

CAMMUS

C12说明书

C12 User Manual



保修说明

本产品保修时间为1年，只在中国境内大陆地区有效（除台湾、澳门、香港地区），凭借产品保修卡以及购买产品的有效发票或/及规定的其他有效凭证，用户可以在有效时间内享受到保修服务。为了您能享受到CAMMUS的保修支持，请勿人为对机器造成损坏，请勿脱离官方或官方授权相关人员的指导进行对机器或系统的非正常使用操作。

服务规定

- 保修卡丢失不补发，请妥善保管，在需要维修服务时请出示；
- 保修卡不承担其他责任，包括但不限于偶尔发生的或随之而来的损坏或预计会得到的利益或利润的损失、由于使用或无法使用产品导致的工作停止或损坏等情况下的任何责任；
- 维修服务中更换下来的零件，均不交还用户；
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- 保修卡中记载的内容如有与国家相关法律法规不符之处，以国家相关法律法规
- 法规的规定为准。

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- 不能出示有效发票或/及保修规定的其他有效凭证和保修卡的；（根据三包规定能够证明产品在保修有效期内的除外）
- 保修卡有涂改痕迹或记载的产品信息与产品实物不符的；
- 产品上条形码被损或有涂改痕迹的；
- 消耗材料的自然消耗、磨损及老化的；
- 雷击或其它用电系统原因造成故障的；
- 事故、灾害、战争等不可抗力因素造成故障的；
- 因用户行为（自行改装、修理、或由非卡妙思授权的第三方拆动、改装、维修等）而损坏的；

- 与产品一同使用的非产品自身配置的外设或附件的软件故障及其导致产品故障的；
- 非产品预装的第三方软件的使用故障及其导致产品故障的；
- 用于产品说明未明确声明与该产品兼容的产品而故障、损坏的；
- 由于进液、受潮、外力挤压、掉落等使用或保管不当造成故障的；
- 使用盗版软件或在使用过程中感染病毒造成故障的；
- 超过保修有效期的；
- 未按产品使用说明要求使用、维护、保管而造成故障的；
- 非卡妙思经销之产品的。

补充说明

- 首次使用或体验您的设备的人士须有该设备所有者进行指导。
- 头发、电缆、裙摆等宽松衣物或其他易缠结物应远离模拟器。
- 用户使用本产品进行模拟游戏活动，建议游戏结束30分钟后驾驶汽车。
- 本说明手册仅作为单款产品（包括单款产品下不同款式）通用说明手册，在本手册中演示产品仅作为产品说明不作销售说明使用，具体款式产品以用户购买的为准。

感谢您的阅读，祝您使用愉快。

本手册如有更新，恕不另行通知。您可以在CAMMUS官方网站及官方信息发布平台查询最新版本《用户手册》及其他资讯。www.cammus.com如您对本说明手册及CAMMUS全系产品有任何疑问和建议，请通过信息渠道联系我们。

再次感谢您对CAMMUS的支持

企业介绍

卡妙思于 2008 年成立，以“高科技、高精尖、高品质、高质量”的品牌服务，立足于汽车配件市场，是业内有目共睹的标杆企业。公司汇集了电动超跑、纯电动卡丁车、赛车模拟器、卡丁车模拟器、高性能零部件的研发制造、销售、高端服务于一体的高科技创新产业，坚持诠释赛车文化的卓越魅力。2014 年打造出中国第一台电动超跑 TITAN，以百公里加速 3.9s、最高时速 260km/h、续航里程 400km 的卓越性能，惊艳了 2016 年 2 月的发布会。2016 年传承 TITAN 超跑血统的领先三电技术核心奥秘，卡妙思打造了中国首屈一指的纯电动卡丁车，一个情怀落地的故事悄悄进行了到第五代。2021 年赛车模拟器、卡丁车模拟器先后上市，一经上市就获得了业界的各种好评和肯定。

注意事项

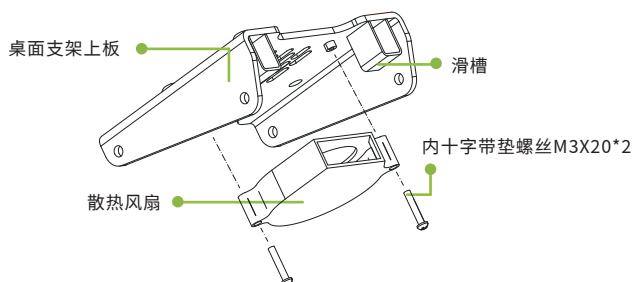


为了您更方便快捷的使用 CAMMUS C12，请您在安装使用前务必认真阅读本说明手册，它包含重要的产品与安全信息；请保留此手册以便后续有需要参考。

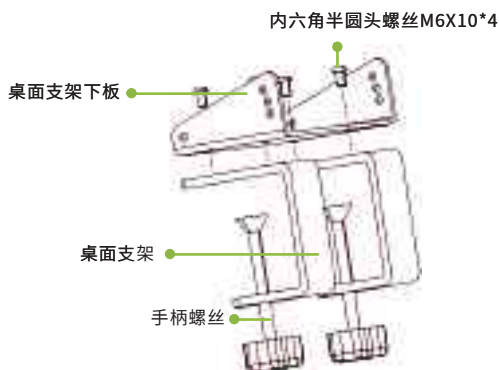
- 本说明书对CAMMUS开发、生产的方向盘适用。
- 游玩力反馈游戏时，建议游戏时间为60分钟，每20分钟休息5分钟，游玩时间不要超过120分钟。
- 用户首次使用时，请配合【使用说明】的步骤使用。
- 进入游戏时若反馈力过大无法控制，请立即停止游戏并及时调整。
- 本产品不适合16岁以下少年或儿童单独使用，必须由家长或监护人在身旁监督调试好合适的力反馈数据，在监管下使用设备。

使用说明

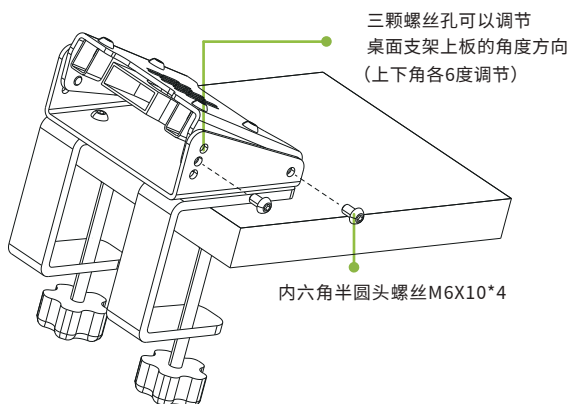
- ① 将散热风扇用对应螺丝安装到桌面支架上板上。



- ② 将桌面支架下板通过 4 颗对应螺丝和桌面支架固定在一起。

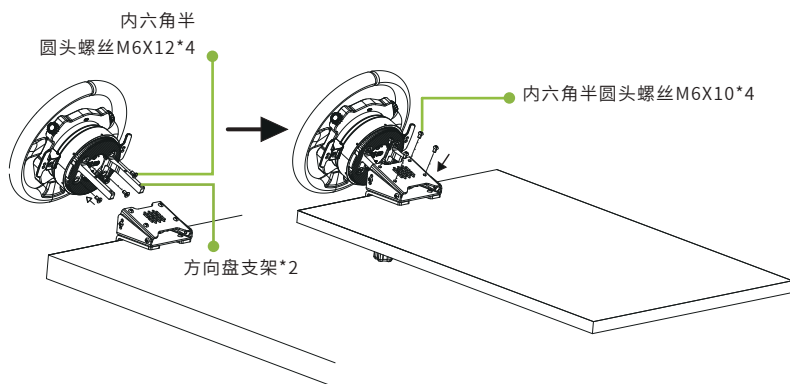


- ③ 将组装好的桌面支架上板通过 4 颗对应螺丝紧固在桌面支架下板上，然后通过两只手柄螺丝拧紧桌面支架跟桌面紧固一起。



- ④ 将方向盘整体通过 4 颗对应螺丝与方向盘支架连接在一起，再将连接好的整体方向盘组件通过滑槽插入桌面支架上板上，并通过 4 颗对应螺丝连接起来，完成桌面方向盘的安装。

(方向盘支架有 Logo 一面需要朝外，同时方向盘支架 T 形较短一端需朝向上方)



规格参数

基本数据

长宽高	300*300*106mm
方向盘	300圆盘/GTR盘
换挡拨片	碳纤维
基座主体材质	铝合金
裸机重	4.8kg
力反馈技术	直驱伺服电机 (12N·m)

功能键：共 22 个，详见下图



- ① 为 LED 转速灯 ② 为速度表 ⑪ 为 3D 摇杆 ⑫ 为 方向摇杆
 ⑮ ⑯ 为 拨片
 ⑤ ⑥ ⑨ ⑩ ⑬ ⑭ ⑰ ⑱ ⑳ 为 十个 功能 键 按钮
 ③ ④ 为 1 2 挡 旋 钮 ⑦ ⑧ ⑳ ㉑ ㉒ 为 编 码 器

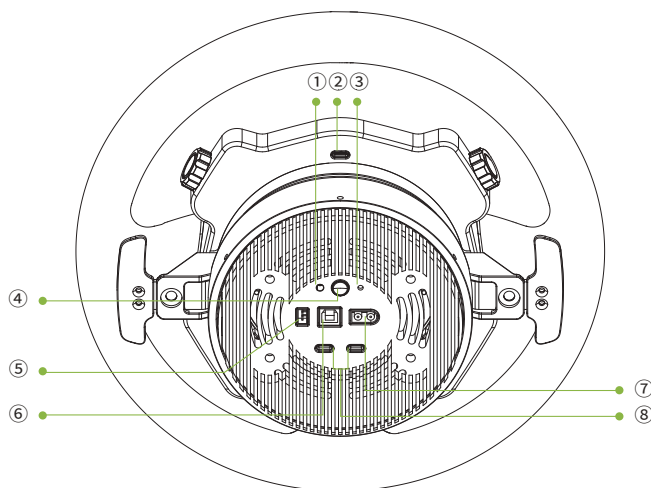
组合键使用介绍：

- 旋钮切换档位模式：共分为12档旋钮模式和加减档旋钮模式，可同时长按上方编码器 / 3-5秒，成功后会有一声蜂鸣，可以切换12档旋钮 / 为加减档模式，或在卡妙思桌面端应用界面可以切换档位模式。

注：功能键皆无预设功能，请在游戏内自定义功能后使用

方向盘背面接口详情：

接口详情参看图纸说明，如图所示；



- 1、RES: 复位键
- 2、预留口
- 3、指示灯
- 4、POWER: 电源开关
- 5、FAN: 风扇接口
- 6、USB: 用于与电脑通讯连接
- 7、DC INPUT: 电源输入口，输入DC24V，14.59A电源
- 8、USB: USB数据线接口，支持本公司或第三方USB设备接入。

开机：接通电源并摁下电源键，方向盘会自动转动进行自检，如果方向盘没有出现自动转动，请检查方向盘外接电源是否接通。

提醒注意，在C12电源键左侧有复位按键，注意不要误触。

关机：长按电源键3-5秒，方向盘上灯会全部熄灭，即已关机。

固件升级：可通过Type-C连接线与电脑进行链接，或连接上电脑后通过卡妙思应用后对方向盘进行固件升级。

包装清单

CAMMUS C12本体	*1
方口USB线	*1
电源适配器	*1
电源线	*1
T型支架	*1
工具包	*1
说明书+保修卡	*1

CAMMUS桌面端下载及安装

1.桌面端下载

①进入卡妙思官方网站 (<https://cammus.com.cn/download/>) 下载最新桌面端并安装。（卡妙思官网→服务支持→资料下载→点击最新桌面驱动下载）



2.桌面端安装

①根据安装提示进行安装；

②桌面端安装完成后，勾选所有必备环境驱动进行安装；



软件介绍及设备设置

设备接线后，打开安装好的桌面端，首页查看设备连接状态→设备页选择方向盘**设置方向盘中心**→参数页**设置基座机械回正值**→设备页选择踏板**设置踏板最大值、最小值**→启动游戏。

①首页：可查看各设备连接状态，快速启动游戏，同时可上传个人练习成绩数据。



②参数：基座设置界面，包括基座的基础设置及游戏效果设置。

入门玩家可通过调整基础设置迅速匹配合适的手感进行游戏，熟悉后可通过对游戏效果设置进行高阶，调校出专属力反馈效果。



③设备：主要查看、设置各设备工作状态，包括手刹、方向盘、踏板、动态座椅等的设备设置。



进入方向盘界面，设置方向盘中心。

④设置踏板最大/最小值：进入踏板设置界面，点击油门最小值，等待提示设置成功。此时踩满油门，保持住并点击最大值，直到提示设置成功；刹车、离合器同理。



⑤固件升级：可查看现有设备的固件版本。打开固件更新助手快速一键更新设备最新固件。



启动游戏及游戏设置

完成设备预设后启动游戏。进入游戏设置界面，设置轴及按键。

以神力科莎为例：



转向轴设置：点击设定，摆动方向盘，录入方向盘转向轴；

油门设置：点击设定，轻踩油门踏板，录入油门轴；刹车、离合同理；

拨片设置：升档按钮设置右边拨片，降档设置左边拨片。亦可按照个人习惯设置。

完成转向、踏板及拨片的基本设置，可满足游戏需求。CAMMUS 方向盘键位全部可自定义，玩家可根据自身喜欢进行游戏里的其他键位设置。

Warranty

The warranty period of this product is 1 year(except EURO,which is 2 years). With the product warranty card, valid invoice or/and other valid certificates for purchasing the product, users can enjoy the product within the valid period. In order for you to enjoy the warranty support of CAMMUS, please do not artificially damage the machine, and do not operate the machine or system abnormally under the guidance of the official or official authorized personnel.

Service Regulations

- The warranty card will not be reissued if it is lost, please keep it properly and present it when repair service is required.
- The warranty card does not assume other responsibilities, including but not limited to any accidental or consequential damage or loss of expected benefits or profits, work stoppage or damage due to use or inability to use the product, etc. responsibility.
- The parts replaced in the maintenance service will not be returned to the user.
- The calculation method of the validity period of the maintenance service is based on the date of purchase.
- If there is any discrepancy between the content recorded in the warranty card and the relevant national laws and regulations, the relevant national laws and regulations shall prevail.

Cases where warranty service is not performed

- Unable to produce valid invoices or/and other valid certificates and warranty cards stipulated in the warranty. (except for those that can prove that the product is within the validity period of the warranty according to the Three Guarantees regulations)
- The warranty card has traces of alteration or the recorded product information is inconsistent with the actual product.
- The barcode on the product is damaged or has traces of alteration.
- Natural consumption, wear and aging of consumable materials.
- Faults caused by lightning strikes or other electrical system reasons.
- Failures caused by force such as accidents, disasters, and wars.

- Damaged due to user behavior (self-refitting, repairing, or dismantling, refitting, repairing, etc. by a third party not authorized by CAMMUS).
- Software failure of peripherals or accessories that are not configured by the product itself and cause product failure.
- The use of third-party software that is not pre-installed on the product fails and causes product failure.
- It is used for failure or damage of products whose product instructions do not clearly state that they are compatible with the product.
- Faults caused by improper use or storage such as liquid damage, dampness, external force extrusion, drop, etc.
- Using pirated software or infecting with viruses during use causes malfunctions.
- Beyond the validity period of the warranty.
- Failure to use, maintain, and store according to the product instructions. Products not distributed by CAMMUS.

Supplementary Note

*People who use or experience your device for the first time must be guided by the owner of the device.

*Hair, Loose clothing, cables, skirts, or other objects easily damaged or wrapped around wheel, should be kept away from the simulator.

*For users who use this product for simulated game activities, it is recommended to drive the car 30 minutes after the game is over.

*This instruction manual is only used as a general manual for a single product.

*The products demonstrated in this manual are only used as product descriptions and not as sales instructions.

The specific styles of products are subject to the purchase of the user.

*This manual is subject to update without prior notice. You can check the latest version of "User Manual" and other information on the CAMMUS official website and official information release platform.

www.cammusracing.com If you have any questions or suggestions about this instruction manual and all CAMMUS products, please contact us through information channels.

Thank you again for supporting CAMMUS!

Enterprise Introduction

CAMMUS was established in 2008. With its brand service of "high technology, high precision, high quality, high quality", it's based on the auto parts market and is a benchmark enterprise in the industry that's obvious to all. The company brings together high-tech innovative industries integrating the R&D, manufacturing, sales, and high-end services of electric supercars, purely electric go-karts, racing simulators, go-kart simulators, and high-performance parts, and insists on interpreting the outstanding charm of racing culture. In 2014, TITAN, China's first electric supercar, was built. It amazed the press conference in February 2016 with its outstanding performance of 0-100km/h acceleration in 3.9 seconds, top speed of 260km/h, and cruising range of 400km. In 2016, inheriting the core secrets of TITAN supercar's leading three-electric technology, CAMMUS created China's leading purely electric kart. A story of emotional realization quietly progressed to the fifth generation. In 2021, the racing simulator and the kart simulator were launched successively, and once launched, they received various praises and affirmations from the industry.

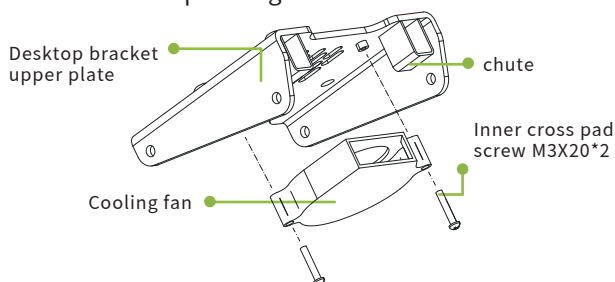
Note

In order for you to use the CAMMUS C12 more safely and effectively, please be sure to read this instruction manual carefully before installation and use. It contains important product and safety information; please keep this manual for reference when necessary.

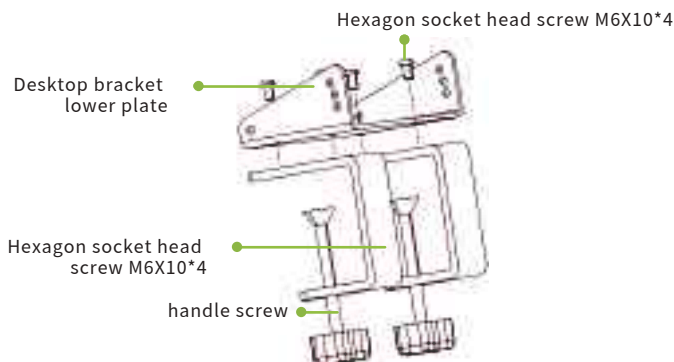
- This manual is applicable to steering wheels developed and produced by CAMMUS.
- When playing games with force feedback, it's recommended the user's game time is 60 minutes, with a 5-minute break every 20 minutes, and the game time should not exceed 120 minutes.
- When using it for the first time, please follow the steps in the [Instructions for Use].
- If the feedback force is too strong and cannot be controlled when entering the game, please stop the game immediately and make adjustments in time.
- This product is not suitable for use alone by teenagers or children under the age of 16. Parents or guardians must directly supervise and adjust the appropriate force feedback data for users under 16.

Hardware installation

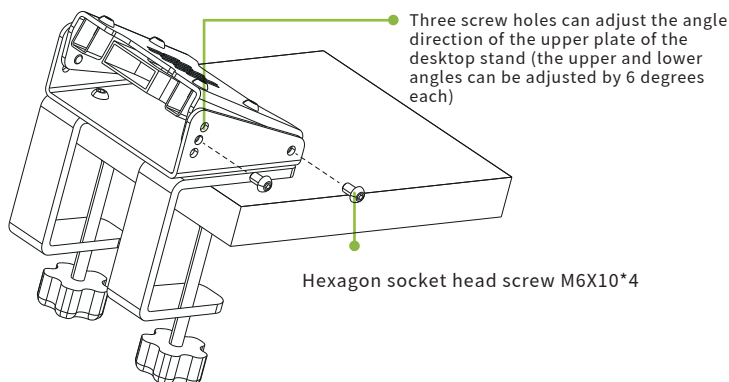
- 1 Install the cooling fan to the upper plate of the desktop bracket with the corresponding screws.



- 2 Fasten the lower plate of the desktop bracket to the desktop bracket with 4 corresponding screws.

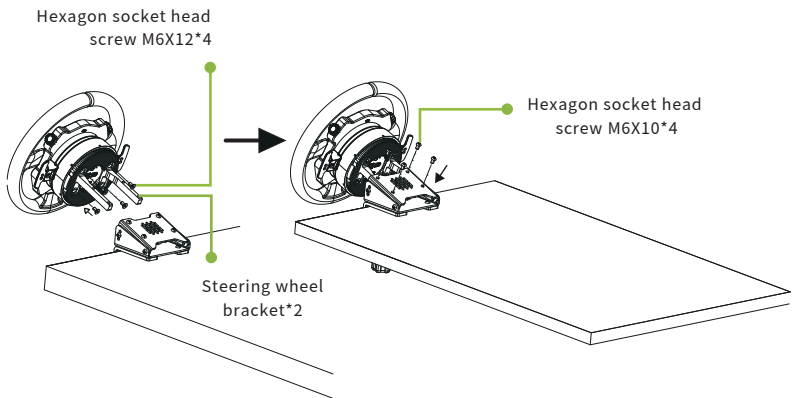


- 3 Fasten the assembled upper plate of the desktop bracket to the lower plate of the desktop bracket through four corresponding screws, and then tighten the desktop bracket and the desktop through two handle screws.



- 4 Connect the whole steering wheel to the steering wheel bracket through 4 corresponding screws, then insert the connected integral steering wheel assembly into the upper plate of the desktop bracket through the chute, and connect it with 4 corresponding screws to complete the installation of the desktop steering wheel.

(The side with the logo on the steering wheel bracket needs to face outwards, and the T-shaped shorter end of the steering wheel bracket needs to face upwards)



Specification parameters

Length, width and height	300*300*106mm
Steering Wheel	300 Round steering wheel/ GTR steering wheel
Paddle shifters	Carbon fiber
Wheelbase body material	Aluminum alloy
Bare metal weight	4.8kg
Force feedback technology	Direct drive servo motor (12N·m)

Function keys: 22 in total, see the figure below for details



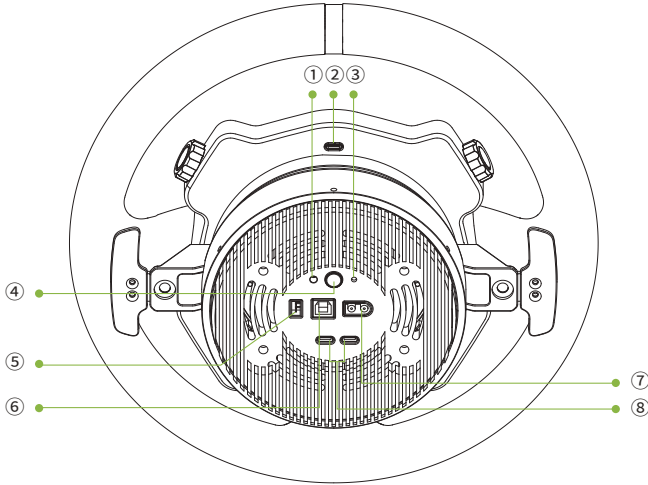
- ① LED speed light. ② Speedometer. ⑪ analog joystick. ⑫ Directional joystick.
- ⑬ ⑭ Paddle shifters
- ⑤ ⑥ ⑨ ⑩ ⑬ ⑭ ⑰ ⑱ ⑳ function key buttons
- ③ ④ 12-speed knobs. ⑦ ⑧ ⑳ ㉑ ㉒ encoder

Introduction to using key combinations:

Knob switching gear mode: There are 12 gear knob modes and plus and minus gear knob modes. You can press and hold the upper encoder at the same time for 3-5 seconds. There will be a buzzer after success, and you can switch the 12-gear knob mode to plus or minus gear mode, or you can switch gear mode in the CAMMUS desktop application interface.

Note: None of the function keys have preset functions. Please customize the functions in the game before using them.

Interface details on the back of the steering wheel:
For interface details, please refer to the drawing description, as shown in the figure;



- ① RES: reset button
- ② reserved port
- ③ Indicator light
- ④ POWER: power switch
- ⑤ FAN: fan
- ⑥ USB: usb data cable interface
- ⑦ DC INPUT: Power input port, input DC24V, 14.59A power supply
- ⑧ USB: USB data cable interface, supports the access of our company or third-party USB devices.

Power on: Connect the power and press the power button. The steering wheel will automatically rotate for self-test. If the steering wheel does not rotate automatically, please check whether the

external power supply of the steering wheel is properly connected.

Please note that there is a reset button on the left side of the C12 power button, so be careful not to accidentally touch it.

Shut down: Press and hold the power button for 3-5 minutes. All the lights on the steering wheel will go out, indicating that the machine is shut down.

Firmware upgrade: You can connect to the computer through a Type-C cable, or you can upgrade the steering wheel's firmware through the CAMMUS app after connecting to the computer.

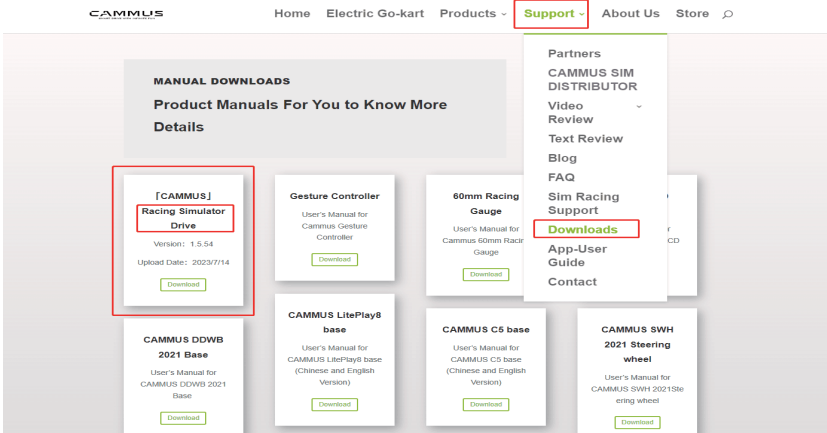
packing list

CAMMUS C12 body	*1
Square USB cable	*1
Power Adapter	*1
Power cord	*1
T-shaped bracket	*1
Tool kit	*1
Instruction manual + warranty card	*1

CAMMUS desktop download and installation

1.Desktop download

Enter CAMMUS official website (<https://cammusracing.com/downloads/>) to download the latest desktop and install it. (CAMMUS official website →download → click the latest desktop driver to download)



2.Desktop installation

- ① Install according to the installation prompt;
- ② After the desktop installation is complete, check all the necessary environment drivers to install;



Software introduction and equipment setting

After the device is connected, open the installed desktop, check the device connection status on the home page → select the steering wheel on the device page to set the center of the steering wheel → set the mechanical return value of the base on the parameter page → select the pedal on the device page to set the maximum and minimum pedal values → start the game.

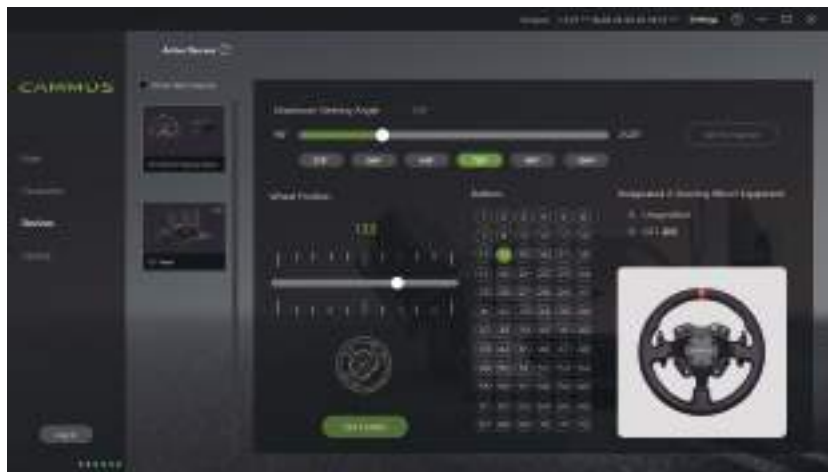
① Home page: You can check the connection status of each device, quickly start the game, and upload personal practice results da



② Parameters: Base setting interface, including basic settings of the base and game effect settings. Beginner players can quickly match the appropriate feel to play the game by adjusting the basic settings. After getting familiar with it, they can adjust the exclusive force feedback effect by making advanced game effect settings.



③Equipment: Mainly check and set the working status of each device, including equipment settings such as handbrake, steering wheel, pedals, and dynamic seats.



Enter the steering wheel interface and set the center of the steering wheel.

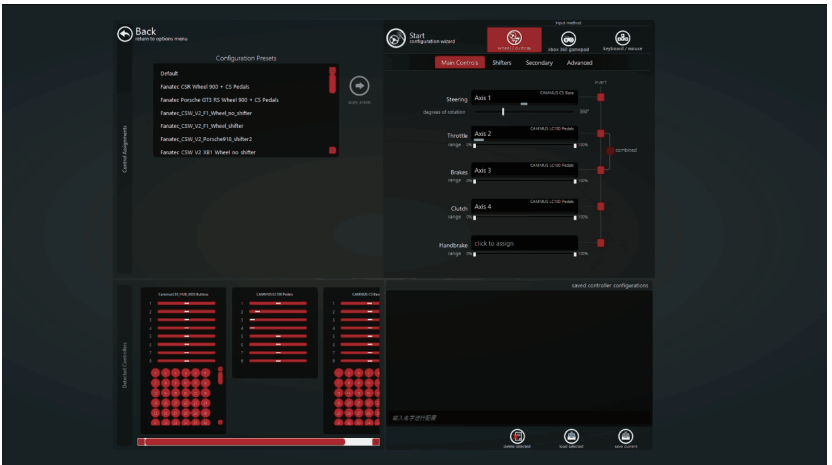
④Set the maximum/minimum value of the pedal: Enter the pedal setting interface, click the minimum value of the accelerator, and wait for the prompt that the setting is successful. At this time, step on the accelerator fully, hold it and click the maximum value until it prompts that the setting is successful; the same is true for the brake and clutch.





Start the game and game settings

Launch the game after device preset is done. Enter the game setting interface, set the axes and buttons. Take Assetto Corsa as an example:



Steering axis setting: click setting, swing the steering wheel, and enter the steering wheel steering axis;

Accelerator setting: click on the setting, lightly step on the accelerator pedal, and enter the accelerator shaft; brake and clutch are reasonable;

Paddle Settings: The upshift button sets the right paddle, and the downshift sets the left paddle. It can also be set according to personal habits.

Complete the basic settings of steering, pedals and paddles to meet the needs of the game. All CAMMUS steering wheel keys can be customized, and players can set other keys in the game according to their own preferences.

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.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: 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.

FCC Radiation Exposure statement

The device has been evaluatec to meel general RF exposure requirement. The device can be used in porlable exposure condition without restriction.

合格证

CERTIFICATE

Product number: _____

Inspector: _____

Production Date: _____

