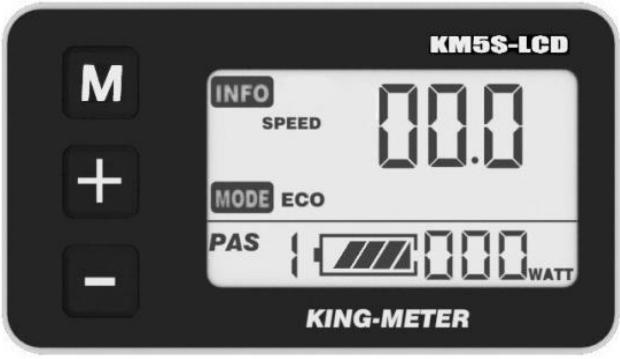
KING-METER

USERS GUIDE

KM5S–LCD



目录

关于用户手册

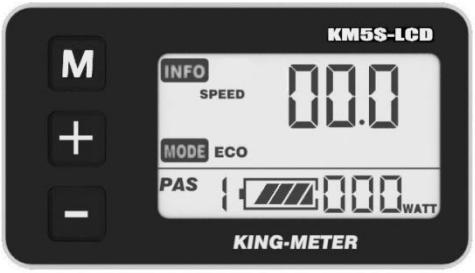
尊敬的用户，为了更好的操作您的电动车，请在使用前仔细阅读 KM5S 仪表的说明书。我们将以最简洁的语言告诉您仪表使用的每一个环节，包括从硬件的安装、设置到仪表的正常使用。同时帮助您解决有可能出现的困惑与障碍。

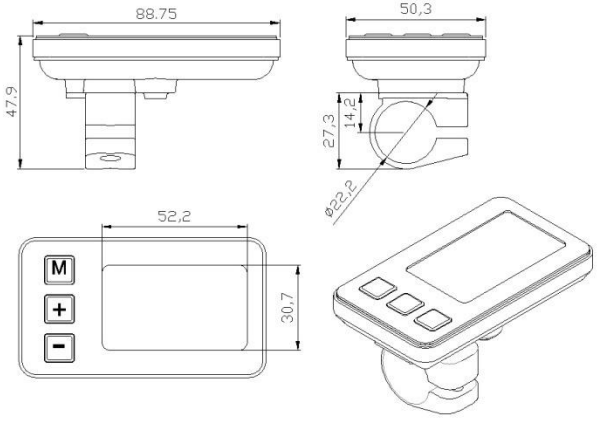
外观尺寸

主要材质及颜色

KM5S 产品采用 PC 材料。外壳的材料允许在-20℃到 60℃温度中正常使用，并且能保证良好的机械性能。

实物图及尺寸图（单位：mm）





功能概述及按钮定义

功能概述

KM5S 为您提供了多种功能及显示，以满足您的骑行需要。KM5S 显示的内容有：

◆电量显示，

◆电机功率显示，

◆速度显示（包括实时速度显示，最大速度显示及平均速度显示），

◆里程显示（包括单次里程显示和总里程显示），

◆单次骑行时间显示，

◆助力推行显示，

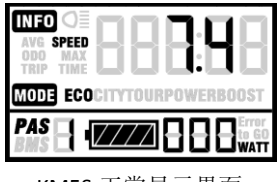
◆背光开启，

◆错误代码显示，

◆多项设置参数。如：轮径、限速、电池电量设定、多种助力档位选择和助力参数设定、开机密码设定、控制器限流设定等等。

◆默认参数修复功能。

正常显示区域



KM5S 正常显示界面

按钮定义

KM5S 仪表上有三个按钮。包括开机/模式键、加键和减键。在后续的说明中，  按键用文字“**MODE**”替代。  按键用文字“**UP**”替代，  按键用文字“**DOWN**”替代。

用户注意事项

在使用过程中注意使用安全，不要在通电情况下插拔仪表。

仪表尽量避免磕碰。

仪表使用贴膜为防水贴膜，请不要撕开，以免影响仪表防水性能。

关于仪表的后台参数设置，请不要随意更改，否则无法保证正常骑行。

当仪表不能正常使用时应尽快送修。

安装说明

将仪表固定在车把上，调整好合适的视角。在电动自行车断电的情况下，将仪表的接插件与控制器对应的接插件对插即可完成安装。

正常操作

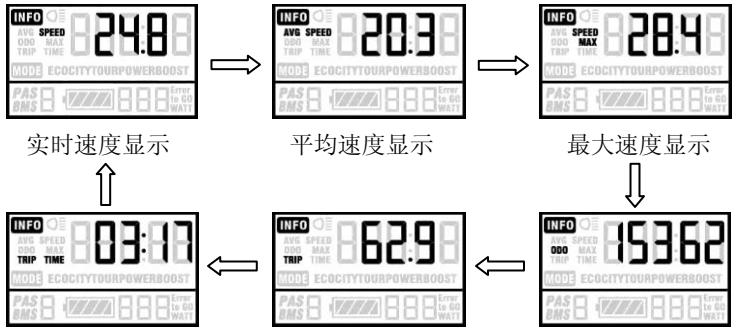
开机/关机

长按 **MODE** 键后，仪表开始工作，并提供控制器工作电源。在开机状态下，长按 **MODE** 键，可以关闭电动车电源。在关机状态下，仪表不再使用电池的电源，仪表的漏电流小于1uA。

如果超过 10 分钟不使用电动车，仪表会自动关机。

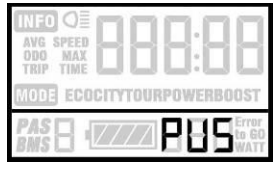
仪表显示界面

仪表开机后，仪表默认显示实时速度。短按 **MODE** 键切换显示信息。依次显示为：实时速度（单位：Km/h）→本次骑行的平均速度（单位：Km/h）→本次骑行的最高速度（单位：Km/h）→累计里程（单位：Km）→单次里程（单位：Km）→单次骑行时间→实时速度。



助力推行

按住 **DOWN** 不放，2 秒钟后，电动车进入电助力推行状态。电动车以每小时 6 公里的速度匀速行驶。屏幕显示 PUS。



助力推行显示界面

助力推行功能只能在使用者推行电动车时使用，请勿在骑行状态使用。

开启背光

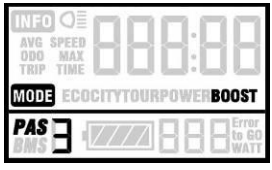
长按 **UP** 延时 2 秒钟，仪表背光开启，同时通知控制器开前灯。当外部光线不足或者夜晚行车的时候，可以开启 LCD

背光。再次长按 **UP** 延时 2 秒钟，可以关闭 LCD 背光。

开启背光显示界面

助力档位选择

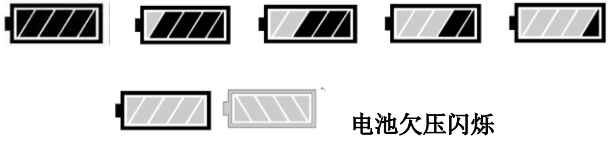
短按 **UP** 或 **DOWN** 按键，切换电动车助力档位，改变电机输出功率，仪表默认输出功率范围是 1—5 档，1 档是最低功率，5 档是最高功率。仪表开机默认档位是 1 档。



挡位切换显示界面

电量显示

当电池电压高时五段 LCD 均亮，当电池欠压时电池外边框以 1HZ 的频率闪烁，表示电池已严重欠压，需要马上充电。

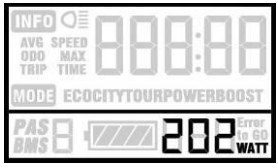


电池欠压闪烁

电池电量显示

功率显示

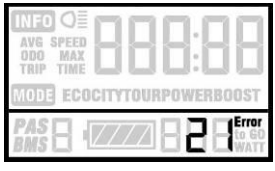
通过仪表可以知道电机输出功率。显示方式如下图所示。



电机输出功率显示界面

错误代码显示

当电动车电控系统出现故障时，仪表将自动显示错误代码，详细错误代码的定义参见**附表 1**。



错误代码显示界面

只有故障被排除时才能退出故障显示界面，出现故障后电动车将不能继续行驶。

用户设置

开机前准备

确保接插件对接牢靠，并打开电动车电源。

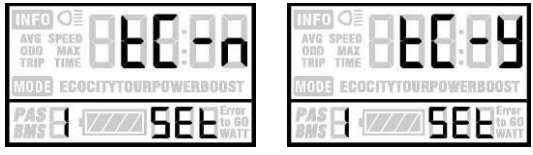
常规设置

长按 **MODE** 键即可开机。在开机状态下，同时按住 **UP** 和 **DOWN** 键 2 秒钟后，仪表进入常规设置状态。

单次里程和单次骑行时间清零

TC 代表**单次里程清零**，设置参数可选 N/Y。默认 N 表示单次骑行里程不清零。屏幕下方提示 SET1，表示设置项 1。通过 **UP/DOWN** 可选择 Y/N，Y 表示单次骑行里程需要清零。N 表示单次骑行里程不需要清零。短按 **MODE** 确认，进入背光亮度界面。

单次里程和单次骑行时间是同时清零的。

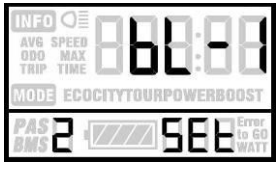


单次里程设置界面

背光亮度

BL 代表**背光**。可设置参数 1、2、3，表示背光亮度，1 是最暗，2 是标准亮度，3 是最亮。仪表出厂的默认数值是 1。屏幕下方提示 SET2，表示设置项 2。

通过 **UP**、**DOWN**，可改变背光亮度参数。长按 **MODE** 确认，退出常规设置状态。

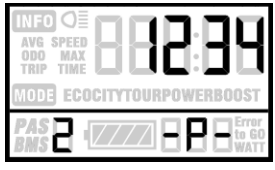


背光设置界面

仪表密码设置

同时按住 **UP+DOWN** 2 秒钟后抬起，进入常规设置状态。然后同时按住 **UP+MODE** 2 秒钟，可进入开机密码设置状态。

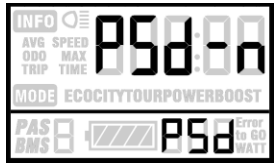
屏幕下方提示“-P-”，代表**密码**。“2”表示仪表的第二个密码。短按 **MODE** 移位，通过 **UP/DOWN** 加/减输入数值。4 位密码输入完后，短按 **MODE** 确认。密码正确则进入开机密码使能设置界面，否则停留在密码输入状态。输入密码：1234。



密码输入设置界面

密码使能

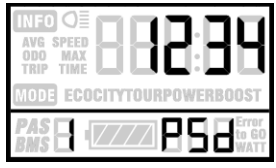
通过 **UP/DOWN** 选择 **Y/N,**Y 表示需要开机密码，N 表示不需要开机密码。短按 **MODE** 确认，进入仪表密码修改界面。仪表出厂的默认是 N。



密码使能确认界面

密码修改

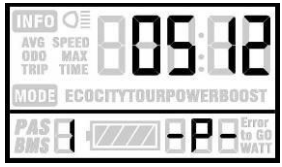
PSD 表示**密码。**短按 **MODE** 移位，通过 **UP/DOWN** 加/减输入数值。修改完后，长按 **MODE** 保存确认，退出设置界面。



密码修改界面

使用参数设置

同时按住 **UP+DOWN** 2 秒钟后抬起，进入常规设置状态。然后同时按住 **MODE+DOWN** 2 秒钟，要求输入密码，方可更改仪表参数。仪表出厂默认密码是：0512。

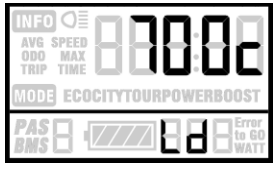


输入设置密码界面

短按 **MODE** 移位，通过 **UP/DOWN** 加/减输入数值。4 位密码输入完后，短按 **MODE** 确认。密码正确则进入轮径设置界面，否则停留在密码输入状态。

轮径设置

LD 表示**轮径。**可设置值有：16、18、20、22、24、26、700C，28，29。通过 **UP** 和 **DOWN** 选择车辆对应的轮径，以确保仪表速度显示和里程显示的准确性。仪表出厂默认轮径数值是 26inch。

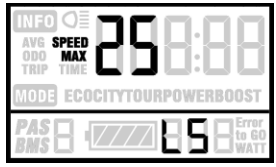


轮径设置界面

限速设置

仪表出厂的最高骑行速度默认值是 25Km/h。更改此数值可以设定电动车的最高骑行速度，当电动超过设定值时，控制器会停止对电机的供电，以保护骑行者的安全行驶。

LS 表示**限速。**最高速度设定值的可选择范围是 12Km/h 到 40Km/h 之间。可以通过 **UP/DOWN** 进行加/减设置。长按 **MODE** 确认，并退出设置状态。



限速设置密码界面

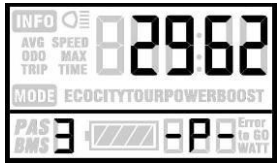
个性化设置

为了提高此款产品的个性化使用，我们特别加入了此项设置。能够针对使用者的不同要求对其进行设置。在此项设置中包括仪表的电池电量设置，助力档位设置，限流设置，助力传感器设置，速度传感器设置和系统设置。共六大项设置。详细设置项参见**附表 2**。

个性化设置密码输入

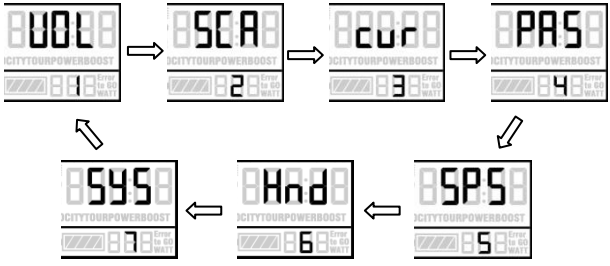
同时按住 **UP+DOWN** 2 秒钟后抬起，进入常规设置状态。再次同时按住 **UP+DOWN**，则进入个性化设置状态。

屏幕下方提示“-P-”，代表**密码**。“3”表示仪表的第三个密码。短按 **MODE** 移位，通过 **UP/DOWN** 加/减输入数值。4 位密码输入完后，短按 **MODE** 确认。密码正确，则进入仪表设置项选择界面，否则停留在密码输入状态。后台参数设置密码为：2962。



后台输入密码界面

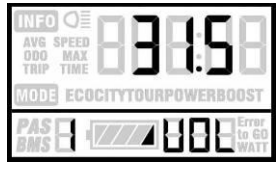
通过 **UP**、**DOWN** 选择需要设置的内容，短按 **MODE** 进入对应的设置界面。



设置选择界面

电池电量设置

VOL 代表**电压**。要求 1 到 5 段电压值逐个输入。以第一个电量值为例：屏幕中“1”表示第一个电压，“31.5”为第一个电量值。通过 **UP/DOWN** 进行加/减改变数值。短按 **MODE** 确认，并进入下一个电量值的设置。5 个电量值设置完成后长按 **MODE** 确认，退回仪表设置项选择界面。

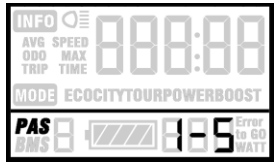


电池电量设置界面

助力参数设置

助力档位选择

在助力档位选择中提供了 8 中模式：0-3、1-3、0-5、1-5、0-7、1-7、0-9、1-9。通过 **UP/DOWN** 切换，短按 **MODE** 确认，进入对应的助力比例数值设置界面。



助力档位选择界面

0-3 或 1-3： **PAS1** 同时显示 ECO， **PAS2** 同时显示 TOUR，**PAS3** 同时显示 BOOST。

0-5 或 1-5： **PAS1** 同时显示 ECO， **PAS2** 同时显示 CITY，**PAS3** 同时显示 TOUR， **PAS4** 同时显 POWER，**PAS5** 同时显示 BOOST。

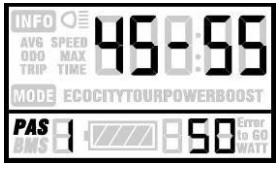
0-7 或 1-7： **PAS1** 同时显示 ECO， **PAS2** 同时显示 ECO，**PAS3** 同时显示 CITY， **PAS4** 同时显示 CITY，**PAS5** 同时显示 TOUR， **PAS6** 同时显 POWER，**PAS7** 同时显示 BOOST。

0-9 或 1-9： **PAS1/2** 对应 ECO， **PAS3/4** 对应 CITY，**PAS5/6** 对应 TOUR， **PAS7/8** 对应 POWER，**PAS9** 对应 BOOST。

助力比例数值设置

通过设置助力比例数值，可以调整每档的速度大小。以满足不同骑行者的需求。

以一档为例，“45-55%”为一档助力比例范围，“50%”为一档的默认值，是可设定数值。通过 **UP/DOWN** 进行加/减设置。短按 **MODE** 确认，进入下一个助力比例设置。最多可以设定 9 个。设置结束后，长按 **MODE** 确认，退回仪表设置项选择界面。短按 **MODE** 确认，返回助力档位选择。详细参考**附表 4**。

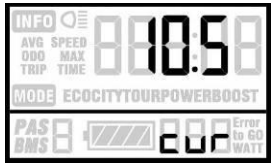


助力比例数值设置界面

限流数值设置

CUR 代表**限流**。限流可设置范围为 7.0-22.0A。通过 **UP/DOWN** 改变控制器最大电流值。长按 **MODE** 确认，退回仪表设置项选择界面。仪表出厂默认值为 15A。

根据控制器的硬件不同，控制器有可能无法达到设定的 22A。

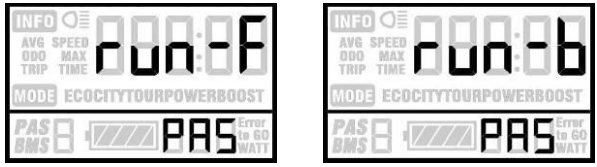


限流数值设置界面

助力传感器设置

助力传感器方向设置

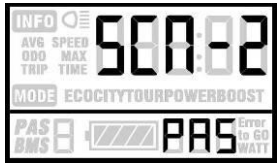
PAS 代表**助力传感器**，屏幕上面显示 run-F/b。run-F 代表正向，run-b 代表反向。通过 **UP/DOWN** 切换，短按 **MODE** 确认，进入助力传感器灵敏度设置。仪表出厂默认值为正向。



助力传感器方向设置界面

助力传感器灵敏度设置

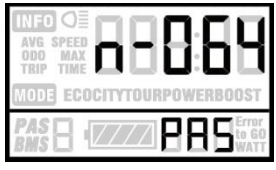
屏幕下面显示 PAS，代表助力传感器，屏幕上面显示 SCN，代表助力传感器的灵敏度。设置范围为 2-9。其中 2 表示灵敏度最高，9 表示灵敏度最低。通过 **UP/DOWN** 进行加/减设置，短按 **MODE** 确认，并进入助力传感器磁钢数设置界面。仪表出厂默认值为 2。



助力传感器灵敏度设置界面

助力传感器比例参数设置

N-代表**助力传感器比例参数**。通过 **UP/DOWN** 可以选择助力传感器参数值。数值越大代表助力感觉越明显。



助力传感器比例参数设置界面

速度传感器设置

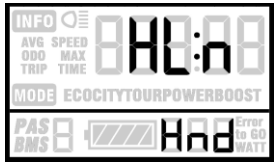
SPS 代表**速度传感器**。可以根据电动车车轮上所装的磁头数进行设置，设置范围 1-9。通过短按 **UP/DOWN** 实现修改。长按 **MODE** 确认，退回仪表设置项选择界面。仪表出厂默认值为 1。

速度传感器磁钢选择界面

转把功能设置

转把助力推行使能设置

HL 表示**转把助力推行**，HL:N 表示转把没有**助力推行**功能，HL:Y 表示转把有**助力推行**功能，即当转动转把的时候，仪表进入助力推行模式。通过 **UP/DOWN** 可以切换 Y/N。短按 **MODE** 确认。若选择 N 则进入转把矢量使能设置界面。否则返回仪表设置项选择界面。仪表出厂默认值为 N。

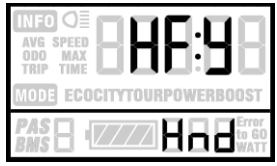


转把助力推行设置界面

转把档位使能设置

HND 表示**转把**。**HF：Y** 表示转把分档，**HF：N** 表示转把不分档。如果选择转把分档，则表示在转动转把时，速度最大值只能达到仪表上显示档位对应的相应速度；如果选择转把不分档，则表示在转动转把时，不受仪表上显示的档位限制，可达到额定的最大速度。

通过 **UP/DOWN** 可以设置 Y/N。长按 **MODE** 确认，返回仪表设置项选择界面。短按 **MODE** 确认，返回转把助力推行使能设置界面。

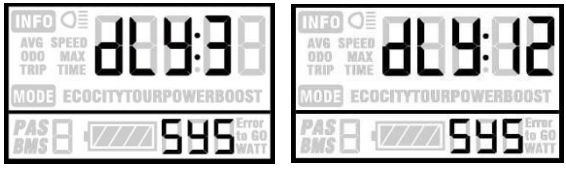


转把档位使能设置界面

系统设置

电量延时时间设置

DLY 代表**电量延时时间**。通过 **UP/DOWN** 可以选择电量延时时间 3/6/12s。短按 **MODE** 确认，并进入最大限速设置界面。仪表出厂默认 3s。



电量延时时间选择界面

最大限速设置

MAX SPD 代表**最大速度**。通过 **UP/DOWN** 可以设置最大限速，设置范围 25-40 Km/h。短按 **MODE** 确认，并进入按键

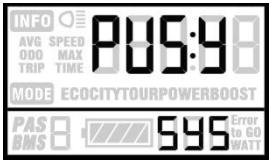
助力推行使能设置界面。仪表出厂默认 40Km/h。

此设置参数是仪表厂家规定之上限值。

最大限制速度设置界面

按键助力推行使能设置

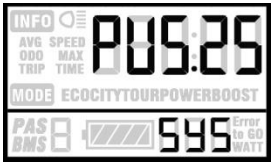
PUS **代表按键推行使能。**通过 **UP/DOWN** 可以切换 Y/N。短按 MODE 确认。Y 代表使能，N 代表不使能。短按 **MODE** 确认，并进入助力推行速度设置。仪表出厂默认值为 Y。



按键助力推行使能设置界面

助力推行速度设置

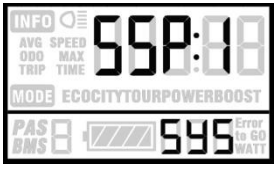
通过设置助力推行数值，可以调整推行速度大小。以满足不同骑行者的需求。通过 **UP/DOWN** 可以选择。可调范围为“20%-35%” 短按 **MODE** 确认，并进入缓启动设置界面。仪表出厂默认 25%。



助力推行速度设置界面

缓启动设置

SSP 代表**缓启动。**可调节范围为 1-4,4 代表最缓慢。通过 **UP/DOWN** 可以选择。长按 **MODE 确认，**并退出设置。仪表出厂默认 1.



缓启动设置界面

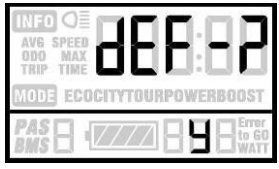
退出设置

在设定状态下，短按 **MODE**（2 秒以内），是确认输入保存当前设置。长时间按 **MODE**（2 秒以上），是确认保存当前设置，并退出当前设置状态。长按 **DOWN**(2 秒以上), 为取消当前操作，退出设置，不保存当前设置数据。

在一分钟内没进行任何操作，仪表自动退出设置状态。

恢复默认设置

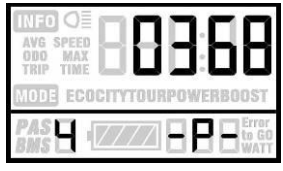
DEF 代表**恢复默认参数**。同时按住 **UP+MODE** 2 秒钟以上，可进入恢复默认参数。通过 **UP**、**DOWN** 来切换 Y 或 N。N 表示不需要恢复默认参数。长按 **MODE** 确认。如果选择 Y，需要输入一个密码，才能恢复默认参数。



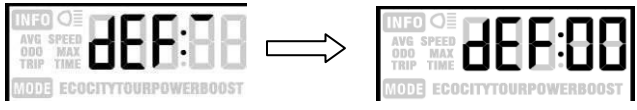
恢复默认设置界面

输入密码：0368。短按 **MODE** 移位，通过 **UP/DOWN** 加/减输入数值。4 位密码输入完后，短按 **MODE** 确认。仪表显示如下图所示，当仪表显示 DEF:00 时表示恢复默认成功，自动退出。

在恢复默认中，电池电量值、总里程和单次里程是不恢复的。开机密码在恢复之列。



输入恢复密码界面



恢复开始　　恢复完成

常见问题及解答

问：为什么不能开机？

答：检查电池是否打开电源或外漏引线是否断裂。

问：仪表显示故障代码应如何处理？

答：及时到维修电动车的维修点修理。

关于仪表条形码

仪表条形码分为两行。第一行：KM5S000001。KM5S 代表产品名称，000001 为产品序列号。第二行：12 06 3 101801。其中 1206 代表仪表出厂日期为 2012 年第 6 周，3 代表仪表的电压参数（2-24V，3-36V，4-48V）,1 代表样品，01 代表仪表硬件版本号，801 代表仪表软件版本号。

质量承诺与包修范围

一、保修信息：

1、凡属正常使用情况下由于产品本身质量问题引起的故障，在保修期内本公司将负责给予有限保修。

2、产品的保修期自仪表出厂 24 个月内。

二、以下情况不属于保修范围

1、外壳被打开

2、接插件被破坏

3、仪表出厂后，外壳划伤或外壳破损

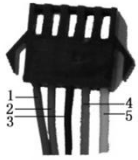
4、仪表引出线划伤或断裂

5、由于不可抗拒（如火灾、地震等）或自然灾害（如雷击等）所造成的故障或损坏

6、产品超出保修期

引线连接图

标配接插件线序



与控制器连接端

仪表出线端

对接线端

表：标配接插件线序表

标配线序	标配线颜色	功能
1	红色（VCC）	仪表电源线
2	蓝色(K)	控制器的电源控制线
3	黑色(GND)	仪表地线
4	绿色(RX)	仪表的数据接收线
5	黄色(TX)	仪表的数据发送线

注：部分产品的引线采用防水接插件，用户无法看到线束内的引线颜色。

版本变更

本仪表的使用说明书是天津嘉特机电技术有限公司通用软件版本（V1.0 版本）的操作说明书。部分整车上使用的仪表软件版本有可能与本说明书略有差异，均以实际使用版本为准。

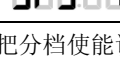
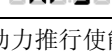
附表 1：错误代码定义表

错误代码	定义
21	电流异常
22	转把异常
23	电机缺相
24	电机霍尔信号异常
25	刹车异常
30	通讯异常

附表 2：密码速查表

序号	屏幕显示	密码	说明
1		0512	使用参数设置密码（固定）
2		**出厂默认** 1234	开机密码（可修改）
3		2962	后台参数设置密码（固定）
4		0368	恢复设置密码（固定）

附表 3：个性化设置对应表

序号	设置项	屏幕显示	设置内容
1	电池电量设置		5 个电量值设置 
2	助力档位设置		助力档位选择  助力档位比例 
3	限流设置		限制电流大小 
4	助力传感器设置		助力传感器方向  助力传感器灵敏度  助力传感器磁钢数 
5	速度传感器设置		速度传感器磁钢数 
6	转把功能		转把分档使能设置  转把助力推行使能设置

续表 3：

序号	设置项	屏幕显示	设置内容
7	系统设置	SYS	电量延时时间  最大速度设置 

附表 4：助力档位比例默认值表

档位 档位选项	1	2	3	4	5	6	7	8	9
0-3/ 1-3	50%	74%	92%	—	—	—	—	—	—
0-5/ 1-5	50%	61%	73%	85%	96%	—	—	—	—
0-7/ 1-7	40%	50%	60%	70%	80%	90%	96%	—	—
0-9/ 1-9	25%	34%	43%	52%	61%	70%	79%	88%	96%

附表 5：显示符号定义速查表

序号	符号	含义
1		设置
2		密码
3		电量延时
4		恢复默认
5		单次里程和单次骑行时间清零
6		背光
7		转把分档
8		转把助力推行
9		限速
10		轮径
11		问号
12		反向
13		正向
14		是
15		否

Contents

About the User Manual

Dear users,

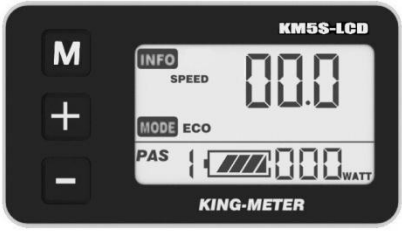
To ensure better performance of your e-bike, please read through the KM5S product introduction carefully before using. We will use the most concise words to inform you of all the details（including the hardware installation, setting and normal operation use of the display）when using our display. Meanwhile, the introduction will also help you to solve the possible confusion and malfunctions.

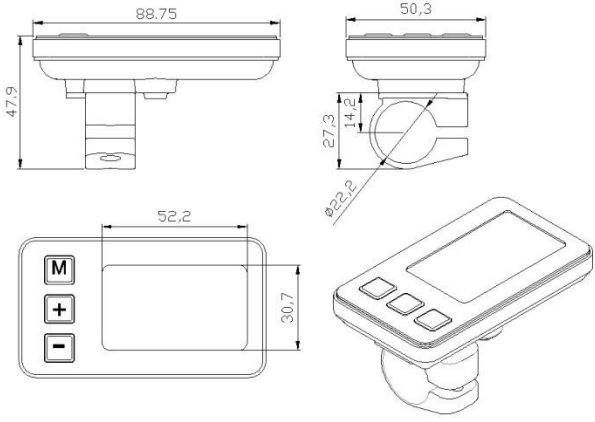
Appearance and Size

Material and Color

KM5S products are made of PC. Under the temperature of -20 to 60℃, the shell material can ensure normal usage and good mechanical performance.

Real product and dimension figure (unit: mm)





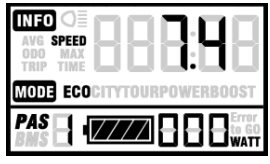
Function Summary and Button Definition

Function Summary

KM5S provides a wide range of functions and indicators to fit the users' needs. The indicated contents are as following.

- ◆Battery Indicator
- ◆Motor Power Ratio
- ◆Speed Display (including running speed, max speed and average speed)
- ◆Trip distance and total distance
- ◆Trip time display of single
- ◆Cruise control
- ◆Headlight On/Off
- ◆Error Code Indicator
- ◆Various Parameters Setting (like wheel size, speed -limited, battery level bar, PAS level, controller limited current, max speed, password enable, and so on.)
- ◆Recover Default Setting

Monitor Area



Monitor Area

Button Definition

KM5S has three buttons. They are    . In the following introduction,  is named as "**MODE**".  is named as "**UP**" and  is named as "**DOWN**".

Operation Cautions

Be care of the safety use. Don't attempt to release the connector when battery is on power.

Try to avoid hitting.

Don't split the waterproof sticker to avoid affecting the waterproof performance.

Don't modify system parameters to avoid parameters disorder.

Make the display repaired when error code appears.

Installation Instruction

Fix the display onto the handlebar and adjust to an appropriate visual angle. Tighten all the connectors.

Normal Operation

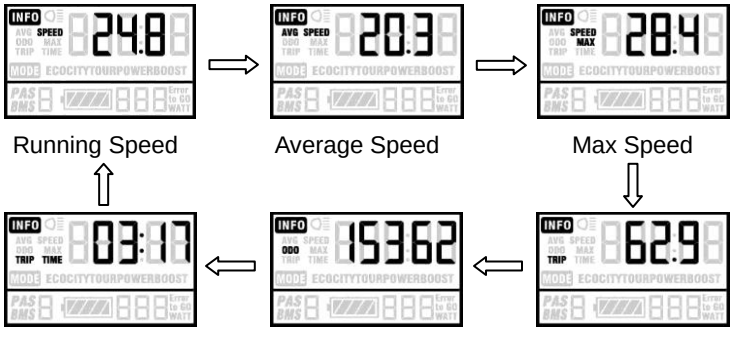
Power On/Off

Hold **Mode** button for 2 seconds then the display will power on, and the display will the power on the controller. With display on, hold **MODE** to turn off power supply of the e-bike. With the display off, the display and controller shut down. The leakage current is less than 1 uA.

When parking e-bike for more than 10 minutes, the display shut down automatically.

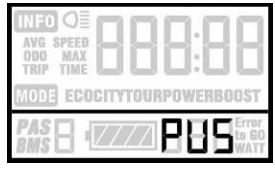
Display Interface

After starting up the display, default show is running speed. Press MODE to change the indicated information in sequence as below: Running Speed (Km/h) → Average Speed (Km/h) → Max Speed (Km/h) → Trip Distance (km) → Total Distance (km) → Travel Time → Running Speed (Km/h).



Push Cruise Control

Hold **DOWN** for 2 seconds to enter the mode of power assistant walk. The e-bike will go on at a uniform speed of 6 Km/h. PUS shows on the screen.



Push Cruise Control

"Push Cruise Control" function can only be used as pushing the e-bike by hands. Please don't use this function when riding.

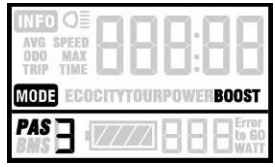
Turn on/off Backlight

Hold **UP** 2 seconds to turn on the backlight of the display, the headlight will be power on at the same time. Hold **UP** for 2 seconds again, backlight turned off.

Turn On/Off Backlight

PAS Level Selection

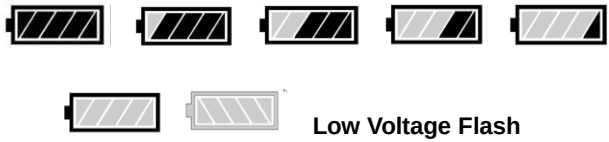
Hold **UP** or **DOWN** to change the output power of the motor. The power ranges from level 1 to level 5. Level 1 is the minimum power. Level 5 is the maximum power. The default value is level 1.



PAS Level

Battery Indicator

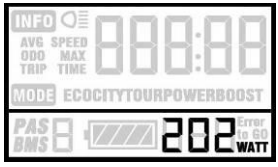
The 5 battery bars represent the capacity of the battery. When the battery is in low voltage, battery frame will flash to notice that the battery needs to be recharged immediately.



Battery Indicator

Motor Power Monitor

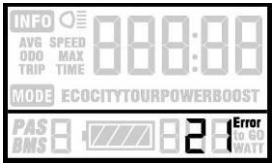
Motor power showed as below:



Motor Output Power

Error Code Information

If there is something wrong with the electronic control system, the error code will appear automatically. Here is the detail information of the error code in Table 1 attached.



Error Code

Make the display repaired when error code appears.

User Setting

Preparation before Starting

Make sure all connectors tightened and the cables without damage.

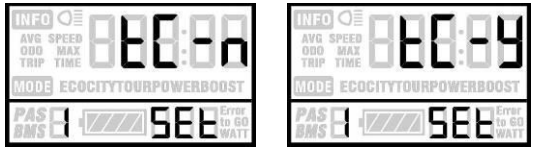
General Setting

Press **MODE** button to start the display, then hold both **UP** and **DOWN** for 2 seconds to enter the setting menu.

Trip Distance and Trip Time Clearance

TC means trip distance clearance. Press **UP** or **DOWN** to choose yes or no to clear the trip distance.

Trip distance and trip time will be cleared at the same time.

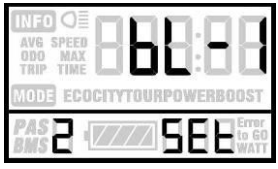


Trip Distance Clearance

Backlight Contrast

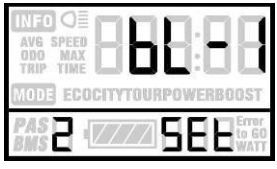
BL means backlight. Level 1 is the low brightness. Level 2 is the middle brightness. Level 3 is high brightness. The default level is 1. Bottom of the screen prompts SET2.

Press **UP** or **DOWN** to modify the backlight brightness. Hold **MODE** to confirm the modification and exit the general setting.



Backlight Brightness

Pressing **UP** and **DOWN** can change the backlight lighting. Long press **MODE** is to confirm and quit Setting Mode.



Backlight setting Interface

Power-on Password Enable/Disable

The character “-P-” on the bottom of the screen means the page of password. Hold **UP** and **DOWN** both up to 2 seconds enter normal setting , while hold both **UP** and

MODE 2 seconds again will enter power-on password enable/disable page.

Press **UP**/**DOWN** to change the number .Press **MODE** to select digit one by one. After 4-digite of the correct password entered, press **MODE** to confirm then select password enable or disable.

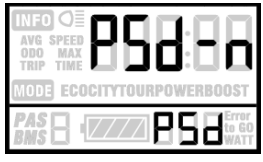
Password Entering Page

Power-on Password Enable

Press **UP**/**DOWN** to select **Y** or **N**, and press **MODE** to confirm. Power-on Password default disable.

y = Power-on Password Enable

n = Power-on Password Disable



Password Disable Page

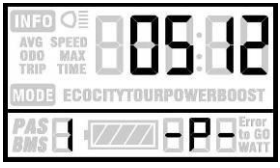
Power-on Password Modify

UP and **DOWN** is to change the number, and **MODE** is to select digit one by one, finally to hold **MODE** to confirm the modification.

Password Modify Page

Normal Parameter Setting

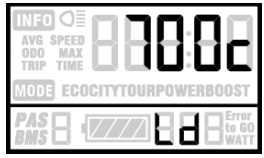
Hold both **UP** and **DOWN** for 2 seconds to enter User setting .But hold both **DOWN** and **MODE** over 2 seconds is to enter password 0512 to modify the wheel size.



Password Inputting Page

Wheel Diameter Setting

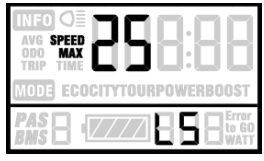
Press **UP** and **DOWN** to select the correct value to match the wheel diameter. Selectable values include: 16, 18, 20, 22, 24, 26, 700C, 28, 29. Default diameter is 26 inch. Ld means Wheel Diameter.



Wheel Diameter Setting Page

Speed-limit Setting

When the running speed is faster than MAX SPEED, the controller will cut off the motor power. MAX SPEED default setting is 25Km/h. LS means Limit Speed 12Km/h to 40Km/h is selectable. Press **UP**/**DOWN** to select the favorite value, then hold **MODE** over 2 seconds to confirm and quit the setting mode.



Limit Speed Setting Page

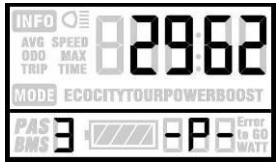
Personalized Parameter Setting

Personalized Parameter Setting can match variety requirements in use. Settings items are : Battery Power Bar Setting, Pedal assistant level Setting, Over-current Cut , Pedal Assistant Sensor Setting, Speed Sensor Setting and Delay Time Setting. For the details, please see the **Attached List 2**.

System Parameter Setting

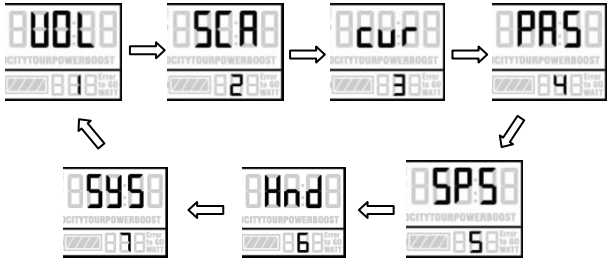
Hold **UP** and **DOWN** both over 2 seconds to enter normal setting, while hold **UP** and **DOWN** both again is to set up System Parameter, password 2962 must be entered.

MODE is to confirm and enter System Parameter Setting page, you can select the option which you want.



System Parameter Password Input

Press **UP/DOWN** to select, and press **MODE** to enter the corresponding setting page.



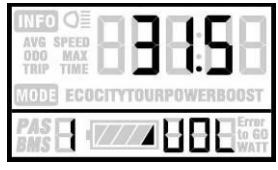
Option Select Page

Battery Power Bar Setting

Each bar represents a voltage value. 5 voltage values **MUST BE** entered one by one.

Press **MODE** to confirm and **UP/DOWN** to select the value.

VOL = voltage

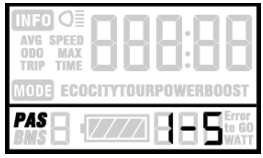


Battery Power Bar Setting

Pedal Assistant Level Setting

Pedal Assistant Level Select

In Pedal Assistant Level Setting , there are 8 modes to select ： 0-3, 1-3, 0-5, 1-5, 0-7, 1-7, 0-9, 1-9. Press **UP/DOWN** to select the mode, and press **MODE** to confirm, then change the ratio of each PAS level.



PAS Mode Select Page

0-3 or 1-3: **PAS1** also shows ECO, **PAS2** also shows TOUR, **PAS3** also shows BOOST.

0-5 or 1-5: **PAS1** also shows ECO, **PAS2** also shows CITY, **PAS3** also shows TOUR, **PAS4** also shows POWER, **PAS5** also shows BOOST.

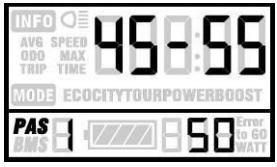
0-7 or 1-7: **PAS1** also shows ECO, **PAS2** also shows ECO, **PAS3** also shows CITY, **PAS4** also shows CITY, **PAS5** also shows TOUR, **PAS6** also shows POWER, **PAS7** also shows BOOST.

0-9 or 1-9: **PAS1** or **2** also shows ECO, **PAS3** or **4** also shows CITY, **PAS5** or **6** also shows TOUR, **PAS7** or **8** also shows POWER, **PAS9** also shows BOOST.

PAS Ratio Modify

To modify the value of PAS ratio will meet the different requirements.

Take the 1 level for example, “45-55 percent” is the range value, bottom value can be modified, and the default is 50 percent. **MODE** is used to confirm and turn to the next PAS ratio setting. After all PAS ratio inputted, please hold **MODE** over 2 seconds to confirm the modification and turn to controller Over-current Cut setting (**MODE** back to pedal assistant level select page). For the details, please see **Attached List 4.**

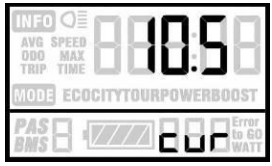


PAS Ratio Page

Controller Over-Current Cut Setting

CUR means current. CUR value can be changed from 7.0A to 22.0A. Press **UP/DOWN** is to change the value of the current, and hold **MODE** to confirm the setting and turn to PAS sensor setting.15A is the default value of controller over-current cut.

According to the different controller, the value might not be able to be 22A.

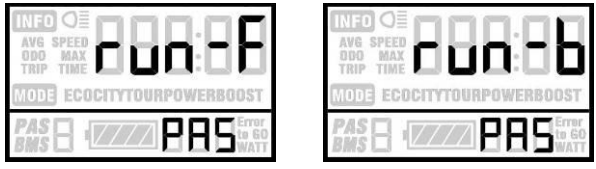


CUR Setting Page

Pedal Assistant Sensor Setting

The Direction of Pedal Assistant Sensor Setting

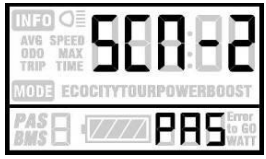
PAS means Pedal Assistant System. “run-F” means forward direction, while “run-b” means back direction. Press **UP/DOWN** to select F or b, and press **MODE** to confirm and turn to PAS sensitivity setting. The default direction is forward.



Direction of PAS Sensor Setting

The Sensitivity of PAS Setting

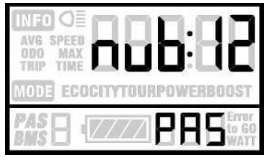
SCN means the sensitivity of PAS, and 2 to 9 can be selected.2 is strongest, 9 is the weakest. **UP/DOWN** is to select sensitivity value, and **MODE** is to confirm selection and turn to magnet disk setting. SCN default value is 2.



The Sensitivity of PAS Setting

Proportion parameters Setting Of PAS

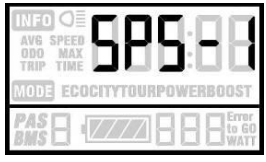
N means the proportion parameter of PAS. Press **UP/DOWN** to select the parameter, the more power, the more PAS feeling.



Proportion parameter of PAS

Speed Sensor Selection

SPS means Speed Sensor. Press **UP/DOWN** to select the quantity of magnet head (the range is from 1 to 9), and press **MODE** to confirm and turn to Throttle Definition page. SPS default value is 1.



Speed Sensor Selection

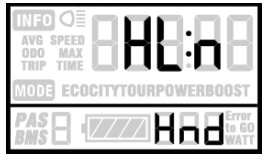
Throttle Definition

Throttle Enable/Disable

HL means throttle load, HL:N means function disable ,HL:Y means function enable .

When HL=Y, throttle can control the function. Press **UP/DOWN** to select Y, and press **MODE** to confirm the selection, otherwise select N to turn to Throttle Vector Enable Setting.

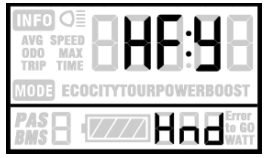
HL default value is N.



Throttle Enable/Disable Page

Throttle Level Enable/Disable

HND means throttle. **HF：Y** means throttle vector enable , **HF：N** means throttle vector disable. When **HF=Y**, turn throttle to change the running speed. Press **UP/DOWN** to select Y or N, and hold **MODE** to confirm the selection and quitting. Press **MODE** to confirm and turn to throttle definition page.

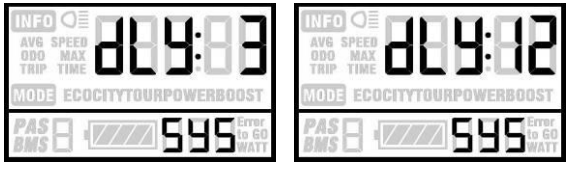


Throttle Level Enable/Disable Page

System Setting

Delay time setting of battery power

DLY means delay time of battery power. Choose delay time 3/6/12s through pressing **UP/DOWN,** then shortly press **MODE,** and enter the max speed limited**.** The default time is 3s.

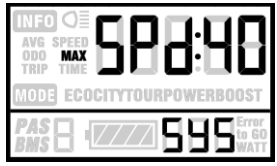


Delay time of battery power interface

Max speed limited

MAX SPD means max speed limited. Set the max speed when pressing **UP/DOWN** from 25-40 Km/h. Long time to press MODE, then exit setting. The default is 40Km/h.

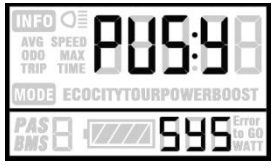
The standard speed limit setting is based on this setting, not more than this setting value.
This setting is the priority version



Interface of max speed limited setting

Button PAS Setting

PUS means pushing. Press **UP/DOWN** to choose Y/N. Short press MODE, Y means enable, N means disable. Short press MODE to confirm and enter into PAS speed setting. The default value is Y.

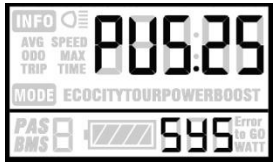


Interface of PAS pushing

PAS Speed Setting

Through setting PAS to adjust push speed to meet rider's requirements.

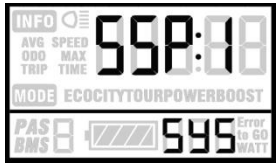
The scope is “20%-35%”by pressing **UP/DOWN,** short press **MODE** to enter into slowly start up. Default value is 25%.



Interface of PAS speed setting

Slowly Start up Setting

SSP means slowly start up. The scope is 1-4, 4 means the slowest. Press **UP/DOWN** to choose. Long press **MODE** to confirm and exit setting. The default value is 1.



Interface of slowly setting up

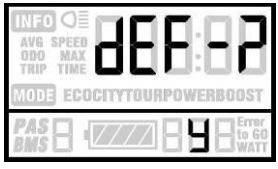
Exit setting

In the setting state, short press MODE (less than 2s) is to confirm the input. Long press MODE (more than 2s) is for saving the setting, then quit the setting state. Long press DOWN (more than 2s), is to cancel the operating but not saving setting data.

If there is not any operating in one minute, display will exit the setting state.

Recover default setting

DEF means recover default. Both press **UP+MODE** to enter recover default setting**.** Pressing **UP**, **DOWN** to convert Y or N. N means do not need to recover default setting; Y means entering into password setting. Otherwise, display will exit. The default state is N.

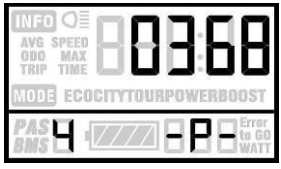


Restore Default Setting Interface

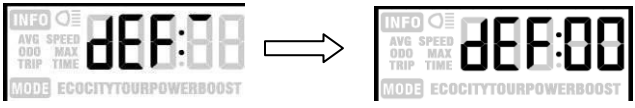
Input password: 0368. Short press **MODE**, **UP**/**DOWN** can increase or reduce the number. After inputting 4

passwords, short press **MODE** to confirm. The interface is as below. When display showed DEF:00, it means recovering default state, then exiting.

In the recovery default, battery power, ODO and trip cannot be recovered, but starting up password can be recovered.



Input recovery password interface



Start Complete

Recover default interface

FAQ

Q: Why the display is not able to start up?
A: Check the connector between display and controller.
Q: How to deal with the error code?
A: Fix it to the maintenance place immediately.

Barcode

The barcode is built up as follows:

KM5S=Name
000001=Sequence No.
12=Year of Production
06=Week of Production
3=Battery Voltage
1=sample（0=mass production）
01=hardware version No.
801=software version No.

Quality assurance and warranty scope

Ⅰ、Warranty

1、Any quality problems in normal case and during guarantee period, our company will be responsible for the warranty.

2、The warranty time is 24 months when display out of the factory.

Ⅱ、Other items

The following items do not belong to our warranty scope.

1、It can not be demolished.

2、The damage is caused by wrong installation or operation.

3、Shell is broken when display is out of the factory.

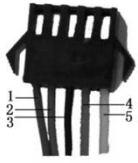
4、Wire is broken.

5、The fault or damage is caused by the force majeure (such as fire, earthquake, etc,) or natural disasters like lighting, etc.

6、Beyond Warranty period.

Connection layout

Connector line sequence



Display-side Connector

Display-side adapter

Switch wiring

Line sequence table

Line sequence	Color	Function
1	Red（VCC）	+
2	Blue(K)	Lock
3	Black(GND)	-
4	Green(RX)	RX
5	Yellow(TX)	TX

Some wire use the water-proof connector, users are not able to see the inside color.

Version changes

This operating instruction is a general-purpose version （V1.0）. Some of the version for the display software will be different from the specification, which should depend on the actual use version.

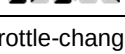
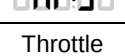
Attached list 1：Error code definition

Error Code	Definition
21	Current Abnormality
22	Throttle Abnormality
23	Motor Abnormality
24	Motor Hall Signal Abnormality
25	Brake Abnormality
30	Communication Abnormality

Attached list 2： Password table

No	OSD	Password	Setting
1		0512	Using parameter setting password(settled)
2		**Default** 1234	Starting up password
3		2962	Personality setting password(settled)
4		0368	Recovery setting password(settled)

Attached list 3：Personality Parameter setting

No	Setting	Display	Details
1	Battery power		Five battery power value 
2	Assistance		Power assist level option 
			Assistance proportion 
3	Current-limiting		Limit current 
4	Power assist sensor		PAS direction 
			PAS sensitivity 
			PAS magnet No 
5	Speed sensor		Speed sensor magnet No 
6	Throttle		Throttle-changing 
			Throttle 

Continue list 3：

No	Items	Display	Setting
7	System setting		Time of battery power delay 
			Max speed 

Attached list 4：Power assist table

Level / Item	1	2	3	4	5	6	7	8	9
0-3/ 1-3	50%	74%	92%	—	—	—	—	—	—
0-5/ 1-5	50%	61%	73%	85%	96%	—	—	—	—
0-7/ 1-7	40%	50%	60%	70%	80%	90%	96%	—	—
0-9/ 1-9	25%	34%	43%	52%	61%	70%	79%	88%	96%

Attached list 5：symbol definition

No	Symbol	Definition
1		Setting
2		Password
3		Power delayed time
4		Recover default
5		Trip and time to clear
6		Backlight
7		Throttle-changing
8		Throttle power assist walk
9		Speed limit
10		Wheel diameter
11		Question mark
12		Backward
13		Forward
14		Yes
15		No

KING-METER