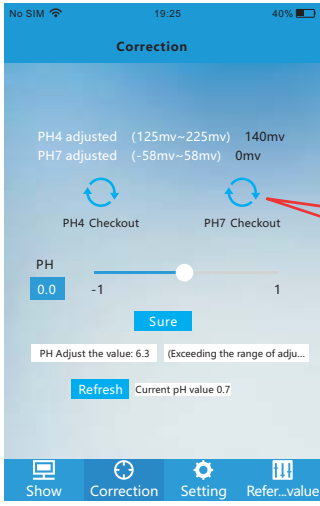
向右旋开蓝色底座
Rotate the blue base to the right

取下电极保护罩,在操作过程中，查看保护帽内是否有保护液，假如没有，请检查传感器是否损坏。保护液为3M浓度的氯化钾液体。（请不要丢弃保护帽！）

Remove the electrode cover, During operation, check the protective cap for protective fluid. If not, check the sensor for damage. The protective liquid is a 3M concentration potassium chloride liquid. (Please don't discard the protective cap!)

将产品测试探头放入PH7标准液中

PH7 test solution

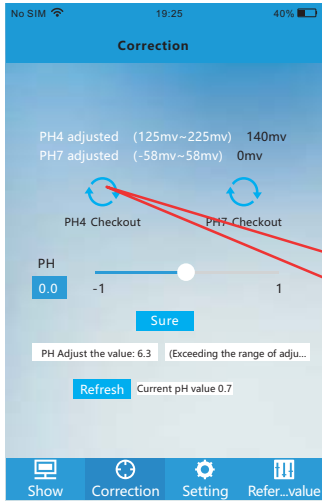


点击PH7校验

PH7 check

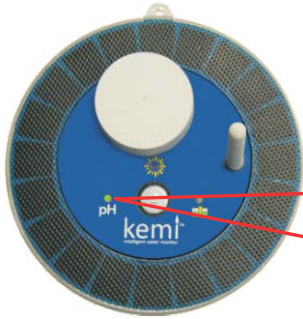
待PH7 校正OK后，取出将探头用清水清洗干净再将产品测试探头放入PH4 标准液中校正

After PH7 calibration is OK, take out and clean the probe with water, then put the product test probe into PH4 standard solution for calibration



点击PH4校验

PH4 check



校正通过指示灯亮绿色，校正不通过则亮红灯(Green light : OK Red light : NG)

The indicator light is green when the calibration is passed, and it is red when the calibration is not passed

校正补偿
Correction compensation

说明:

1. 根据PH实测值与标准液的相差数据进行相关补偿，例如：在标准液PH7中，若实测值为6，在补偿值中加1个PH值并点击确定；

2. PH4的校正无需进行补偿。

3. 当实测值与PH标准液相差 > 1个PH值时无法进行补偿，此时建议更换PH传感头并将换下的传感头交于售后服务商。

Description:

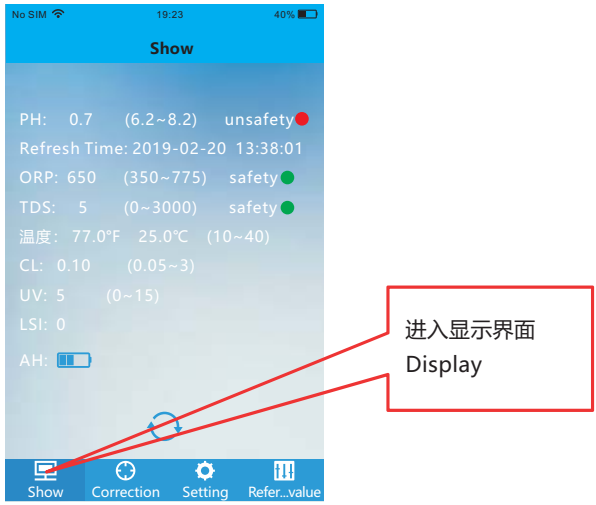
1. According to the difference between the measured value of the PH and the standard solution, for example, in the standard solution PH7, if the measured value is 6, add 1 PH value to the compensation value and click OK;

2. Correction of PH4 does not require compensation

3. When the measured value and the PH standard liquid phase difference is greater than 1 PH value, it is impossible to compensate. At this time, it is recommended to replace the PH sensor head and hand over the replaced sensor head to the after-sales service provider.

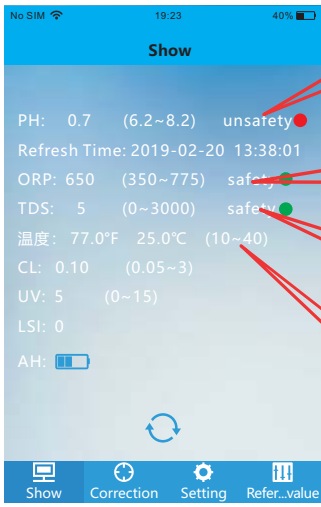
7、测试水样
7. Test water samples

显示（测试：刷新）
Display (test: refresh)



读取测试数值（测试：刷新）
Test Value (test: refresh)

待测水样
Water sample to be tested



PH数值
PH value

ORP数值
ORP value

TDS数值
TDS value

温度数值
Temperature value

说明：

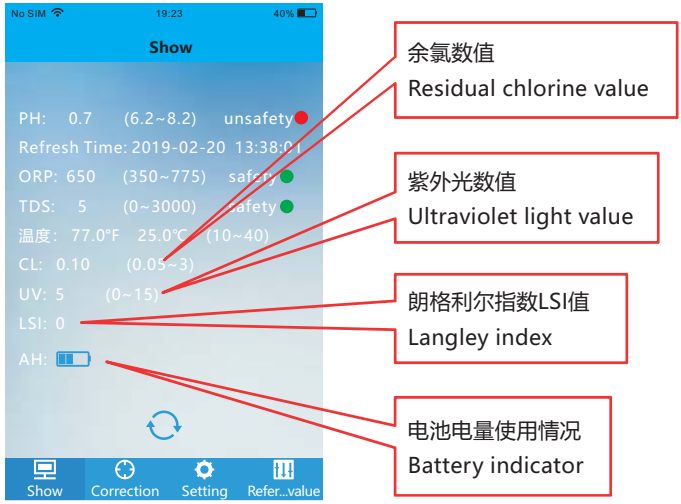
1. 将Kemi放在游泳池固定的位置上，首先用手机搜索用于连接的路由器名称，若手机能够搜索到家中路由器的名称，说明Kemi将在WIFI连接范围内；若手机无法搜索到家中路由器名称，说明已经超出WIFI的连接范围（距离＞80米），此刻尽量将家中路由器向游泳池靠近、直到手机能够搜索到家中路由器的名称，先将Kemi关机、间隔5秒后再开机，等待1分钟后登陆APP测试数据。

2. 若Kemi已经正常连接家中路由器后，Kemi被移动或者断电关机、以及家中路由器断电等原因引起APP不能连接Kemi读取测试数据，此时需将KemiKemi关机后再开机并等待1分钟后再次登录APP，即可自动连接KemiKemi进行测试。

Description:

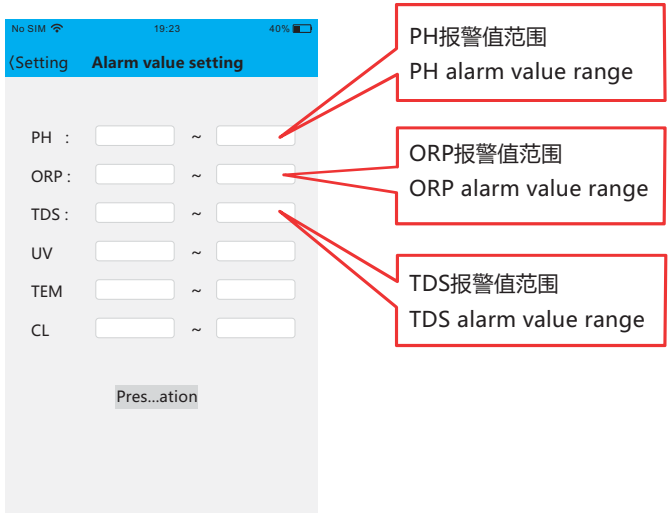
1. Put Kemi in a fixed position in the swimming pool, first use your phone to search for the name of the router used to connect to the router. If the phone can find the name of the router at home, it means that Kemi will be within the range of the WIFIconnection; It means that it has exceeded the WIFI connection range (distance> 80 meters). At this moment, try to move the home router closer to the swimming pool until the mobile phone can find the name of the home router. Turn off Kemi, turn it on after 5 seconds, and then log on after waiting for 1 minute APP test data.

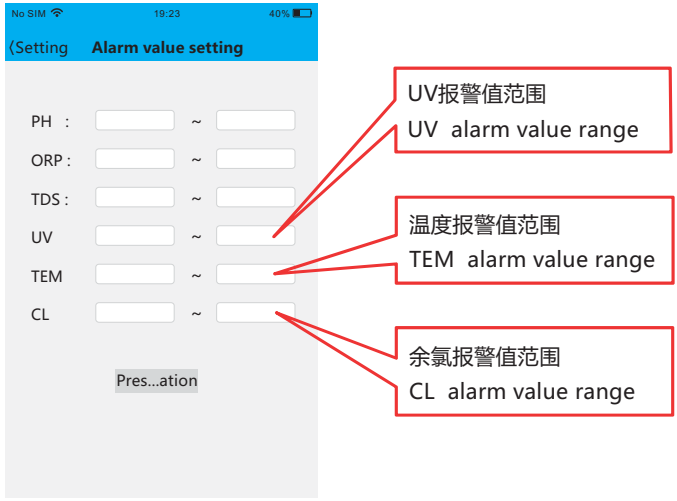
2. If Kemi has been connected to the home router normally, Kemi is moved or powered off, and the home router is powered off, etc., the APP cannot connect to Kemi to read test data. At this time, KemiKemi needs to be turned off and then turned on and wait for 1 minute Log in to the APP again to automatically connect to KemiKemi for testing.

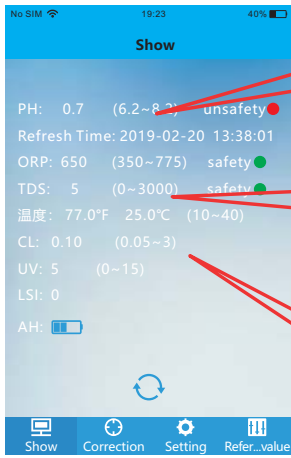


8、报警值设置、恢复出厂设置
8. Alarm value setting, reset

报警值设置 (用户可根据自己的需要进行上下限报警值的调整)
Alarm value setting (Users can adjust the upper and lower limit alarm values according to their needs.)



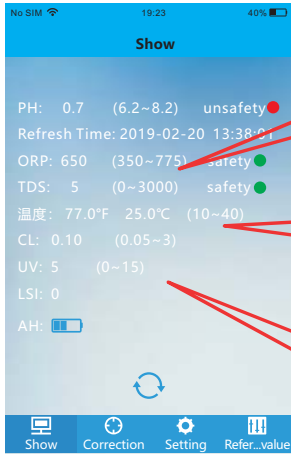




PH报警值范围
PH alarm value range

TDS报警值范围
TDS alarm value range

余氯报警值范围
CL alarm value range

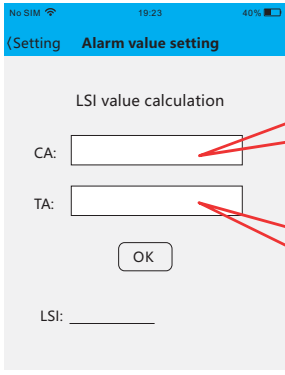


ORP报警值范围
ORP alarm value range

温度报警值范围
TEM alarm value range

UV报警值范围
UV alarm value range

LSI 值计算
LSI value calculation



此项数据由第三方维护提供并输入
This data is provided by third party maintainer

此项数据由第三方维护提供并输入
This data is provided by third party maintainer

恢复出厂设置
Restore Factory Reset

说明：

1. 当Kemi进行恢复出厂设置后，再次使用需重复步骤3--步骤7；

2. 当手机断网后再次连网，需要等待1分钟后再登录APP读取KEMI的数据；

3. 当KEMI与路由器的实际距离≥80米后，将KEMI Kemi取回放置与路由器间距＜80米的范围内，关掉KEMI、5秒后再开机，等待1分钟后再登录APP读取KEMI的数据；(实际距离可参照手机与路由器的WIFI连接有效距离)

4. 当路由器断电后再恢复供电，需将KEMIKemi关机再开机，等待1分钟后登录APP即可读取KEMI数据；

Description:

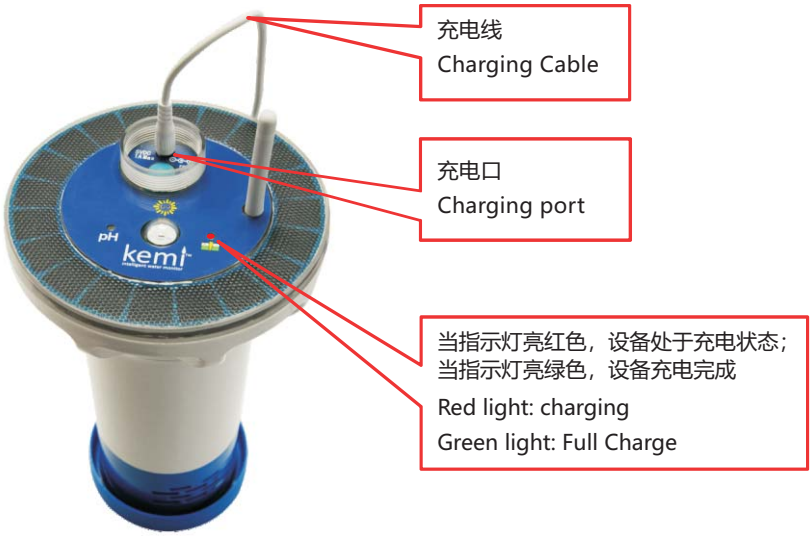
1. After the device is restored to factory settings, repeat steps 3 - 7 again;

2. When the mobile phone is disconnected from the network and connected to the network again, it takes 1 minute to log in to the APP to read the KEMI data;

3. When the actual distance between KEMI and the router is ≥80 meters, the KEMI product is retrieved and placed on the router. In the range of <80 meters, turn off KEMI, turn it on after 5 seconds, wait for 1 minute and then log in to APP.Read KEMI data; (the actual distance can refer to the effective distance of WIFI connection between mobile phone and router)

4. When the router is powered off and then resumes power supply, the KEMI product needs to be powered off and on again, waiting for 1 minute to log in. APP can read KEMI data

9、Kemi充电
9. Kemi charging



说明：

当APP显示电量低或连接不上Kemi、测试数据异常时，请及时连接充电器给Kemi充电

Description:

When the APP shows that the battery is low or Kemi cannot be connected or the test data is abnormal, please connect the charger to charge Kemi in time

10、Kemi存放保管
10. Kemi storage

将设备PH探头用清水冲洗干净， 装上有3M KCl 电极保护液的保护套

Rinse the device's pH probe with clean water and install a protective cover with electrode protection solution.

装上蓝色底座，然后将设备装入原包装彩盒内，放在指定的存放地点

Install the blue base, then place the device in the original packaging box and place it in the designated storage location.

11、第三方维护登录及操作
11. Third-party supervision login and operation

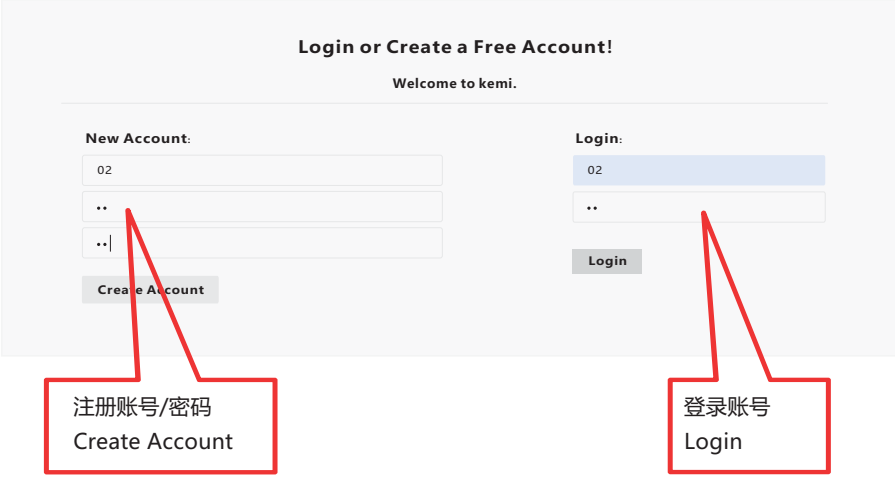
欧洲： http://18.221.168.148/linxinsz
美国： http://35.180.198.156/linxinsz
中国： http://112.74.103.71/linxinsz

European: http://18.221.168.148/linxinsz
US: http://35.180.198.156/linxinsz
China: http://112.74.103.71/linxinsz

浏览器输入网址，网址由设备商提供
(Enter URL, URL provided by the device manufacturer)

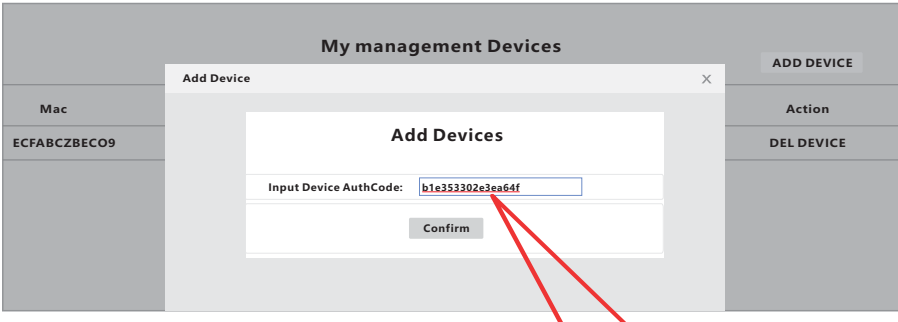
Entrez le site web sur navigateur, dont le site est fourni par le fournisseur d'appareil

(Geben Sie die URL in den Browser ein. Die URL wird vom Gerätehersteller bereitgestellt)

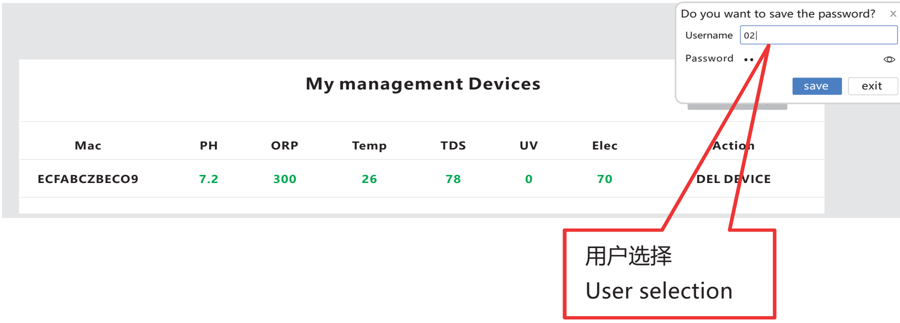


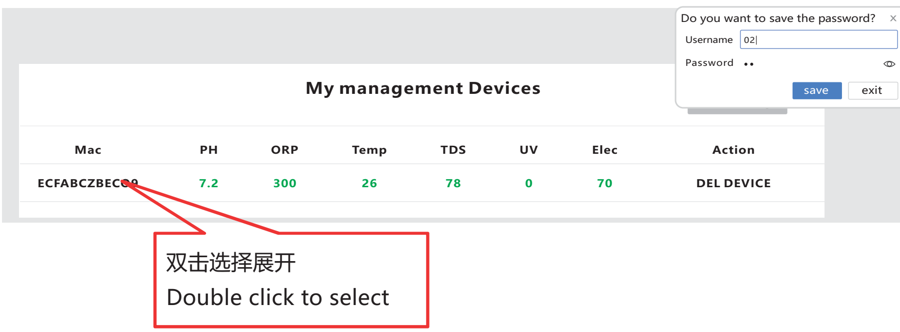
注册账号/密码
Create Account

登录账号
Login

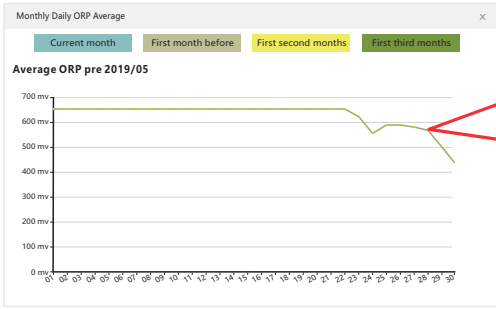


输入产品授权码
Enter product authorization code


Do you want to save the password?
Username
02|
Password
save
exit
My management Devices
Mac
PH
ORP
Temp
TDS
UV
Elec
Action
ECFABCZBECO9
7.2
300
26
78
0
70
DEL DEVICE
用户选择
User selection

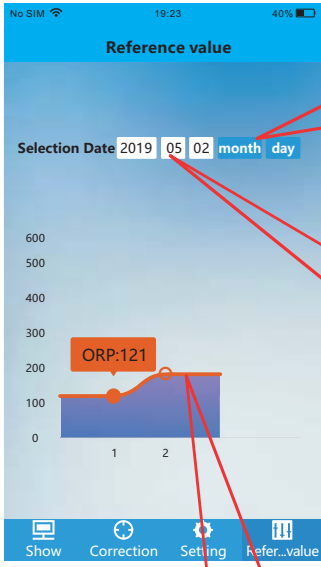

Do you want to save the password?
Username
02|
Password
save
exit
My management Devices
Mac
PH
ORP
Temp
TDS
UV
Elec
Action
ECFABCZBECO9
7.2
300
26
78
0
70
DEL DEVICE
双击选择展开
Double click to select


Device detailed data
Refresh Data
MAC: ECFABC2BECO9
PH: 7.2
ORP: 300
ORP24: [650,650,650,650,650,650,650,650,650,650,650,650,650,650,
650,650,650,650,650,650,650,650,650,650],650,
Monthly Daily ORP Average: Click View Monthly Daily ORP Average
Temp: 26
TDS: 78
UV: 0
Elec: 70
CL: 0.2
Calculate LSI: CA: TA: Calculate [-]
LinkMan: 01
Phone: 01
Address: 01
详细数据
Detailed data
双击显示ORP/PH值的月均曲线图
Double click to display the
ORP / PH value diagram



ORP 参考值曲线图（第三方监管显示）

ORP reference value curve (third-party regulatory display)



ORP 参考值曲线图（手机APP显示）点击“月”或“日”，会更新参考曲线图界面

ORP reference value curve (displayed by mobile APP) Click "Month" or " Day", the reference curve interface will be updated

ORP参考值曲线图（手机APP显示）点击进入手动切换年、月、日

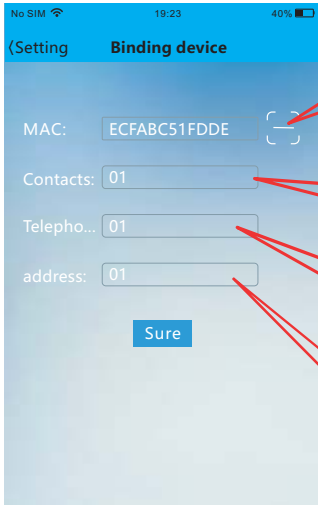
ORP reference value curve (displayed by mobile APP) Click to enter the manual switching of year, month and day

ORP 参考值曲线图（手机APP显示）

ORP reference value curve (displayed by mobile APP)

绑定Kemi
Binding device

KEMI设备MAC码
Code MAC of the KEMI

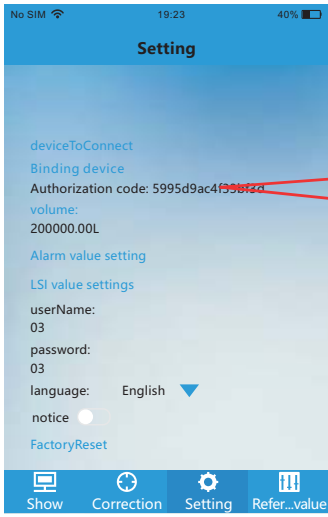


扫描KEMI设备的MAC码
（白色旋钮盖内侧）字母大写
Scan the MAC code of the WIFI module of the device

输入联系人姓名
Enter contact name

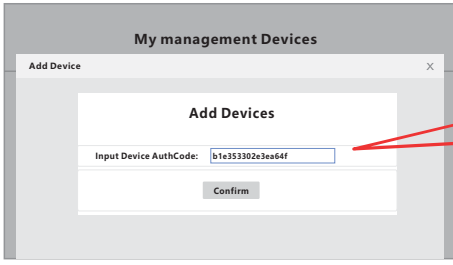
输入联系人电话
Enter contact phone number

输入联系人地址
Enter contact address



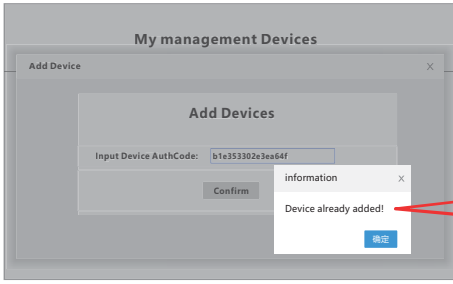
记录授权码

Record authorization code



第三方监管登录输入产品授权码

Enter product authorization code



绑定设备成功

Bind the device successfully

12、常见故障说明
12. Description of common faults

KEMI常见异常及故障排除办法：

1. Kemi连接不上网络
   A: 检查Kemi与路由器的距离是否 > 80m;
   B: 稽查Kemi是否正常开；
   C: 检查网络是否正常；
   D: 复位Kemi，按照说明书步骤重新连接

2. 测试数据出现异常：
   A: 检查Kemi是否正常连接；
   B: 检查Kemi电池电量是否充足（当电芯电压低于3.3V 时，Kemi部分功能因供电不足会导致工作不稳定）
   C: 检查Kemi的传感头是否完好无损，有没有外力导致的机械损伤。

3. 第三方维护电脑端曲线界面显示时间过久：
   A: 属于正常现象，因全球各地不同的服务器响应时间不同。

KEMI common anomalies and troubleshooting methods:

1. Kemi cannot connect to the network
   A: Check whether the distance between Kemi and the router is> 80m;
   B: Check whether Kemi is opened normally;
   C: Check whether the network is normal;
   D: Reset Kemi, and reconnect according to the steps in the manual.

2. Abnormal test data:
   A: Check whether Kemi is connected normally:
   B: Check whether the power of Kemi battery is sufficient (when the cell voltage is lower than 3.3V, some functions of Kemi will cause unstable work due to insufficient power supply)
   C: Check whether Kemi's sensor head is intact and whether there is any mechanical damage caused by external force.

3. The third-party supervision computer-side curve interface display time is too long:
   A: It is a normal phenomenon, because the response time of different servers around the world is different.

RF exposure statement

This equipment complies with the FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator and any part of your body.
This equipment meets the exemption from the routine evaluation limits in section 2.5 of RSS-102. It should be installed and operated with a minimum distance of 20cm between the radiator and any part of your body.

Cet équipement est conforme à l'exemption des limites d'évaluation habituelle de la section 2.5 de la norme RSS-102. Il doit être installé et utilisé à une distance minimale de 20 cm entre le radiateur et toute partie de votre corps.

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.

NOTE 1: 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.

NOTE 2: Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

IC WARNING

This device contains licence-exempt transmitter(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:
(1) This device may not cause interference.
(2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:
1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.