

机车小子 G4_CEC 定制版本使用手册

Jiche Xiaozi G4_CEC Custom Edition User Manual

Version 1.0

1. 概述/Overview

该设备为 CEC 赛会专用定制版本，与普通 G4 功能不同。请勿自行替换。

该设备具备旗语发送能力，仲裁视频采集能力，数据回传能力。请车队按照本手册正确安装。

设备为免费发放，车队有妥善保管和正确收纳的义务。如归还时，有物理损坏或者缺失，请照价赔偿。

This device is a custom version exclusively for the CEC race series and differs from standard G4 units. Do not replace it with other versions.

This device is capable of flag signal transmission, race control video capture, and data telemetry. Teams must install the device correctly according to this manual.

The device is provided free of charge. Teams are responsible for proper care and correct storage upon return. Any physical damage or missing parts at the time of return must be compensated at the full price.

编号 Item No.	项目 Description	数量 Quantity	单价（人民币） Unit Price (RMB)
P1	机车小子 G4 主机 Main Unit	1	5200
P2	GPS 天线 GPS Antenna	1	50
P3	4G 小天线 4G Small Antenna	1	10
P4	电源线 Power Cable	1	200
P5	点烟器延长线 Cigarette Lighter Extension Cable	1	30
P6	副摄 Secondary Camera	1	200
P7	连杆 Connecting Rod	2	60
P8	防滚架球头 Roll Cage Ball Mount	2	60
P9	抱箍 Clamp	2	20

P10	包装箱 Storage Case	1	100
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表 1.1: 硬件配置单

Table 1.1: Hardware Configuration List



图 1.1: 零件组成

Figure 1.1: All parts

2. 安装/Installation

2.1. 电源配件 (P4、P5)

Power Accessories (P4, P5)

2.1.1. 设备使用 12 伏电源供电，如连接错误，烧坏设备，则需要照价赔偿

The device uses a 12V power supply. Incorrect connection that burns out the device must be compensated at full price.

2.1.2. 将点烟器延长线 (P5) 的红色线头，连在电瓶正极，黑色线头连在电瓶负极。如下图

Connect the red wire of the cigarette lighter extension cable (P5) to the battery positive terminal, and the black wire to the battery negative terminal, as shown below.



图 2.1: 电瓶搭线

Figure 2.1: Battery Connection Diagram (Original figure reference)

注意：请勿使用原车自带点烟器插座（防止熄火后断电关机）

Note: Do not use the vehicle's original cigarette lighter socket (to prevent power loss when the engine is turned off).

2.1.3. 将电源线（P4）插入点烟器延长线（P5），并将电源线上的开关置于打开状态

Insert the power cable (P4) into the cigarette lighter extension cable (P5), and set the switch on the power cable to the ON position.



图 2.2: 电源线插入点烟器座、开关打开

Figure 2.2: Power Cable Insertion and Switch ON (Original figure reference)

2.2. 主机与连杆（P1、P7、P8、P9）

Main Unit and Connecting Rod (P1, P7, P8, P9)

2.2.1. 将主机与连杆连接，如下图：

Connect the main unit to the connecting rods as shown below.



图 2.3 主机（P1）与连杆（P7、P8）装配好的合影
Figure 2.3: Assembled Main Unit (P1) with Rods (P7, P8) (Original figure reference)

2.2.2. 将装配好的主机，绑定在防滚架下图位置：

Mount the assembled main unit on the roll cage at the position shown below.



图 2.4：建议的安装位置
Recommended Mounting Position (Original figure reference)

2.2.3. 将电源线（P4）的红色插头插入主机红色插头，设备会自动开机

Insert the red connector of the power cable (P4) into the red port of the main unit. The device will automatically power on.



图 2.5：电源线插入主机
Power Cable Connected to Main Unit (Original figure reference)

注：如设备超过 30 秒未开机，请立即检查点烟器延长线是否反接

Note: If the device does not power on after 30 seconds, immediately check if the cigarette

lighter extension cable is reversed.

2.2.4. 将 GPS 天线（P2）连接主机，天线插座在主机后盖，GPS 天线应当吸附在车顶，上方无遮挡

Connect the GPS antenna (P2) to the main unit. The antenna socket is on the rear cover of the main unit. The GPS antenna should be mounted on the roof with a clear view of the sky.

2.2.5. 将 4G（P3）小天线，拧上主机侧面的孔位，如下图

Screw the 4G small antenna (P3) onto the threaded port on the side of the main unit, as shown below.



图 2.6: 4G 天线的安装

Figure 2.6: 4G Antenna Installation (Original figure reference)

2.2.6. 将副摄与球头，如下图连接

Connect the secondary camera to the ball mount as shown below.



图 2.7: 摄像头的连接
Camera Connection (Original figure reference)

2.2.7. 将连接好的副摄与球头，安装在防滚架指定位置，从驾驶员后方，对准前方风挡
Install the assembled secondary camera and ball mount on the roll cage at the designated position, aiming from behind the driver toward the front windshield.

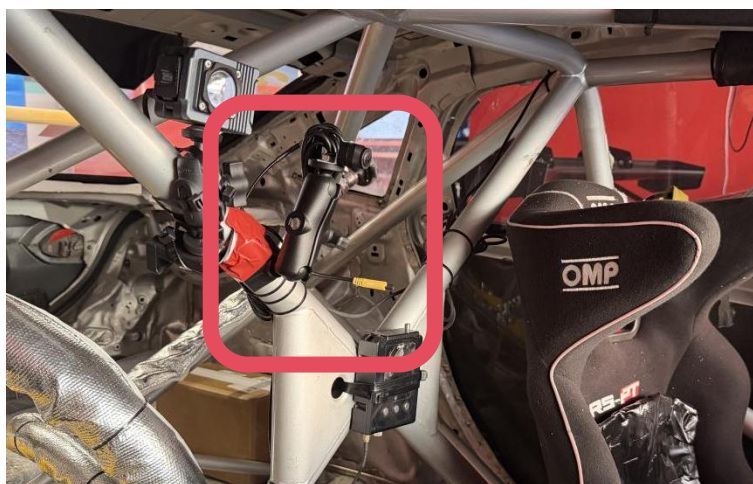


图 2.8: 摄像头的固定位置
Figure 2.8: Camera Mounting Position (Original figure reference)

2.2.8. 将线束沿着防滚架绑好固定
Secure the cables along the roll cage with ties.

3. 使用/Usage

赛前，车队应当确保电源（P4）开关处于打开状态，屏幕启动
并且，车队有义务确认设备的 4G 天线、GPS 天线、副摄，在正确位置
赛后，车队自行关闭电源开关（P4），避免电瓶亏电
车队不可自行修改设备参数、插拔主机内的 SIM 卡及 TF 卡
上述细节为车队自行确保，如使用不当造成的处罚、仲裁后果，由车队承担

Before the race, the team must ensure the power cable (P4) switch is ON and the screen has started.

The team is responsible for confirming that the 4G antenna, GPS antenna, and secondary camera are in the correct positions.

After the race, the team must turn off the power switch (P4) to avoid draining the battery.

Teams must not modify device parameters, or remove/insert the SIM card or TF card inside the main unit.

The above details must be ensured by the team. Any penalties or arbitration consequences resulting from improper use shall be borne by the team.

4. 回收/Return

结束之后，车队应负责将上述设备清点，收纳，如下图方式收纳到包装箱内交还
After the event, the team must inventory all equipment listed above and store it in the storage case as shown in the diagram below before returning.



图 4: 收纳

Figure 4: Storage Diagram (Original figure reference)