

DATA LINK USER MANUAL

Thanks for purchasing T-MOTOR product. Please read this manual carefully before use, and abide by its rules.

1. INTRODUCTION

DATA LINK is a communication facility of ALPHA ESC for data collection, storage, and transmission. Together with the FC, DATA LINK is capable of real-time monitoring and logging of the propulsion system for purposes such as failure data analysis and operational conditions, further elevating aircraft safety. DATA LINK can also be used to change settings of ALPHA ESCs to match various motors.

2. NOTE

When using DATA LINK, please make sure ESC, DATA LINK and other devices are connected to a common ground.

3. SIZE

55.3*36.3*12.8mm.

4. PORTS AND CONNECTION METHODS

①. D1-D8 for ESC Upgrade.

“+” is for red wire; “D1” is for white wire;
“-” is for black wire; “R1-R8” is for yellow wire.

②. ECS Upgrade Cable Connection to D1-D8 Port for Data Transmission.

TX1 RX1 is a 115200 BPS data transmission serial port of ESC slow serial port integration data. It can be connected to T-MOTOR WIFI LINK for real-time graphical data from DATALINK in PC and phone-based applications.

TX2 RX2 is 1MBPS data transmission serial port of real-time data transmission for 8 ESCs which includes serial port data and RPM. It can be connected to other devices like FCs.

③. KEY

Please press “KEY” when DATA LINK is connected to PC end for the first time, and cannot be recognized.

④. Power Supply

2-12S LIPO.

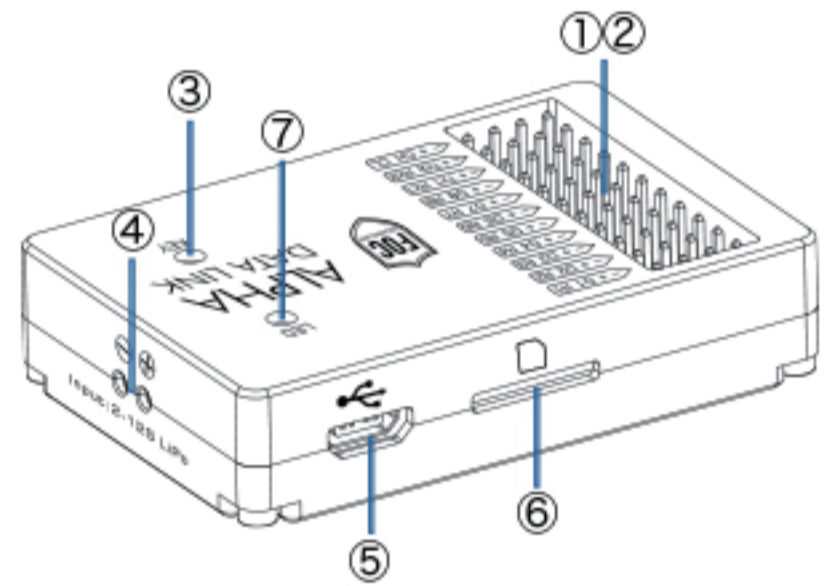
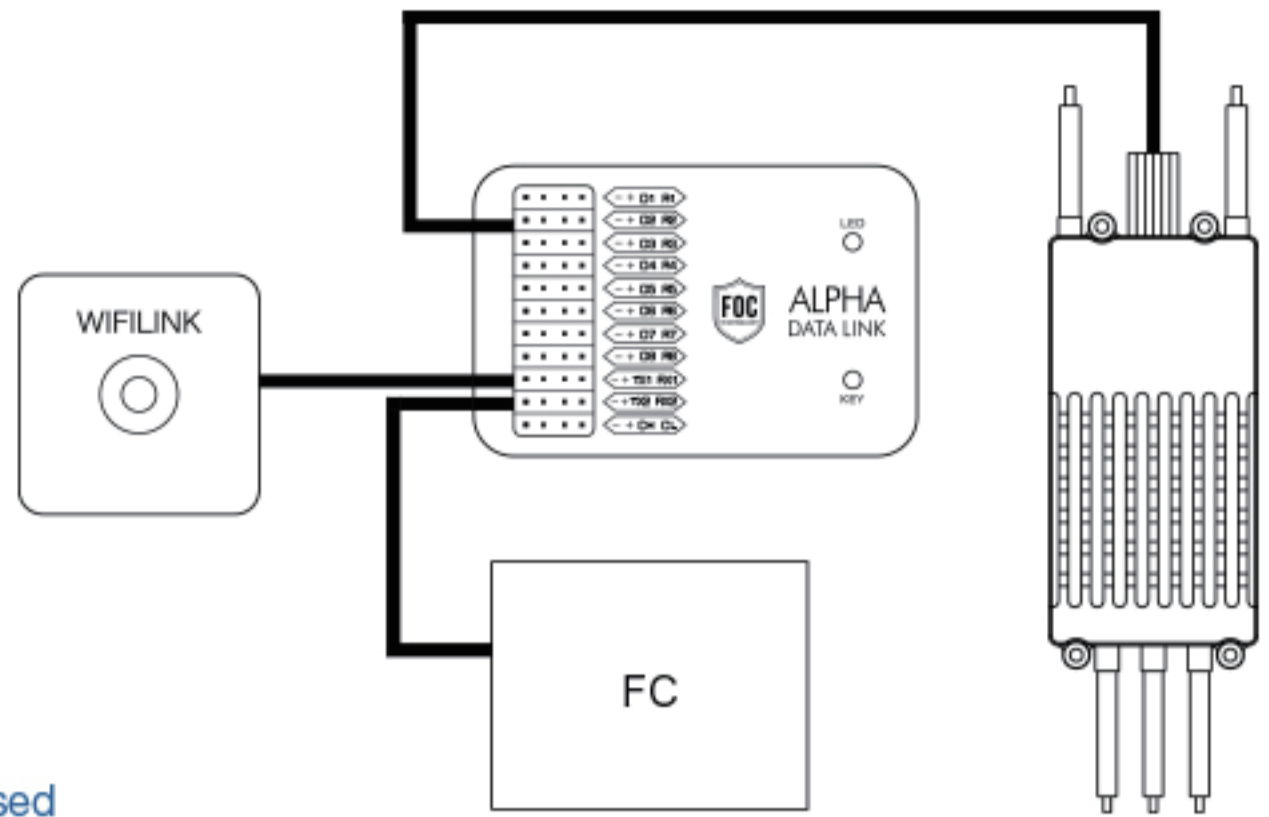
⑤. USB Interface

Connection to PC end for adjustment of matching motor or data transmission.

⑥. SD Card Slot

Insert SD card.

⑦. LED Light



LED Signal	Signal Explanation
LED light (pink)-quick flash twice	The upgrading application-USB LINK is in operation. DATA LINK is connected to PC via USB for firmware upgrade.
LED light (pink)-slow flash once	ESCs are being upgraded.
LED light (green) -on	DATA LINK is being upgraded.
LED light (pink)-quick flash once	Firmware upgrade of DATA LINK is finished.
LED light (yellow)-slow flash once	DATA LINK is in USB flash disk mode.
LED light (red)-quick flash once	Trouble warning light. No SD card is inserted in DATA LINK or SD card malfunctioned in USB flash disk mode.
LED light (blue)-slow flash once	Normal data transmission status.
LED light (red, green,blue) -alternate flash	Please press “KEY” to turn it on and install HID driver when DATA LINK is connected to PC end for the first time, and it cannot be recognized.

5. INSTRUCTIONS

①. Data Transmission and Storage Mode.

When DATA LINK is powered (and USB end is not connected) it enters into data collection and transmission mode.

②. USB Flash Disk Mode.

DATA LINK is connected to PC end via USB (TM-LINK in PC end remains unopened).

③. ESC Programming.

A. Open TM LINK on PC end and switch to ESC mode.

B. Connect DATA LINK to PC end via USB.

C. Connect ESC upgrading wires to any ports of D1-D8.

D. Power the ESC on.

E. Enter program mode to check the current version of ESC software or programme the ESC for the corresponding motor type.

Notice: When programming ESC, please power the ESC on and make sure all are properly connected.

④. DATA LINK Upgrade.

A. Open TM LINK on PC end and swift to DATA LINK mode.

B. Upgrade DATA LINK after connecting it to PC end.

Notice: Please keep USB connected when upgrading DATA LINK!

Attention: Please press “KEY” to turn on DATA LINK when it is connected via USB to PC end, and cannot be recognized.

LED light flashing red, green, and blue alternatively signals that USB HID driver is ready for installation. For USB HID driver installation, please set DATA LINK as “USB input device driver” in device manager. Power cycle the DATA LINK after installation.