emesent

THE HOVERMAP BACKPACK

PREPARED BY:
EMESENT PTY LTD
LEVEL G, BUILDING 4, KINGS ROW OFFICE PARK
40-52 MCDOUGALL ST, MILTON, QLD, 4064 AUSTRALIA

EMAIL: INFO@EMESENT.IO
PHONE: +61 7 3548 9494

Copyright

Using this manual

Hovermap is a powerful system that can be used as a Lidar mapping payload but also as an advanced autopilot for drones. It is therefore recommended to read the user manual thoroughly to make use of all its capabilities in a safe and productive way.

Disclaimer and safety guidelines

This product is not a toy and must not be used by any person under the age of 18. It must be operated with caution, common sense, and in accordance with the instructions in the user manual. Failure to operate it in a safe and responsible manner could result in product loss or injury.
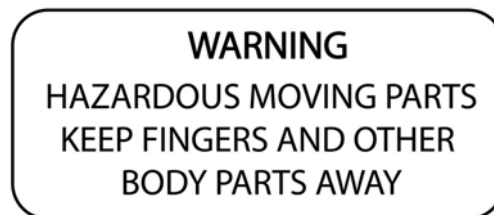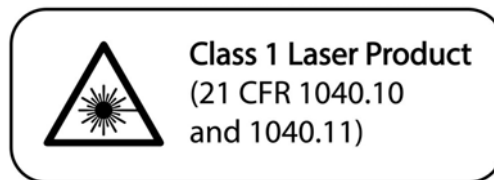
By using this product, you hereby agree that you are solely responsible for your own conduct while using it, and for any consequences thereof. You also agree to use this product only for purposes that are in accordance with all applicable laws, rules and regulations.

The use of Remotely Piloted Aircraft Systems (RPAS) may result in serious injury, death, or property damage if operated without proper training and due care. Before using an RPAS, you must ensure that you are suitably qualified, have received all necessary training, and read all relevant instructions, including the user manual. When using an RPAS, you must adopt safe practices and procedures at all times.

Warnings

- This document is legally privileged, confidential under applicable law and is intended only for the use of the individual or entity to whom it is addressed. If you have received this transmission in error, you are hereby notified that any use, dissemination, distribution or reproduction is strictly prohibited. If you are not the intended recipient, please notify the sender and delete the message from your system.

- Always be aware of moving objects that may cause serious injury, such as spinning propellers or other components. *Never* approach a drone while the propellers are spinning or attempt to catch an airborne drone.

Class 1 Laser Product
(21 CFR 1040.10
and 1040.11)

WARNING
HAZARDOUS MOVING PARTS
KEEP FINGERS AND OTHER
BODY PARTS AWAY

CE FC

VCI IC

Contents

1.   The Hovermap backpack

Scan comfortably while walking and keep Hovermap secure when traveling with our hard case backpack. With a tough, water-resistant polypropylene shell, the backpack provides external mounting and power for Hovermap. The ergonomic back pad is made of fast-drying antibacterial foam. It has been designed to be thicker in critical areas, such as the shoulder blades and lumbar, to provide the precise level of required support and protection. The adjustable shoulder and side straps are made of soft air mesh to allow for comfort and quick moisture evaporation. Four extra strong side loops have been molded to allow additional accessories to be attached.

Inside, the backpack includes a custom-cut foam liner with room for accessories and battery storage (suitable for V-mount style batteries up to 45 mm high).

2.   Features

- • Switch easily between backpack-mounted scanning and handheld scanning using the Hovermap handle and the included power cable.

- • V-mount style batteries and chargers are available separately.

3.   What's included

- • Hardcase backpack

- • Custom-fitted foam liner

- • Internal battery mounting for use while scanning

- • Extendable curly power cable to allow for both backpack and handheld scanning

- • Emesent mesh bag

Optional power system:

- • 2 x 97Wh V-mount lithium-ion batteries

- • Combination 90 Watt smart charger and Hovermap desktop power supply

- • Country-specific AC mains power lead

4.   Specifications

- **External dimensions:** 498 mm x 370 mm x 185 mm
- **Weight:** 4 kg empty, 8.5 kg with accessories
- **ATA (Air Transport Association):** 300 rated. Fits in most aircraft overhead compartments
- **Double-hinge locking latches:** For secure close and comfort open
- **97Wh batteries:** Approved to fly on most airlines
- **Built-in battery safety:** Batteries must be stowed before stowing Hovermap
- **97Wh provide power:** For approximately 2 hours of scanning

Figure 1   Hovermap backpack

5.   Assembling the backpack

1.   Remove Hovermap from the case.

2.   Remove the Hovermap protective cover.

3.   Mount a V-mount battery to the internal battery mount. The mount is found on the inside of the lid.

4.   Close and secure the latches on the backpack.

5.   Install Hovermap on the dovetail mount on the rear of the backpack (or install the Hovermap handle).

6.   Open the rear power outlet dust cover and insert the power lead.

7.   Insert the power lead into the rear power connector on Hovermap.

> ⊙   **Warning**
>
> •   To avoid damage to Hovermap, be aware of your surroundings, particularly when bending over to pass under an obstacle.
>
> •   Avoid standing the backpack on the ground in the vertical position, particularly while Hovermap is mounted for scanning.

6.   Operation

1.   Start Hovermap by pressing the rear button. Wait for the status LED to show a slow, pulsing blue.

2.   Start the scan through the Web UI on your tablet or smartphone, or by pushing the rear button.

3.   Conduct the scan for up to 60 minutes.

4.   Retrieve data by installing a USB flash drive.

5.   Power down the unit by removing power.

6.   Disconnect the internal battery and return it to its storage location.

7.   Replace the Hovermap LiDAR cover.

8.   Store Hovermap in the case.

emesent

PREPARED BY:
EMESENT PTY LTD
LEVEL G, BUILDING 4, KINGS ROW OFFICE PARK
40-52 MCDOUGALL ST, MILTON, QLD, 4064 AUSTRALIA

EMAIL: INFO@EMESENT.IO
PHONE: +61 7 3548 9494