

DataLinkBox G3
USER MANUAL



Thank you for purchasing the product! This product is a brushless propulsion system debugging tool, designed to be used with a brushless propulsion system. The brushless propulsion system delivers powerful performance, but improper use can result in personal injury or equipment damage. Therefore, we strongly recommend reading this manual thoroughly before use and strictly following the prescribed operating procedures. We are not responsible for any damages arising from the use of this product or unauthorized modifications, including but not limited to compensation for incidental or indirect damages.



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01 Introduction

The DataLinkBox G3 is a communication device that integrates data collection, storage, and transmission. When used with the operating software, it enables real-time monitoring of the propulsion system's operation and records flight status data. The DataLinkBox G3 helps users analyze ESC usage data, upgrade ESC programs, and adjust parameters, fulfilling personalized setup needs and significantly enhancing the safety and reliability of the aircraft.

02 Product Features

- Compared to previous versions, DataLinkBox G3 adds Bluetooth functionality, enabling basic parameter adjustments via Bluetooth connection with the app.
- DataLinkBox G3 also introduces throttle output, which can be set via the app, computer software, or a switch. After setting, the function can be enabled by using either the software interface or the throttle slider.
- The app enables real-time status data reading without complex wiring connections.
- Advanced features require the desktop software and a USB connection between the computer and the DataLinkBox G3 for operation.
- The LED indicator colors provide quick insight into the DataLinkBox's usage status. For details, refer to the LED color indicator table.

03 Specifications

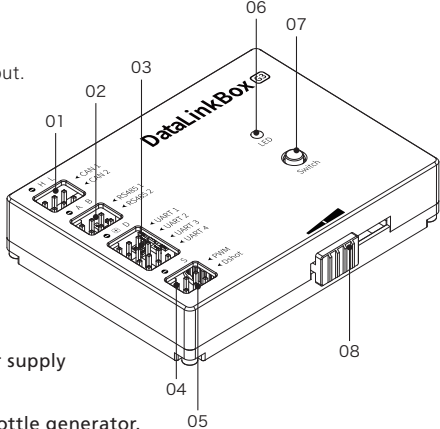
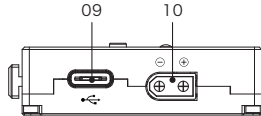
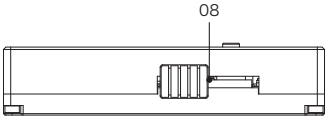
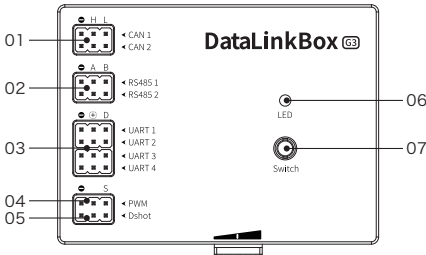
MODEL	DataLinkBox G3
Dimensions	67*52.8*15mm
Operating Voltage	6~81V
Weight	50g

04 Interface Description

- CAN1 and CAN2: ESC CAN data cable input ports. These two ports serve as backups for each other, and either one can be used.
- RS485 1 and RS485 2: ESC RS485 data cable input ports. These two ports serve as backups for each other, and either one can be used.
- UART 1~4: ESC serial data cable input ports. These four ports serve as backups for each other, and either one can be used.
- PWM: the PWM signal output port. When the ESC PWM throttle signal cable is connected, it outputs the PWM signal.
- Dshot: the Dshot signal data interface. When the ESC Dshot throttle signal cable is connected, it communicates data with the Dshot ESC mutually.
- LED: The LED indicators flash in different colors to indicate different operation statuses.
- Switch: Press the switch three times quickly to unlock throttle output; press it twice to disable throttle output.
- Throttle slider: After unlocking with the switch, the throttle slider can be slid left or right to adjust the throttle output.
- Type-C Interface: Use a data cable to connect to the computer for software upgrades or parameter adjustments.
- XT30 power input.

Note:

- For wire order, see the relevant ESC signal wire color definitions.
- Select the appropriate debugging interface based on the ESC's external communication type. For instance, for ESCs with CAN functionality, use CAN1 or CAN2 for upgrades or parameter adjustment.
- The throttle signal output requires proper software settings or button operations (refer to specific ESC manuals or video tutorials for detailed instructions).
- When powering the DataLinkBox G3, either the Type-C or XT30 port can be used; a redundant power supply is not required. Make sure that the operation is within the operating voltage.
- The Dshot function does not support ESC parameter adjustment for FPV drones, only serving as a throttle generator.



05 LED Color Indicator Information

DataLinkBox G3 Mode	DataLinkBox G3 Status	LED Color Indication
Data Collection	The SD card is abnormal when the DataLinkBox G3 starts up.	The blue LED blinks once slowly.
	The SD card operates normally when the DataLinkBox G3 starts up	The green LED blinks once slowly.
	The SD card is abnormal when the DataLinkBox G3 is running.	The red LED blinks once slowly.
Upgrade Function	The DataLinkBox G3 firmware is being upgraded.	The purple LED blinks twice.
	The serial port ESC firmware is being upgraded.	The cyan LED blinks twice.
	The CAN ESC firmware is being upgraded.	The yellow LED blinks twice slowly.
U-disk Function	The Type-C cable connects to the computer, and the DataLinkBox G3 enters the U disk mode.	The green LED blinks once slowly.
RTC	The battery level is insufficient.	The red LED flash alternately fast and slow
	The RTC initialization fails.	The red LED blinks quickly.
Bluetooth Error	The communication is abnormal.	The yellow LED blinks once slowly.

06 Function Description

This manual provides an introduction to the DataLinkBox G3 basic functions. Due to various ESC models and an extensive range of function adjustments, please refer to the relevant usage tutorials or videos for more information. These can be accessed via the following channels:

- HobbyWing Official Website <https://www.hobbywing.com>;
- Contact official technical support and customer service;
- Contact HobbyWing's authorized dealers.

07 After-Sales Service

If the device is damaged, please contact HobbyWing customer service immediately. Unauthorized disassembly, repair, or modification is strictly prohibited. The manufacturer will not be responsible for any consequences resulting from such actions.

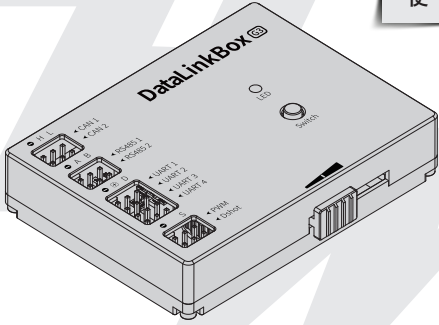
Resources & Specifications

Visit www.hobbywing.com/en/products/datalinkbox-g3 for more details about HOBBYWING DataLinkBox G3



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DataLinkBox G3
使用说明书



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HW-SMD801DUL00

01 简介

数据盒（DataLinkBox G3）是集数据采集，数据存储，数据发送为一体的通信设备，配合操作软件实时监控动力系统运行，记录飞行状态数据；数据盒（DataLinkBox G3）有利于帮助用户分析电调使用数据，通过升级电调程序以及调参操作，满足个性化设置需求，并极大增强飞行器安全可靠。

02 产品特点

- DataLinkBox G3相较于之前版本，新增蓝牙功能，并可以通过蓝牙连接APP调试基础参数；
- DataLinkBox G3相较于之前版本，新增油门输出功能，可通过APP / 电脑软件 / Switch开关设置后在软件界面或油门滑块均可实现；
- 新增APP也可读取实时状态数据，无需繁杂线路连接；
- 高级功能参数需在电脑版软件，并通过USB线连接电脑与数据盒方可实现；
- LED灯色可快速了解DataLinkBox G3使用状态，详情可查询LED灯色指示信息表。

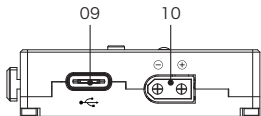
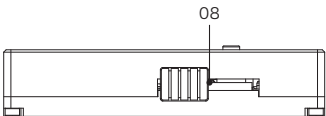
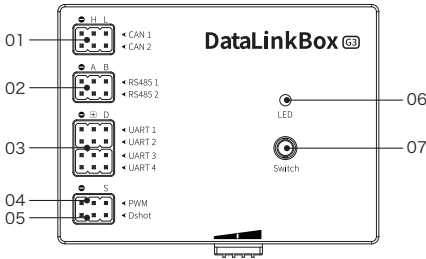
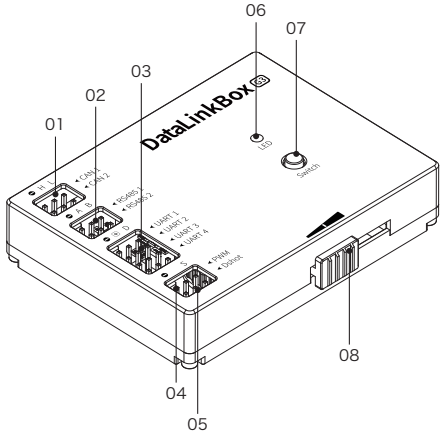
03 规格尺寸

型 号	DataLinkBox G3
外形尺寸	67*52.8*15mm
使用电压	6~81V
重量	50g

04 接口介绍

1. CAN1 与CAN2为电调CAN数据线接口，两个接口互为备份，使用时接入任意一个即可；
2. RS485 1 与RS485 2为电调RS485数据线接口，两个接口互为备份，使用时接入任意一个即可；
3. UART 1~4 为电调串口数据线接口，四个接口互为备份，使用时接入任意一个即可；
4. PWM 为PWM信号输出口，电调PWM油门信号线接入时，对外输出PWM信号；
5. Dshot为Dshot信号数据接口，电调Dshot油门信号线接入时，和Dshot电调互相进行数据通信；
6. LED灯，不同的使用操作以闪烁式和不同的颜色指示；
7. Switch开关，连续短按三次解锁油门输出，连续短按两次关闭油门输出；
8. 油门滑块，待使用Switch开关解锁后，可以左右滑动调节输出油门大小；
9. Type-C接口，通过数据线连接可以电脑端软件实现升级或调参交互功能；
10. XT30电源接口。

- 注：1. 线序定义需查阅相关电调的信号线颜色定义；
2. 根据电调对外通讯类型的具体情况，选择可调试的接口，如带CAN功能的电调，则使用CAN1或CAN2进行升级或调参；
 3. 油门信号输出口使用时，需要根据软件设置或按键操作方可正常使用（详细可参考具体电调使用教程或视频教学内容，此处不赘述）；
 4. 当给数据盒供电时，Type-C或XT30其中一路即可，无需重复供电，并请在电压范围内使用；
 5. Dshot功能不支持穿越机电调调参，仅能当油门发生器使用。



05 LED灯色指示信息

DataLinkBox G3模式	数据盒状态	LED灯指示
数据采集	DataLinkBox G3启动时SD卡异常	蓝灯单慢闪
	DataLinkBox G3启动时SD卡正常	绿灯单慢闪
	DataLinkBox G3运行中SD卡异常	红灯单慢闪
升级功能	DataLinkBox G3设备固件升级	紫灯双闪
	串口电调固件升级	青灯双闪
	CAN电调固件升级	黄灯双闪
U盘功能	Type-C数据线连接电脑进入U盘模式	绿灯单慢闪
RTC	电池电量不足	红灯快慢交替闪
	RTC初始化没有成功	红灯快闪
蓝牙异常	通信异常	黄灯单慢闪

06 功能介绍

本说明书只做DataLinkBox G3基本功能介绍，因涉及多种类的电调型号、多种功能调参，可查询相关使用教程或使用视频，您可通过以下渠道获取：

1. 好盈官网<https://www.hobbywing.com>；
2. 联系官方技术支持及售后；
3. 好盈授权代理商。

07 售后维修

设备损坏请及时联系好盈售后客服，禁止用户自行拆解维修改造，若造成任何后果，厂家不承担任何责任。