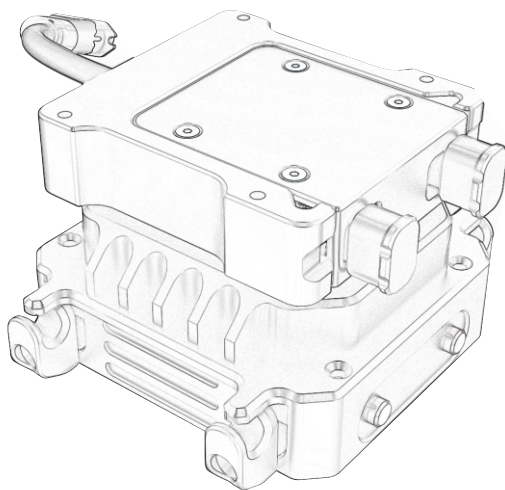


RDD-25

4-Channel Payload Release and Drop Device User Manual

2024



Product Overview

The RDD-25 system consists of four individual payload release units, which are triggered sequentially. Each unit can carry a maximum payload of 2.5 kg, with a total system payload capacity of 10 kg. It is suitable for tasks such as fire extinguisher deployment, emergency material delivery, power line stringing, and urgent rescue operations. Thank you for purchasing our product.

If you encounter any issues during use, please contact your sales representative promptly.

Disclaimer

Without prior written permission, no organization or individual may excerpt, copy, or reproduce any part of this manual, nor distribute it in any form.

Due to product updates or other reasons, the contents of this manual may be updated periodically.

This manual is for instructional use only. All statements, information, and recommendations in this manual do not constitute any express or implied warranty.

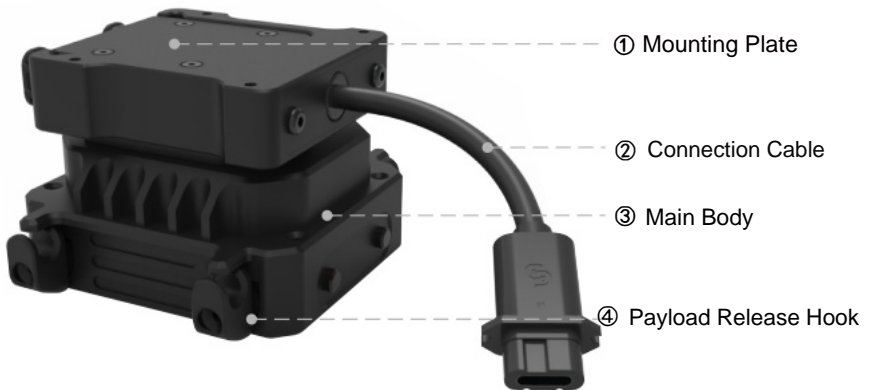
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Package Contents

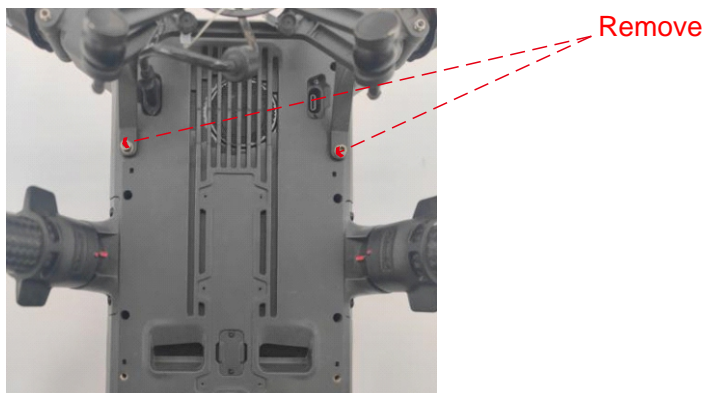
Name	Quantity	Unit
RDD-25	1	Set
Packaging Box	1	Set
Payload Release Hook Rings	12	Pieces
Certificate of Conformity	1	Piece

Understanding the 4-Channel Payload Release and Drop Device

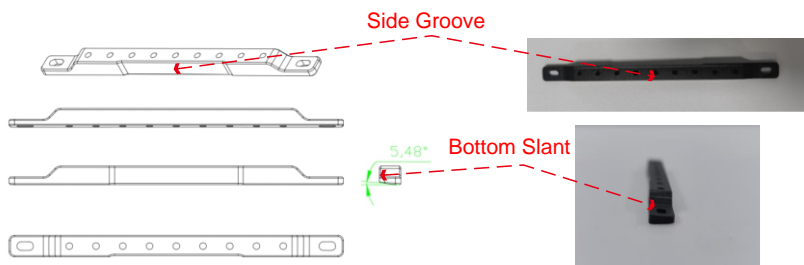


Device Installation

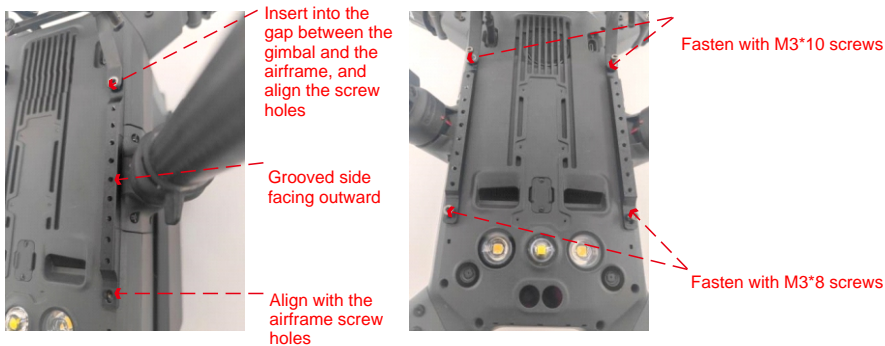
Step 1: Turn the drone upside down and remove the two screws at the bottom of the gimbal mount.



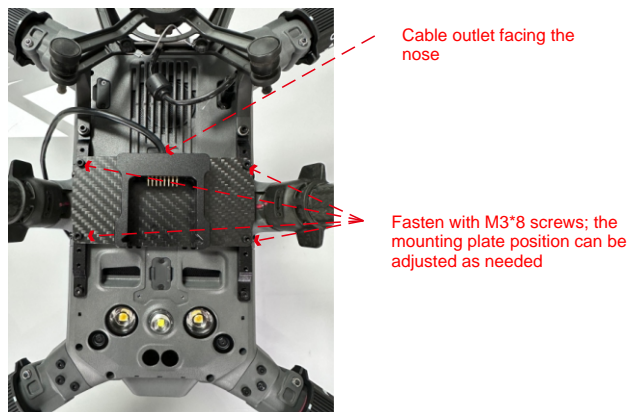
Step2: Confirm the connection position between the alloy bracket and the drone. To better fit the drone body, the bottom of the alloy bracket is slanted and one side has a groove. During installation, align the bottom of the alloy bracket with the drone body, and ensure the grooved side faces outward.



Step 3: Insert one end of the alloy bracket into the middle of the connection point between the gimbal and the airframe, align the screw holes at both ends of the alloy bracket with the corresponding holes on the airframe, fasten the alloy bracket to the airframe at the gimbal-connection side using the supplied M3*10 screws, and fasten the other end using the supplied M3*8 screws.

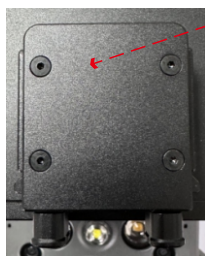


Step 4: Connect the mounting plate to the alloy bracket, with the cable outlet facing the nose of the aircraft; adjust the exact mounting position of the plate as needed for actual use, and fasten the mounting plate to the alloy bracket using the supplied M3*8 screws.

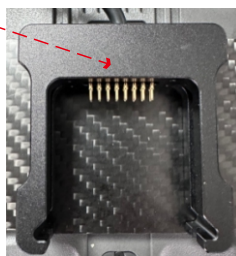


Step 5: Connect the device power pickup to the mounting plate power port; ensure the groove on the power pickup aligns with the power port, and after insertion confirm that both quick-release latches have fully popped out before normal use (depending on the purchased version, connect the mounting plate interface to the HUB or the aircraft E-PORT).

The mounting plate power port must be inserted aligning with the groove on the device power pickup



Device power pickup



Mounting plate power port

Step 6: Insert the connector of the 4-Channel Payload Release and Drop Device into the corresponding E-PORT.

E-PORT as shown below:

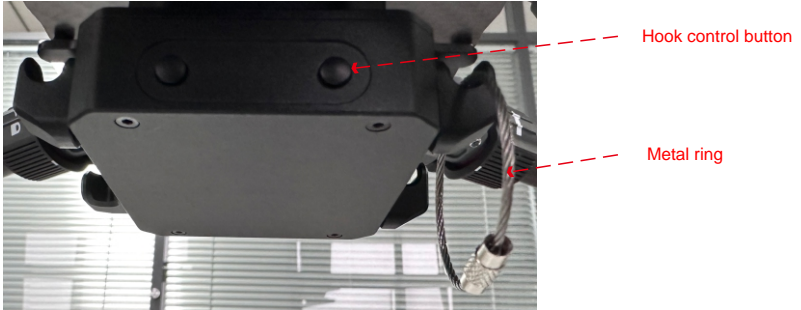


Location of the E-PORT interface on the drone

Connect the plugs as shown in the picture

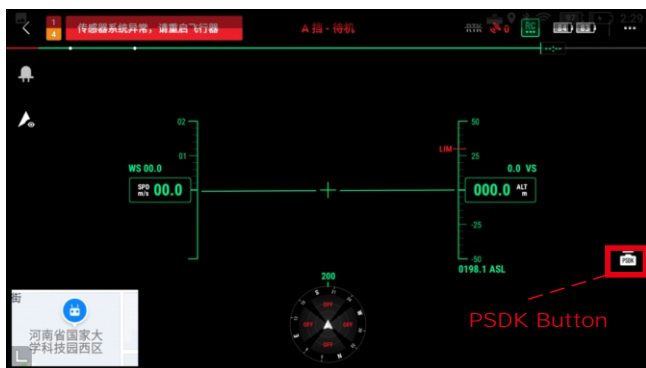


Step 7: As shown in the figure, manually press the hook control button to set the hook into standby release mode. After that, attach the matching metal ring to the payload and hang it on the hook.

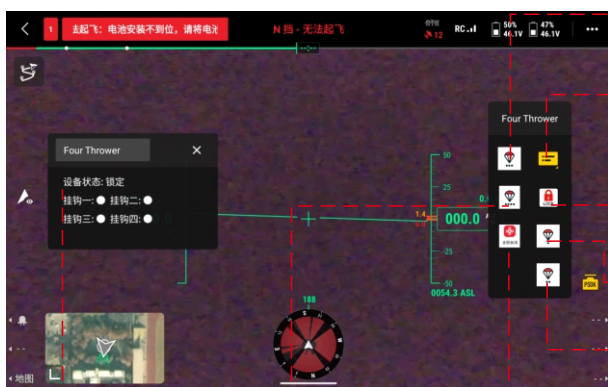


Device Operation

PSDK Button: Single click to open/close the 4-Channel Payload Release and Drop Device operation menu



Operation Button Description



⑧ Hook Status Menu:
Displays the current
load status
of each hook

⑥ Hook 4 Switch:
Single click to release

⑦ One-Key All Release Switch:
Single click to release all

⑤ Hook 3 Switch: Single click to
release

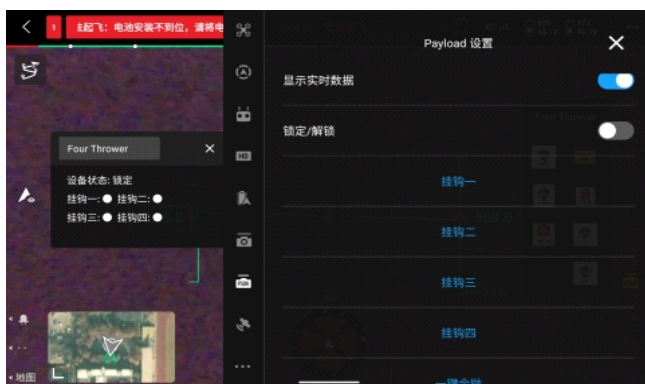
① 4-Channel Device Status Menu
Switch: Open/close the status
menu


② Unlock/Lock: Single click to
unlock/lock; after unlocking the
device can operate normally

③ Hook 1 Switch: Single click to
release

④ Hook 2 Switch: Single click to
release

Payload Control



Open the Payload settings; you can also operate the 4-Channel Payload Release and Drop Device through this menu (tap the menu icon in the upper-right corner of the remote controller  to enter Payload settings).

Display real-time data switch: Show/Hide the working status and detailed information of the 4-Channel Payload Release and Drop Device

Single click to unlock/lock; after unlocking, the device can operate normally

Hook 1: Single click to release

Hook 2: Single click to release

Hook 3: Single click to release

Hook 4: Single click to release

One-key all-release switch: Single click to release

Troubleshooting

1	No PSDK control icon	<p>1. Check whether the wiring is correct. For the M350 version, plug into the top E-PORT of the aircraft and pay attention to the connector orientation. For the M300 version, connect to the supplied adapter ring and plug into the gimbal. For the visual version, connect the Type-C cable to the visual module and install the visual module on the gimbal.</p> <p>2. Check the drone and remote controller firmware; they must be updated to the latest version.</p>
2	Incomplete PSDK icon display	<p>1. Close the Pilot2 flight app in the background and re-enter, or restart.</p> <p>2. Check the drone and remote controller firmware; they must be updated to the latest version.</p>

Device External Interfaces

----Hardware Interfaces: None for third-party hardware

----Software Protocol Interfaces: None

Technical Specifications

Product Dimensions	125mm × 117mm × 60mm
Product Weight	330g
Interface Type	SKYPORT V2 / E-PORT / Type-C
Control Method	PSDK
System Power	20W
Operating Temperature	-20°C to 60°C
Number of Channels	4
Control Mode	Independent channel control; select any hook number or one-key all release
Control Range	Same as drone communication range
Status Feedback	Real-time feedback for each channel
Mounting Method	Quick-detach buckle
Supported Hub	Yes
Payload Capacity	2.5kg per channel