AirBeep-B

Broadcast RID Module

Introduction

Thank you for choosing our AirBeep-B RID Module!

AirBeep-B ensures your drone remains visible to air traffic participants and enables real-time tracking to meet Remote Identification (RID) requirements.

AirBeep-B broadcasts position and identification data locally via Bluetooth and meets international standards, including ASD-STAN-prEN 4709-002 for the EU and ASTM 3411-22a for the US, ensuring compliance with the latest regulations for unrestricted flight.

With its sleek, compact, and lightweight design, AirBeep-B easily attaches to a wide range of drone models without affecting the endurance and performance of the flight.

Integrated seamlessly with the AirBridge Mobile app, AirBeep-B allows you to configure and update your Operator ID and UA Type directly from your mobile device, simplifying compliance management.

Whether you're a commercial operator, drone pilot, or passionate enthusiast, AirBeep-B ensures your operations stay compliant and efficient!

How to Use This Manual

This manual is designed to guide you through every step of using your AirBeep-B RID Module. Each section provides clear, straightforward instructions:

1. **Getting Started** – Unbox, familiarize yourself with its key features, and prepare the Module for use.
2. **Setting up the AirBeep-B RID Module** – Learn how to register and connect your Module to the AirBridge Mobile app, and configure it for optimal use.
3. **Maintenance & Care** – Keep your device in optimal condition with these simple maintenance tips.
4. **Safety Information** – Essential safety precautions and compliance guidelines.
5. **Warranty & Legal Information** – Advise on warranty coverage and important legal details.

We're here to help you operate with confidence, every step of the way!

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Getting Started

What's in the Box

After the AirBeep-B is delivered to you, the following package contents should be present:

- 1 × AirBeep-B RID Module
- 1 × Velcro tape for mounting
- 1 x USB Type-C charging cable
- 1 x Product specification card

Unboxing Checklist

If your AirBeep-B module wasn't tested for functionality and installation at our office, please go through the following steps when you receive your device:

1. Check for any visible damage that may have occurred during shipping.
2. Fully charge the module before performing any tests.
3. Turn on the device to ensure all LED indicators are working correctly.

⚠️ If you notice any damage or the device isn't functioning properly, please submit a warranty claim within 7 days of delivery.

Specifications

AirBeep-B RID Module (Broadcast) combines a lightweight, compact design with reliable performance, ensuring compliance with Remote Identification regulations. It meets international standards, including ASD-STAN-prEN 4709-002 for the EU and ASTM 3411-22a for the US. Below are the key specifications that define the module's capabilities:

Parameter	Value
Weight	16 grams
Dimension	40 x 28 x 14 mm
Charging Port	5V USB-C
Battery	200mAh/3.7V Li-Po
Battery Life	1.5 hour
Environmental Protection Rating	IP53 (Dust & Water Resistant)
Operating Temperature Range	-20°C to +60°C

Specifications

Parameter	Value
Connectivity	Bluetooth 4 and 5
Sensors	GNSS, Barometer, Accelerometer, Gyroscope
Supported GNSS Systems	GPS, Galileo, BDS, GLONASS
Message Transmission Rate	< 1 second
Accuracy	3 meters (vertical and horizontal)
Operating Frequency and Power Output	2.4Ghz/19.5dBm

Features & Functions

Type-C USB Port **5**

5 Type-C USB Port

1 GNSS Indicator
2 RID Indicator
3 Status Indicator

On/Off Switch **4**

1 GNSS Indicator (G)

This indicator shows the status of the GNSS signal, which is responsible for providing accurate positioning data to the Module.

2 RID Indicator (R)

The RID Indicator confirms that the Module is actively transmitting position and identification data via Bluetooth, ensuring that your drone complies with Direct Remote ID (DRI) rules.

3 Status Indicator (S)

The Status Indicator shows the operational status and battery level of the Module.

4 On/Off Switch

The On/Off switch is used to control the power of AirBeep-B RID Module. Flip the switch to the "on" position to activate the Module. To turn it off, simply flip the switch back to the "off" position, this helps conserve battery life when not in use and prevents unnecessary data transmission.

5 Type-C USB Port

The Type-C USB port allows you to charge AirBeep-B. It is designed for fast charging, ensuring the device is ready for use in about 2 hours. Once charged, the device can operate for up to 90 minutes continuously.

LED Indicators

AirBeep-B RID Module is equipped with three LED indicators: **GNSS, RID, and Status**.

These indicators provide important feedback about the device's functionality and operational status, with specific letters indicating each indicator's function.

When the Module is turned on, the three LED indicator will flash in tandem, indicating that its performing a functional check. Below is a breakdown of each indicator and what it means:

GNSS Indicator (G)

GNSS Indicator shows the status of the GNSS signal, which is responsible for determining the Module's precise position. Here are the possible LED states:

The LED is Steady GREEN

Steady Green light indicated GNSS is functioning and transmitting position data.

The LED is Flashing GREEN

This indicates that the Module is acquiring GNSS signal after the module is turned on. This process may go on for 10 to 60 seconds, depending on signal coverage.

The LED is off

This means the Module is either turned off or has malfunctioned. Try to turn on the module again and wait for the LED to turn Green.

Tips: *For optimal performance, ensure the Module is in an open area with minimal obstructions.*

RID Indicator (R)

RID Indicator shows the status of the Remote Identification (RID) transmission, indicating whether the Module is broadcasting position and identification data. Here are the possible LED states:

The LED is Steady GREEN

This indicates that the Module is actively transmitting position and identification data, ensuring compliance with Direct Remote ID (DRI) rules and ready for operation.

The LED is off

This means the Module is not transmitting because it is either turned off or not working properly. Try to turn on the Module again.

Status Indicator (S)

RID Indicator shows the status of the Remote Identification (RID) transmission, indicating whether the Module is broadcasting position and identification data as well as the battery status. Here are the possible LED states:

The LED is Steady GREEN

When the LED displays a steady Green light, it is powered on and functioning properly. This is the normal operating state.

The LED is Steady RED

When the Module is turned off and plugged into a power source, the LED will display a steady Red light.

The LED is Steady YELLOW

When the Module is simultaneously turned on and plugged into a power source, the LED will display a steady Yellow light.

The LED is Flashing GREEN

When the Module displays repeated 3 short Green flashes and fades for 1 second, it means that the module's battery is running low.

The LED is off

This means the Module is either turned off, is not working properly or has no battery. Charge the Module and turn it on again and wait for the LED to be lit.

When the Module is Ready to Fly?

The Module is ready for flight when:
- The GNSS LED is on (indicating a stable GNSS signal)
- The RID LED is on (indicating data transmission)
- The Status LED is on (indicating the Module is functioning correctly)

When You Cannot Fly?

If the GNSS LED is off, or the RID LED is off, the Module cannot transmit position data, and your drone is not compliant. Ensure a stable GNSS signal and proper Module setup before flying.

While the BRID may have acquire GNSS signal, it could take up to 60 seconds for the data to stabilize. Use an Open Drone ID receiver, such as the AirBridge Mobile application, to verify the accuracy of the transmitted data. Compare the location displayed on the application with the actual position, and check whether other telemetry data, such as speed and altitude are within acceptable ranges before putting your BRID to flight.

Battery Charging

AirBeep-B RID Module is equipped with a rechargeable battery that can be charged using any compatible **5V power source**.

Below are the details on how to charge your Module safely and efficiently.

Charging Sources

You can charge the AirBeep-B from any of the following 5V compatible sources:

Computer
USB Port

Power bank

Smartphone
Charging Adaptor

How to Charge AirBeep-B?

1 **Charging the Module (When Not in Use)**

To charge the AirBeep-B when it's not attached to the drone or in use:
1. Connect the provided USB Type-C cable to the Type-C USB port on the Module.
2. Plug the other end of the cable into any of the compatible charging sources listed above.

2 **Charging While Using the Drone**

If you prefer not to remove the AirBeep-B from your drone, you can charge it while the Module remains attached to the drone during flight. Simply connect the AirBeep-B to the drone's internal power source. It will charge while flying, allowing the Module to stay operational without needing to detach it.

Important Charging Instructions!

Please follow these important guidelines to ensure safe and efficient charging:
1. **Do not exceed 5V power input** - When charging, ensure that the voltage does not exceed 5V 3A. Exceeding this voltage could cause permanent damage to the Module and will void the warranty.
2. **Do not overcharge your BRID**. It is recommended for a full charge to be not more than two hours. Do not leave your BRID charging over night as it might damage the battery overtime.

By following these instructions, you can ensure the longevity and safety of your AirBeep-B RID Module.

Mount the Module on Your Drone

AirBeep-B RID Module is equipped with a **dual lock reclosable fastener** for a strong, secure hold and easy removal.

One part of the fastener is already firmly glued to the bottom of the AirBeep-B Module, and the other counterpart is supplied as a self-adhesive piece that must be attached to your drone. Here's how to properly mount the Module:

Proper Location to Attach the Module

When selecting a location to place the Module on your drone, please follow these guidelines for optimal performance:

- **Avoid Curved Surfaces or Soft Material,** this could cause the Dual Lock fastener to lose its ability to fasten the Module to the UA
- **Avoid Propellers** - make sure the module does not obstruct the free movement of the propellers and other mechanical parts
- **Avoid Other Electrical Components** - such as the flight controller, IMU, GNSS antennas, or RF transceivers, as these can cause interference with the Module's GNSS signal or Bluetooth transmission.
- **Ensure Accessibility:** Avoid placing the Module in hard-to-reach or inaccessible locations. You should always be able to access the button and LED indicators for easy monitoring and operation.

Mounting Recommendations for Optimal Signal!
Placing the Module on top of your drone ensures better GNSS signal reception, as it will have clearer visibility of the sky. Align the Module's nose (the side away from the on/off switch) with the front of the drone.

⚠ **Warning**
The velcro strips, once removed from its mounted surface, should not be reused.

How to Install the Module?

1. **Clean the Surface:** Clean the surface of the drone where you plan to mount the Module. Use a soft cloth to remove any dirt, dust, or debris to ensure proper adhesion of the 3M Dual Lock fastener.
2. **Prepare the Adhesive Counterpart:** Peel off the protective backing of the self-adhesive counterpart of the Dual Lock fastener.
3. **Attach the Module:** Align the AirBeep-B Module with the selected location on your drone and press it firmly to engage the interlocking fastener pieces, ensuring a secure bond.
4. **Ensure Stability:** Gently tug on the Module to verify that it is securely attached. If the Module feels loose, press it again to ensure proper adhesion.

AirBridge Mobile

Track flights, manage assets, and plan missions on-the-go!
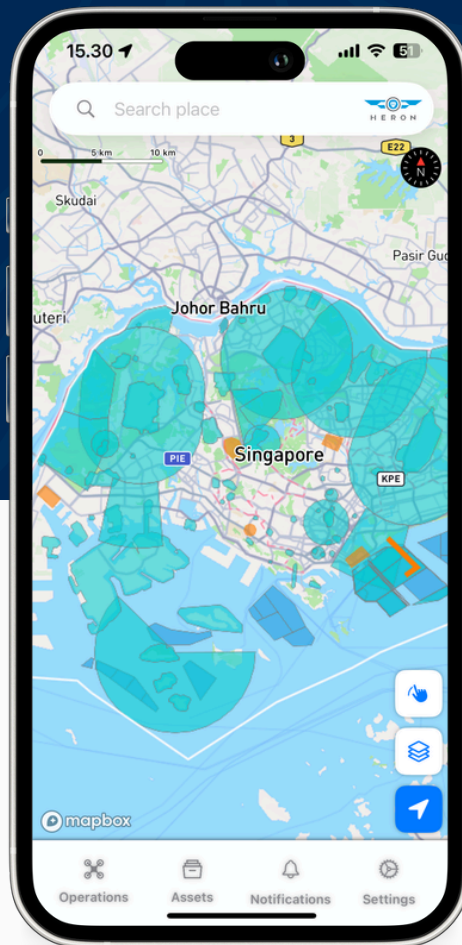
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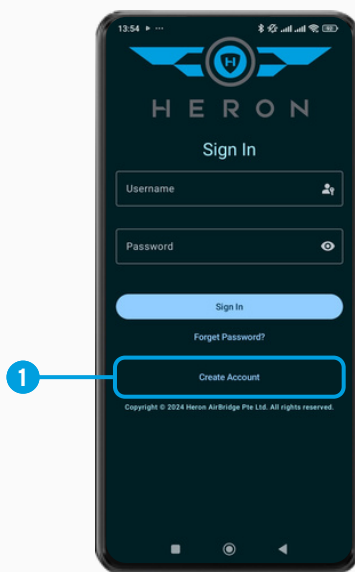### AirBridge Mobile here!
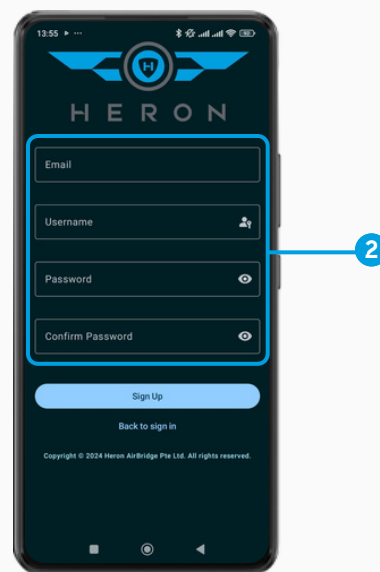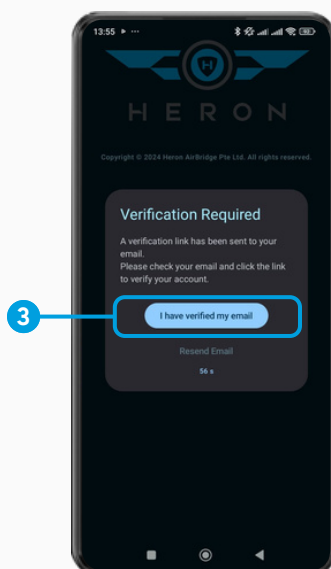
Create an Account on AirBridge Mobile

Before connecting the Module, you'll need to create an account in the AirBridge Mobile app. This will enable you to save your settings and update your Module's details.
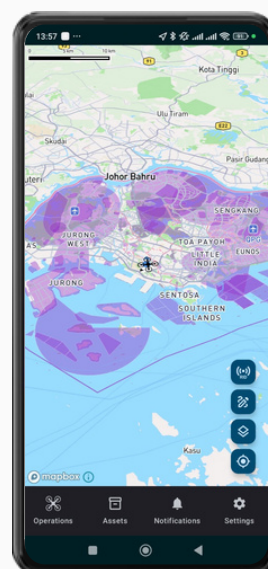

1

Open **AirBridge Mobile App** and select **"Create Account"** to register.

2

Fill in your information.

3

Check your email for a verification link, click it, then return to the app and tap **"I have verified my email"**.

4

You're all set and ready to use the app!

Setting Up AirBeep-B

Once you've completed the basic preparations, it's time to get your AirBeep-B connected and ready for use. Follow these steps to ensure your Module is fully operational and compliant with regulations.
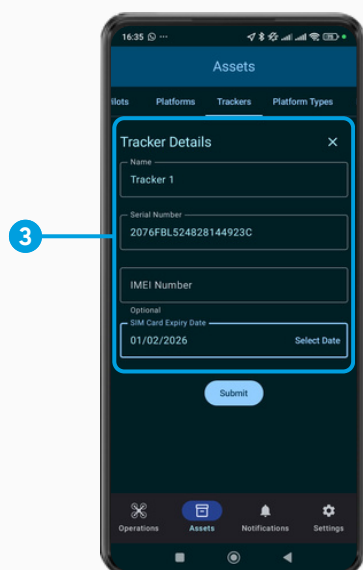
Register on the Mobile App

Before you can connect your AirBeep-B to your mobile device, you need to register the Module in the AirBridge Mobile app. This will help you manage your Module's data and ensure that it is properly registered.
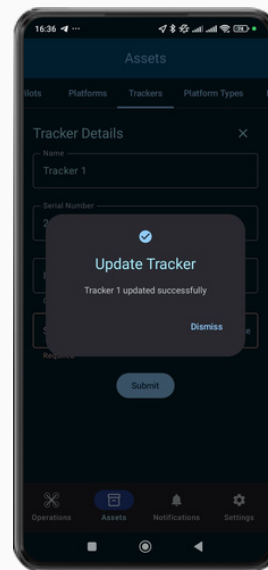

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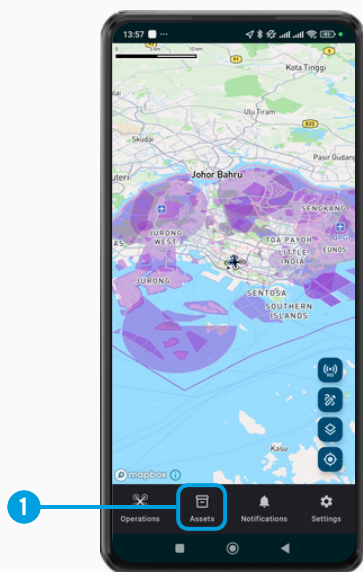
Open **AirBridge Mobile App** and Navigate to the **"Assets Management"** section.
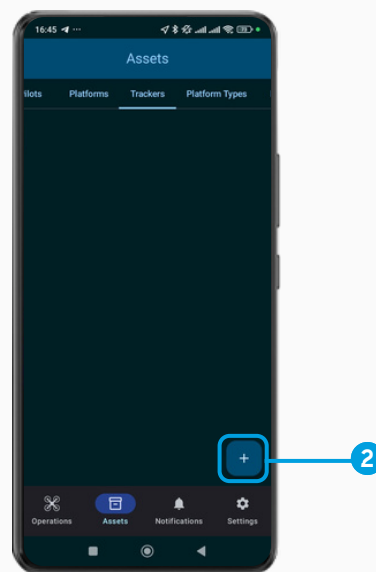
2

Select **"Tracker"** and tap **"Add New"**.

3

Fill in the Module information. The serial number for the RID can be found on the device itself.


4

Your Module data has now been saved.

Connect AirBeep-B with the Mobile App

Now that the Module is registered, pair it with the AirBridge Mobile app to configure the device and enable real-time tracking of both the Module and the drone's position during flight.
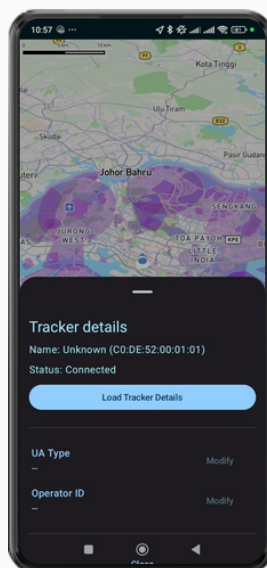
Important Notice: Make sure to switch on the AirBeep-B and enable Bluetooth on your phone before pairing.

1
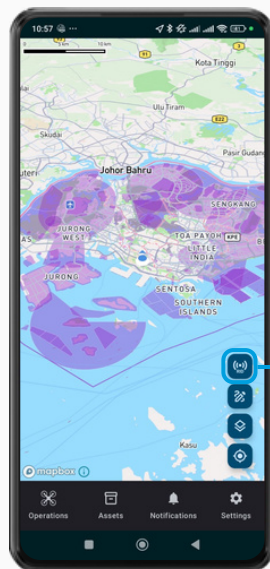
Open **AirBridge Mobile App** and tap the **"Scan Remote ID"** button.
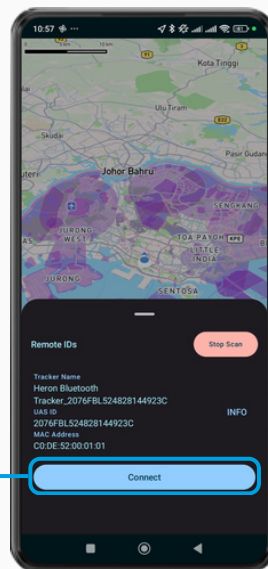
2

Once **AirBeep-B** appears in the list of detected devices, select it and click **"Connect"**.
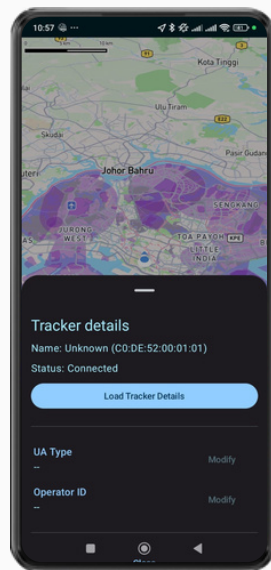
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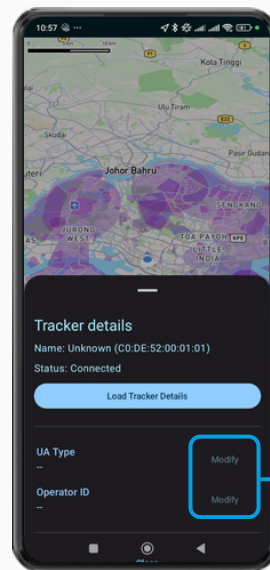The Module has been successfully connected!

14

Firmware Update and Configuration

After your Module is connected, you may need to configure settings like UA Type and Operator ID. This ensures that your Module is compliant and correctly configured.
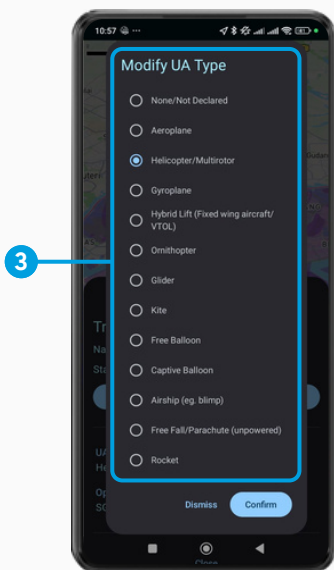

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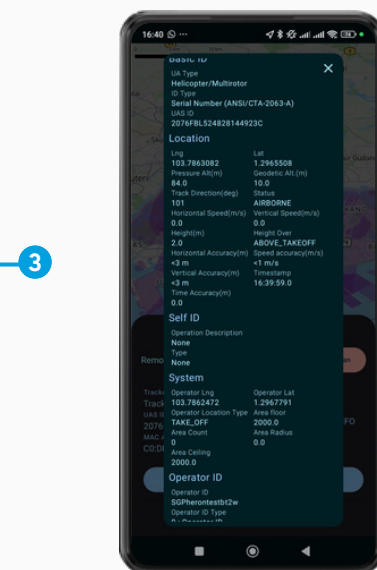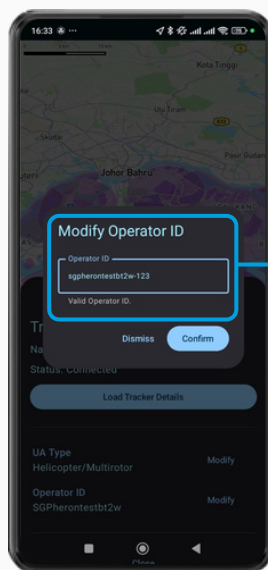Open the **Tracker details** in the app.

2
Click **"Modify"** next to the information you want to edit.

3
Modify the **UA Type** and **Operator ID** as needed, then click **"Confirm"** to store the changes.

4
The Module is now fully configured and ready to use.

Maintenance & Care

To ensure that your AirBeep-B RID Module operates efficiently and remains in optimal condition, regular maintenance and care are essential.

Here are some guidelines to help you extend the lifespan of your Module:

1 Cleaning the Device

Proper cleaning is crucial to maintain the functionality and appearance of the AirBeep-B.

- **Surface Cleaning:** Use a soft, lint-free cloth to gently wipe the surface of the Module. Avoid abrasive materials that could scratch or damage the device.
- **Cleaning Solution:** If needed, slightly dampen the cloth with a mild soap solution or disinfectant wipes. Ensure the cloth is not overly wet to avoid moisture seeping into the device.
- **Ports & Connectors:** Clean the USB Type-C port and any connectors carefully. Use a dry cotton swab or soft brush to remove dust or debris from the charging port, ensuring it is free of obstructions for optimal charging performance.

2 RID Maintenance and General Care

The AirBeep-B RID consists of numerous electronic components, and proper care will help extend its lifespan and performance.

- **Proper Storage:** When not in use, remove your Remote ID (RID) from your drone and store it in its designated storage case. This will protect it from accidental impacts and environmental factors.
- **Temperature Considerations:** Avoid exposing your RID to extreme temperatures (either hot or cold), as this can damage the battery and electronic components, affecting its overall functionality.
- **Regular Inspections:** Check the Module regularly for any signs of wear or damage, particularly around the USB port and Velcro mounting area. Ensure the Module is securely mounted on your drone to avoid any disruptions in function during operation.

Safety Information

It is essential to follow the safety instructions below to ensure the proper operation of the AirBeep-B RID Module and to avoid damage to the device, as well as prevent personal injury.

Please read the following safety instructions carefully:

1 ## Protection Against Extreme Conditions

Improper use of the device can result in permanent damage or malfunction. To ensure the AirBeep-B RID Module operates correctly and lasts longer:
- Do not expose the device to extreme heat or cold, such as direct sunlight for prolonged periods, freezing temperatures, or any environment with high humidity.
- Avoid exposing the device to open flames or other heat sources. Heat damage can severely impair the functionality of the device.

2 ## Battery Safety

AirBeep-B contains a rechargeable battery that requires careful handling:
- Do not short-circuit the battery or allow the Module's battery terminals to come into contact with metallic objects.
- DANGER OF EXPLOSION—Improper handling of the battery can cause it to overheat, leak, or even explode. Never throw the device into an open fire or expose it to flames.
- In case of battery leakage or visible damage, dispose of the device properly (see point 6 below).

3 ## Drone Flight Regulations

Before flying your drone, always ensure you are in compliance with local regulations:
- Check local rules and regulations regarding drone flights in your area to avoid fines and ensure safe drone operation.
- Obtain the necessary authorization or permits for operating a drone in specific areas, such as near airports or within restricted airspace.

4 ## Keep Away from Children

The AirBeep-B RID Module and its packaging contain small parts that could be a choking hazard to young children:
- Store the Module and its accessories in a secure, childproof place, away from children to prevent accidental swallowing of small parts.

5 # This Product is not a Toy

This product is designed for adult use and should be handled with care:

- This product is not a toy—it is a high-tech device designed to support safe drone operations.
- Leaking or damaged batteries can cause chemical burns or other injuries, so it is crucial to handle the device and its components with caution.

6 # Disposal of the Device

The AirBeep-B RID Module contains electronic components and batteries, and improper disposal can have harmful environmental effects:

- Do not dispose of the Module with household rubbish.
- Follow the local guidelines for the disposal of used electronic and electrical devices. Many areas offer recycling programs for electronic waste, and it's important to use them to minimize environmental impact.

Note on Warranty

Heron guarantees that the AirBeep-B RID Module (Broadcast) will remain free from any manufacturing or material defects under regular use for a period of **1-year (or otherwise stated)** from the date of collection.

The warranty ensures that your device operates as intended and meets the quality standards set by Heron.

Advise on Warranty Coverage

Heron will cover defects in materials and workmanship during the warranty period. If the product fails to function correctly under normal use, Heron will provide a repair or replacement, depending on the nature of the defect.

Note on Terms & Conditions

To remain eligible for warranty coverage, the product must be used in accordance with the operational guidelines, safety precautions, and maintenance instructions provided in this manual.

All warranty claims will be reviewed by Heron on a case-by-case basis. The approval of claims is at Heron's sole discretion and subject to validation of the issue.

Please note that failure to follow the instructions outlined in this manual may result in the warranty being voided.

Heron will not cover any indirect or consequential damages resulting from the use of the product. Coverage is strictly limited to the repair or replacement of components found to be defective.

Additional exclusions may apply.

For the full terms and conditions, please visit: https://heron-airbridge.com/airbeep-b-warranty

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