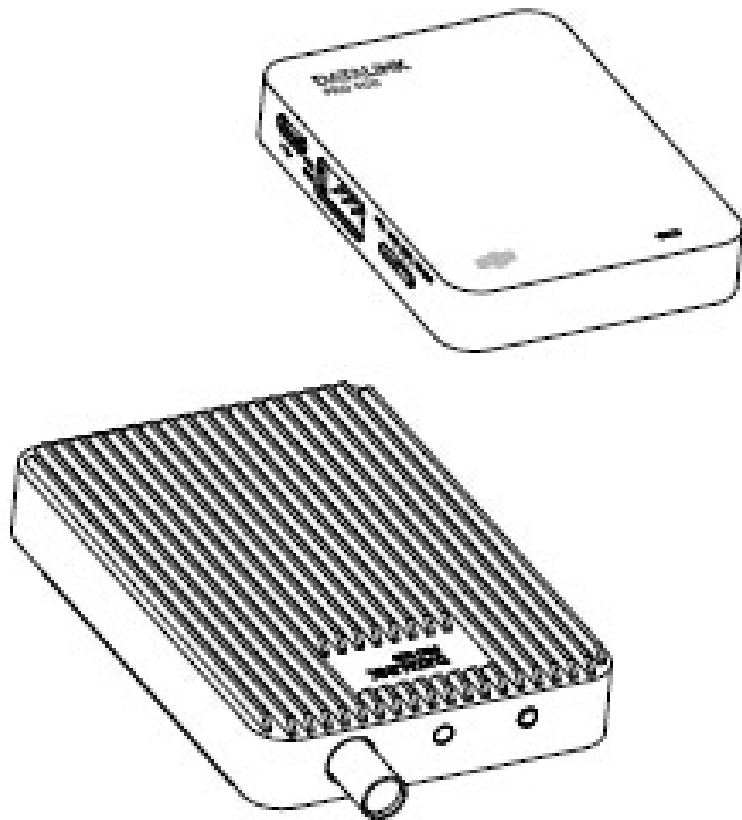


DATALINK PRO

Quick Start Guide



Disclaimer

Thank you for purchasing the Datalink Pro (hereinafter referred to as “product”). Read this disclaimer carefully before using this product. By using this product, you hereby agree to this disclaimer and signify that you have read it fully. Please install and use this product in strict accordance with the User Manual. SZ DJI Technology Co., Ltd. and its affiliated companies assume no liability for damage(s) or injuries incurred directly or indirectly from using, installing or refitting this product improperly, including but not limited to using non-designated accessories.

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This disclaimer is produced in various languages. In the event of variance among different versions, the Chinese version shall prevail when the product in question is purchased in Mainland China, and the English version shall prevail when the product in question is purchased in any other region.

Warnings

1. Only use the Datalink Pro in the corresponding frequency band and in accordance with local laws and regulations.
2. Ensure all modules are connected and the parameters are set correctly in DJI Assistant 2 when using the Datalink Pro for the first time.
3. DO NOT bend or fold the antennas excessively.
4. Ensure the antennas for both the mobile station and the Base Station are unobstructed when used.
5. Only use the Datalink Pro in an open environment free from radio interference.
6. Only pair the Datalink Pro Base Station with a mobile station in the same frequency band. Note that the 400M Datalink Pro and 900M Datalink Pro are not compatible.
7. When upgrading the firmware, toggle the 4-position switch to the COMBO_SW4 position, connect the module to the PC, and then run DJI Assistant 2.
8. To avoid interference, DO NOT use a two-way transceiver or walkie-talkie operating near the 400 MHz band when operating the 400M Datalink Pro.
9. Only use genuine DJI parts or parts certified by DJI. Unauthorized parts or parts from non-DJI-certified manufacturers may cause system malfunctions and compromise safety.
10. Ensure the Datalink Pro and its components are free from contamination (e.g. water, oil, soil and sand).

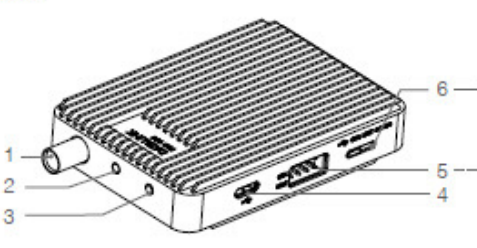
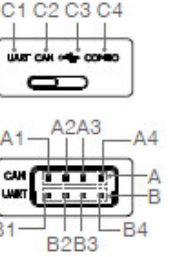
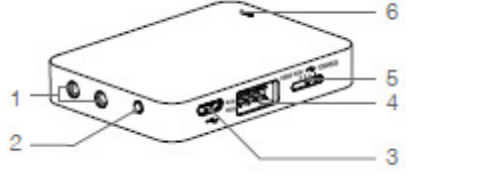
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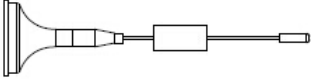
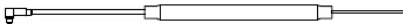
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About

The Datalink Pro is used for wireless data transmission, including communication between the Mobile Station and Base Station. There are 400M and 900M versions to meet the requirements of different regions. The multi-functional bidirectional transmission link is perfect for the DJI A3 flight control system, D-RTK and Ground Station. Use frequency bands of near 400 MHz and 900 MHz to avoid radio interference with the DJI Lightbridge and remote controller. Support for multiple interfaces, such as USB, CAN and UART, offers additional connectivity.

Part Description *

Base Station	
	
1. Antenna Interface 2. Working Status Indicator 3. Linking Button 4. Micro USB 5. 8-pin Port A. CAN port with baud rate of 1 Mbps. - A1: Power (DC9V input) - A2: GND - A3: CAN-H - A4: CAN-L	B. UART port with baud rate up to 115200 bps, working in TTL level logic of 3.0–3.3V (compatible with 5 V, but not recommended to work at 5 V long term). - B1: Power (DC9V input) - B2: GND - B3: UART-RX - B4: UART-TX 6. 4-position Switch - C1: UART_SW1 - C2: CAN_SW2 - C3 : USB_SW3 - C4 : COMBO_SW4
Mobile Station	
	1. Antenna Interface 2. Linking Button 3. Micro USB 4. 8-pin Port (Definition is the same as the Base Station) 5. 4-position Switch (Definition is the same as the Base Station) 6. Working Status Indicator
Base Station Antenna*	

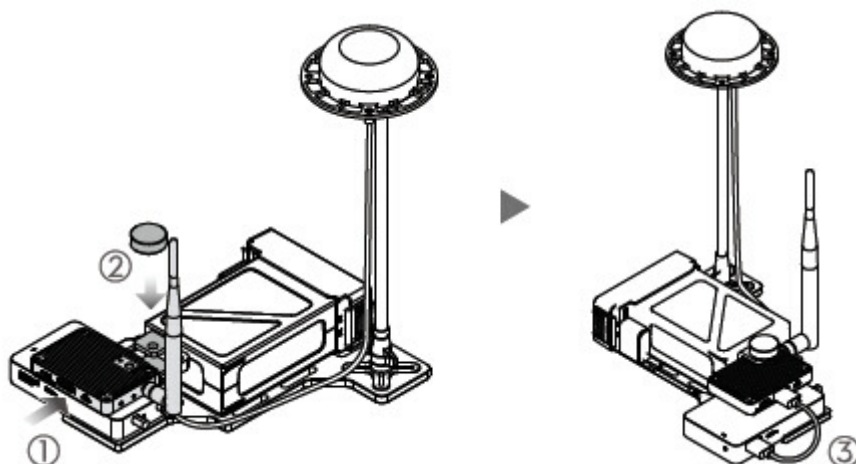
 400M Antenna ×1	 900M Antenna×1
Mobile Station Antenna *	
 400M Antenna ×3(1pcs for standby)	 900M Antenna×3(1pcs for standby)
Accessories	
 8-pin Cable x 2	 Micro USB Cable x 1
 Double-sided tape	

*The 400M and 900M Datalink Pro use different antennas but have the same functions.

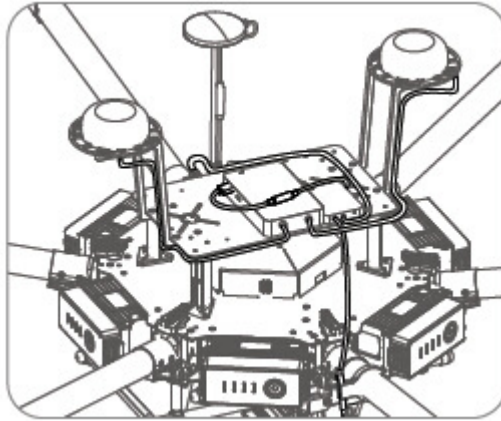
Installation and Connection

The following uses the 900M Datalink Pro, DJI Matrice 600, D-RTK and DJI Intelligent Flight Battery to illustrate a typical installation and connection.

1. Attach the Base Station antenna and install it on the D-RTK Ground System's base board with a screw (included with the D-RTK product). Then connect the Base Station and the D-RTK Ground System via an 8-pin cable.



2. Install the Mobile Station to the DJI Matrice 600 with double-sided tape. Attach the antennas to the Mobile Station and fix them to the landing gears with two clips. Then connect the Mobile Station and the D-RTK Air System via an 8-pin cable.



Notes:

1. Be sure to toggle the 4-position switch to the UART_SW1 position if using the D-RTK, otherwise the D-RTK may fail to receive data from the Datalink Pro.
2. Refer to the “D-RTK Quick Start Guide” for details if using the D-RTK.

Usage

Use the Datalink Pro in an open environment free from radio interference.

Linking Procedures

Base Station and Mobile Station are linked before leaving the factory.

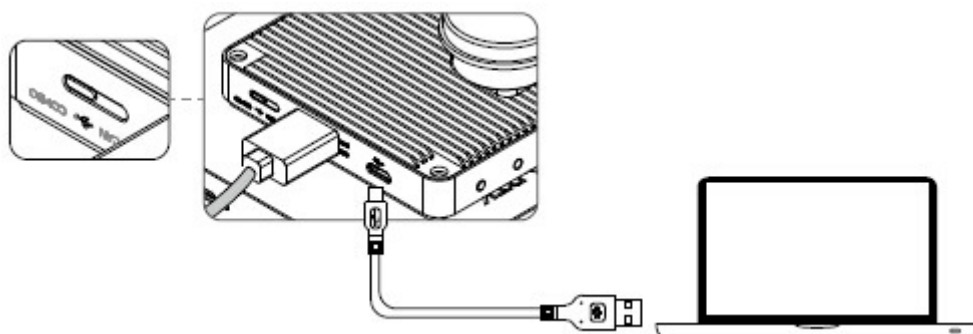
Note that frequency linking is required if any device is changed or added.

1. Enable the D-RTK Ground System’s battery to power on the Datalink Pro Base Station.
2. Hold the Base Station’s Linking Button for about 3 seconds to enter the linking mode with the Working Status LED blinks red and green alternatively.
3. Enable the D-RTK Ground System’s battery to power on the Datalink Pro Mobile Station.
4. Hold the Mobile Station’s Linking Button for about 3 seconds and wait for linking.
5. The Base Station and Mobile Station will connect with each other if successfully linked.
6. Follow procedures 2–5 to link other Mobile Stations to set up a single-to-multiple system.

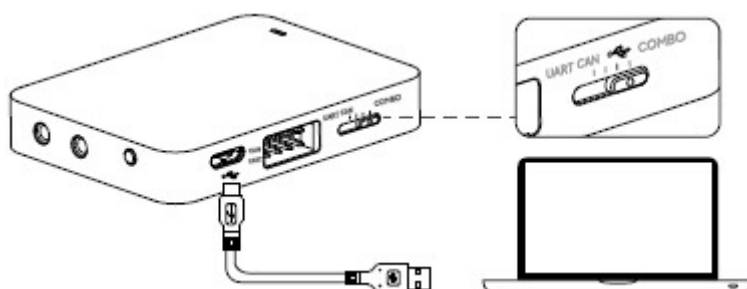
Configuring Parameters Using the DJI Assistant 2

DJI Assistant 2 should be used to upgrade the Datalink Pro. Full Duplex Mode and Broadcast Mode can be switched in DJI Assistant 2

1. Download DJI Assistant 2 from www.dji.com and install it on your computer.
2. Toggle the 4-position switch to the COMBO_SW4 position, connect the Base Station to the computer with DJI Assistant 2 launched, and then configure parameters according to the message prompts.



3. Configure the Mobile Station in the same way. If multiple Mobile Stations are used, you must configure each Mobile Station one by one.



Notes:

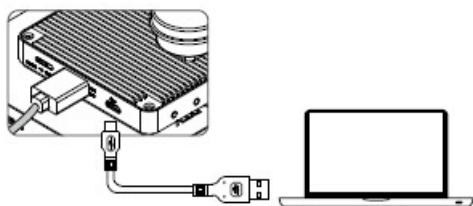
Power cycle the Datalink Pro, Flight Control System and D-RTK after upgrading.

Supports Windows 7 (or later) or Mac OS X 10.9 (or later).

Using the DJI Ground Station

Ensure the A3 Flight Control System, Datalink Pro and D-RTK are connected correctly before powering on.

1. Connect the Base Station to the PC via a Micro USB cable, and then run the Ground Station.
2. Enable the D-RTK Ground System's battery to power on the Datalink Pro Base Station first.
3. Enable the D-RTK Ground System's battery to power on the Datalink Pro Mobile Station.



Note:

The DJI Ground Station supports up to five Air Systems in Full Duplex Mode. The 4-position switch should be set to the COMBO_SW4 position. Download the User Manual from www.dji.com to learn more.

Refer to the "DJI Ground Station User Manual" for details if using the DJI Ground Station.

Working Status LED

LED	Description
Blinking Red	Parameter error after powering on. If not resolved by power

		cycling, contact your dealer.
Blinking Purple		Connected to the Assistant successfully.
Blinking Yellow		Upgrading or preparing for upgrade.
Quickly Blinking Green for 1 Second		Current system setting is saved (Run mode changed successfully), or connected device information is clear.
Solid Blue		Mobile Station: Working in Broadcast Mode. Base Station: Working in Broadcast Mode and receiving the data from Mobile Station.
Solid Green		Mobile Station: Mobile Station connected correctly in Full Duplex Mode. Base Station: At least one Mobile Station connected to the Base Station in Full Duplex Mode.
Solid Red		Mobile Station: All Mobile Stations are disconnected in both Run Modes. Base Station: All Mobile Stations are disconnected in Full Duplex Mode.
Blinking Red and Green Alternatively		Linking in progress.
Blinking Yellow Twice		4-position switch is toggled successfully.
Solid White for 1 Second		Device is initializing, only displays when powering on.

Appendix

Specifications

Type	DATALINK PRO 400M	DATALINK PRO 900M
Performance		
Outdoor/RF Line-of-Sight Range	Approximately 2000m	
Transmit Power	China: 10dBm Taiwan: 10dBm South Korea: 10dBm	CE: 20dBm FCC: 25dBm Canada: 25dBm Australia: 25dBm Japan: 13dBm
Power Consumption	Mobile Station: 0.65 W Base Station: 2.1 W	Mobile Station: 0.65 W Base Station: 1.2 W
Features		
Frequency Band (MHz)	China: 430-432 Taiwan: 429.175-429.2375 South Korea: 447.8625-447.9875	CE: 869.525 FCC: 902-928 Canada: 902-928 Australia: 915-928 Japan: 923.1-926.3
Serial Data Rate	Max. 115200bps	
Antenna Options	Vertically polarized	
Supported Interfaces	USB, UART, CAN	
Supported DJI Products	A3, D-RTK, Ground Station	

Operating Temperature	32° to 113°F (0° to 45°C)	
Storage Temperature	-40° to 185°F (-40° to 85°C)	
Humidity	5% to 95%, non-condensing	
Dimension (without Antenna)	Base Station: 83 mm x 51 mm x 14.5 mm Mobile Station: 58 mm x 42.3 mm x 9.5 mm	
Weight (without Antenna)	Base Station: 24 g Mobile Station: 53 g	
Power Supply		
Voltage	Base Station: DC 9 V Mobile Station: DC 9 V	
Max. Current (Transmitting Signal)	230 mA	130 mA
Max. Current (Receiving Signal)	70 mA	

Compliance Information

FCC Compliance Notice

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.

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.

RF Exposure Information

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the

antenna shall not be less than 20cm during normal operation.

IC RSS Warning

This device complies with Industry Canada licence-exempt RSS standard (s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes:

(1) l'appareil ne doit pas produire de brouillage, et

(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

IC Radiation Exposure Statement:

This equipment complies with IC RF radiation exposure limits set forth for an uncontrolled environment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

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

KCC Warning Message

“ 해당무선설비는 운용 중 전파혼신 가능성이 있으므로 인명안전과 관련된 서비스는 할 수 없습니다.”

“해당 무선설비는 운용 중 전파혼신 가능성이 있음”

NCC Warning Message

低功率電波輻射性電機管理辦法

第十二條 經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

EU Compliance Statement

SZ DJI TECHNOLOGY CO., LTD. hereby declares that this device is in compliance with the essential requirements and other relevant provisions of the R&TTE Directive.

A copy of the EU Declaration of Conformity is available online at www.dji.com/euro-compliance



CE 1313

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