

# VLCD10 形液晶仪表

## VLCD10 Display Instrument Operation Manual



# Contents 目录

<b>Summarize</b>	4
<b>Installation</b>	4
<b>Functions and Operations</b>	5
Key Definitions	5
<b>Main interface Functions and operations</b>	6
Power On/Off	6
Vehicle Speed Display	6
Battery Energy Indicator	7
Setting The Assistance Level	7
Switching the Push Assistance On/Off	8
Headlight Control	8
<b>Settings</b>	9
Entering the Setting Mode	9
Information	9
Setting the Wheel Size	10
Setting the Speed Limit	10
Setting the Brightness	11
Battery Information	11
<b>Error</b>	12
Error code	12

<b>概述</b>	13
<b>安装</b>	13
<b>功能和操作</b>	14
按键定义	14
<b>主界面功能和操作</b>	15
开机和关机	15
车速显示	15
电池电量显示	16
助力比选择	16
推车模式选择	17
车灯控制	17
<b>设置</b>	18
进入设置模式	18
信息	18
设置轮径	19
设置最高车速	19
设置亮度	20
查看电池信息	20
<b>错误</b>	21
错误代码	21

# Summarize

Intelligent VLCD13 instrument is especially designed for electric bicycle. It's mainly used to control the power assist. And it can also show the energy of battery, measure the speed of electric bicycle, record the trip distance.

Specifications	
Type	VLCD10
Working Voltage	DC24-48V
Max Working Current	20ma 24V 10ma 48V
Display Type	128x160 LCD
Working Temperature	-20°C ~ 70°C

# Installation

Instruments mounted on the handlebar, plug - ins output line (5 - pin push - male) and operate on the (5 - pin plug - female) On the plug.

# Functions and Operations

## Key Definitions



### ① Power Assist **+** Key

Used to add gear

### ② Power Assist **-** Key



Used to reduction gear and 6km/h power assist

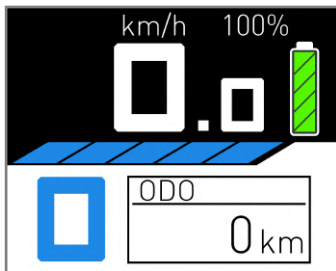
### ④ Power Key **⏻**

Used for booting and setting

# Main interface Functions and operations

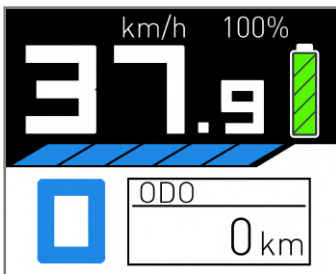
## Power On/Off

Press this  button to power on the LCD display, long pressing the  button for 4 seconds to power off. Automatically shut off without any operation in 5 minutes.



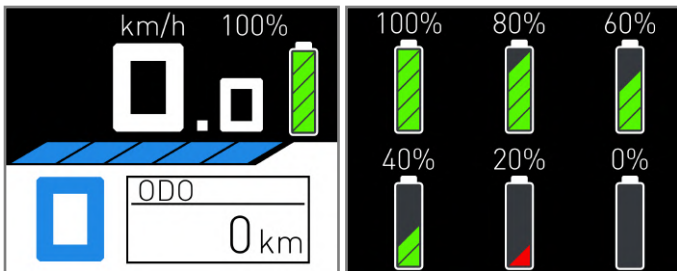
## Vehicle Speed Display

Show current speed.



## Battery Energy Indicator

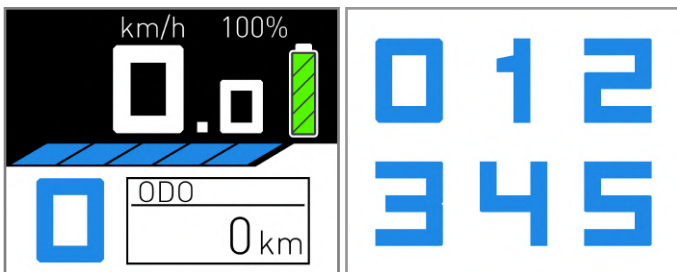
Five horizontal blocks show energy of battery. Each block 20 percents of electric energy.




## Setting The Assistance Level

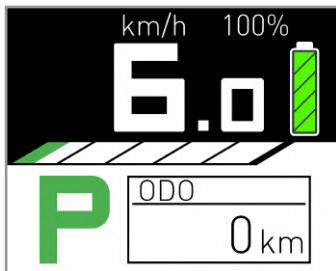
Press **+** or **-** button to switch 1-5 assist level. Level 1 is for the minimum power, level 5 is for the highest power.

Gear 0 is without assist function.




## Switching the Push Assistance On/Off

To activate the push assistance, make sure the assistance level is 1 ~ 5. Press the  button and keep it pressed in 4 second.




## Headlight Control

Long press the  button and keep it pressed in 4 second to turn on the headlight. Repeat the operation to turn off the headlight.


# Settings

## Entering the Setting Mode

Press  buttons to entering the setting mode. In the setting mode, press **+** or **-** buttons to switch the settings. Long Press **-** buttons to exit setting mode.


SETTINGS	
WHEEL	>
MAX SPEED	>
BATTERY INFO	>
INFOMATION	>

## Information

Enter the setting mode and switch to information item. Press  button to confirm setting. Long press **-** buttons to exit.

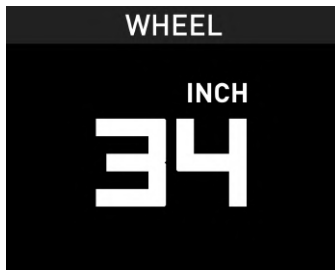
INFORMATION	
TRIP	0.0 km
ODO	0.0 km
TIME	00:23
MAX	0.0 km/h
AVG	0.0 km/h

## Setting the Wheel Size


Enter the setting mode and switch to wheel item. Press  button to confirm setting.

Press **+** or **-** buttons to switch between 5 - 35 inch.

Long press **-** to save and exit.



## Setting the Speed Limit

Enter the setting mode and switch to max speed item. Press  button to confirm setting.

Press **+** or **-** buttons to switch between 10 - 60 km/h.

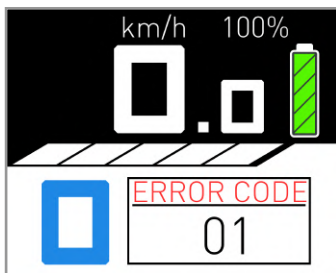
Long press **-** to save and exit.



# Error

## Error code

Once the controller encounters an issue, the related error code will occur on panel.



The following table is a typical failure code for TS middle motor.

Error Code	Cause of Issue
E01	No error
E02	Temperature protection
E03	Short circuit protection
E04	Handlebar failure
E05	Motor phase loss
E06	Torque failure
E07	Stall failure
E08	Undervoltage
E09	Overpressure
E10	Hall failure

## 概述

VLCD10 型液晶仪表是专为电动自行车设计的，与本公司中置电机配套使用，主要用于测量电动自行车行驶速度和记录电动车行驶里程，电池电量显示及控制电机助力大小等等。

参数	
机型	VLCD10
工作电压范围	DC24-48V
最大工作电	20ma 24V 10ma 48V
显示类型	128x160 LCD
工作温度	-20°C ~ 70°C

## 安装

仪表安装在车把上，其输出线上的插件(5 芯快插公头)与操作器上的插件(5 芯快插母头)对插。

# 功能和操作

## 按键定义



### ① 助力 + 键

用于加档

### ② 助力 - 键


用于减档和 6km/h 助推

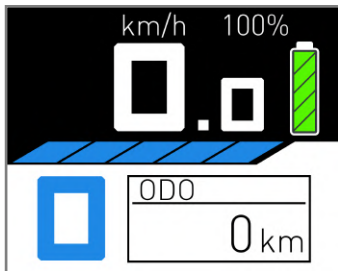
### ④ 电源键

用于开关机和设置

# 主界面功能和操作

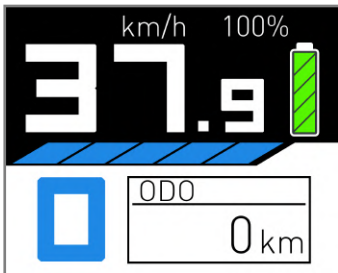
## 开机和关机

按一下  键开机,长按 2 秒关机,5 分钟不工作自动关机。  
开机界面为 ODO 状态,如下图:



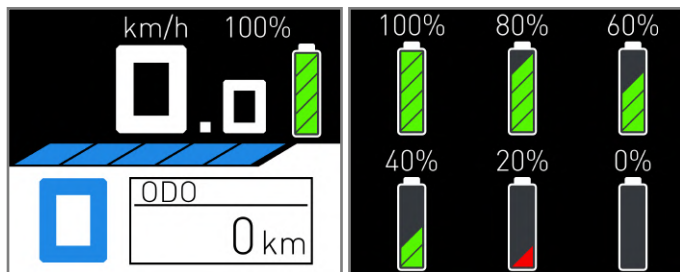
## 车速显示

显示实际骑行速度。



## 电池电量显示

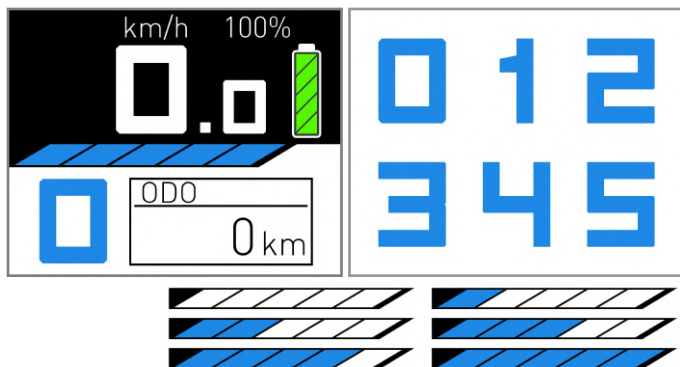
采用横向五段显示，每段约 20%电量。




## 助力比选择

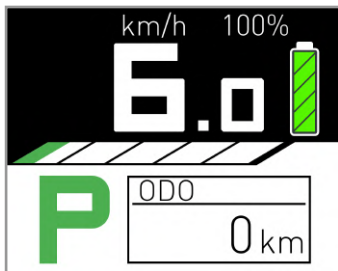
按下 **+** 或者 **-** 键切换 1-5 助力档位。档位 1 为最小助力，档位 5 为最大助力。

档位 0 为无助力。





## 推车模式选择

开启推车模式时，请确认助力档位处于 1~5 档。长按  按钮4秒打开推车模式。






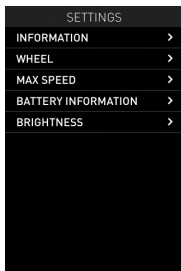
## 车灯控制

长按  键，车灯打开。  
再次长按  键，车灯熄灭。



# 设置

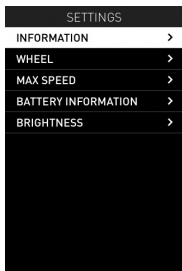
## 进入设置模式

按下  按钮以进入设置模式。在设置模式内，按下  按键来切换设置内容。长按  按钮退出设置模式。




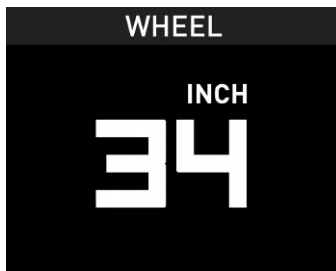
## 信息

进入设置模式后切换至 information 行，按下  按钮确认设置。长按  后保存设置并退出。




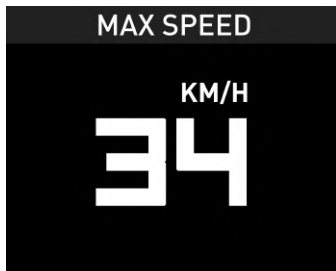
## 设置轮径

进入设置模式后切换至 wheel 行，按下  按钮确认设置。  
按下 **+** 或 **-** 按钮进行选择，轮径范围在 5 - 35 寸。  
长按 **-** 后保存设置并退出。




## 设置最高车速

进入设置模式后切换至第 max speed 行，按下  按钮确认设置。  
按下 **+** 或 **-** 按钮进行选择，最高车速范围在 10 - 60 km/h。  
长按 **-** 后保存设置并退出。




## 设置亮度

进入设置模式后切换至第 brightness 行，按下  按钮确认设置。  
按下 **+** 或 **-** 按钮进行调整亮度。  
长按 **-** 后保存设置并退出。



## 查看电池信息

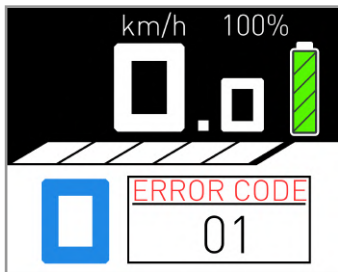
进入设置模式后切换至第 battery information 行，按下  按钮确认设置。  
长按 **-** 后退出。

BATTERY INFO	
Capacity	100%
Cycle Time	2131
Temperature	23°C
Remain Capacity	4444 mAh
Full Capacity	3333 mAh
Last Uncharged Time	12h
Max Uncharged Time	213h

# 错误

## 错误代码

一旦控制器有故障会在屏幕上显示当前故障代码。



下表为典型的匹配同盛中置电机时的故障显示代码

错误代码	故障原因
E01	无故障
E02	温度保护
E03	短路保护
E04	转把故障
E05	电机缺相
E06	力矩故障
E07	堵转故障
E08	欠压
E09	过压
E10	霍尔故障