dronetag

Dronetag Beacon gen.2

Quick Start Guide

Dronetag Beacon Quick Start Guide

Welcome to the Dronetag Beacon Quick Start Guide! Thank you for choosing our product to enhance your drone safety. This guide is crafted to assist you in setting up and using your Dronetag Beacon efficiently. Whether you're a seasoned pilot or a beginner, we're dedicated to providing you with a reliable solution that prioritizes safety. Let's get started on safeguarding your flights with ease and confidence.

Notice

All instructions, warranties and other collateral documents are subject to change at the sole discretion of Dronetag s.r.o.

For up-to-date product literature, please visit https://help.dronetag.cz

Meaning of Special Language

The following terms are used throughout the product literature to indicate various levels of potential harm when operating this product:

⚠ **WARNING**: Procedures, which if not properly followed, create the probability of property damage, collateral damage, and serious injury OR create a high probability of superficial injury.

⊙ **CAUTION:** Procedures, which if not properly followed, create the probability of physical property damage AND a possibility of serious injury.

▯ **NOTICE**: Procedures, which if not properly followed, create a possibility of physical property damage AND a little or no possibility of injury.

⚠ **WARNING**: Read the ENTIRE instruction manual to become familiar with the features of the product before operating. Failure to operate the product correctly can result in damage to the product, personal property and cause serious injury. This is a sophisticated product. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this Product in a safe and responsible manner could result in injury or damage to the product or other property. This product is not intended for use by children without direct adult supervision. Do not attempt disassembly, use with incompatible components or augment product in any way without the approval of Dronetag s.r.o.. This manual contains instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings in the manual, prior to assembly, setup or use, in order to operate correctly and avoid damage or serious injury.

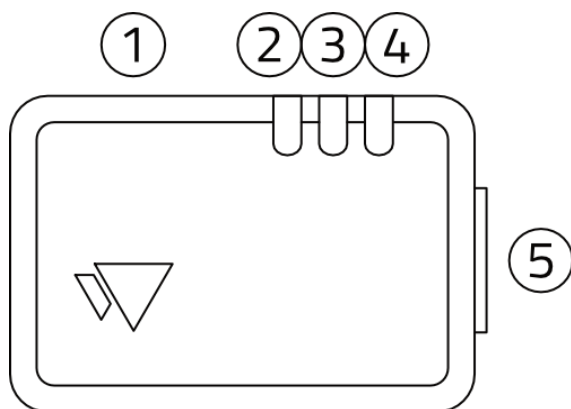⊡ **Age Recommendation**: Not for children under 14 years. This is not a toy.

⊡ **NOTICE:** This product is only intended for use with unmanned, remote-controlled vehicles and aircraft. Dronetag s.r.o. disclaims all liability outside of the intended purpose and will not provide warranty service related thereto.

Introduction

Dronetag Beacon is an effortless way to let your drone fly safe & compliant with the latest EU & US regulations mandating Direct / Broadcast Remote Identification. Dronetag Beacon is compatible with any kind of drone and works anywhere on the planet.

Controls

① USB-C

② Positioning LED

③ Remote ID LED

④ Device status LED

⑤ Button

Features

- Remote Identification via Bluetooth with up to 3 km / 1.8 miles Broadcast Range

- Compliant with EN 4709-02 and ASTM F3411 Standards

- Internal Battery or Drone as Power Source

- Firmware Over the Air Support

- Long-term Firmware Updates

- MAVlink & DJI A3 integration for Enterprise customers

- Flight store / Data management

Contents

- 1 × Dronetag Beacon

- 1 × USB-C cable

- 2 × Dual Lock counterpart for drone

- 1 × Alcohol cleaning pad

- 1 × Quick start guide

Installation

1. Find the proper surface on the drone for the Dual Lock counterpart.

2. Clean the surface with an alcohol cleaning pad.

3. Wait three (3) minutes to let the alcohol evaporate.

4. Remove the foil from the mating piece and stick it onto the area.

5. Wait five (5) minutes, so the glue hardens.

6. Snap the Beacon into the mating piece on the drone.

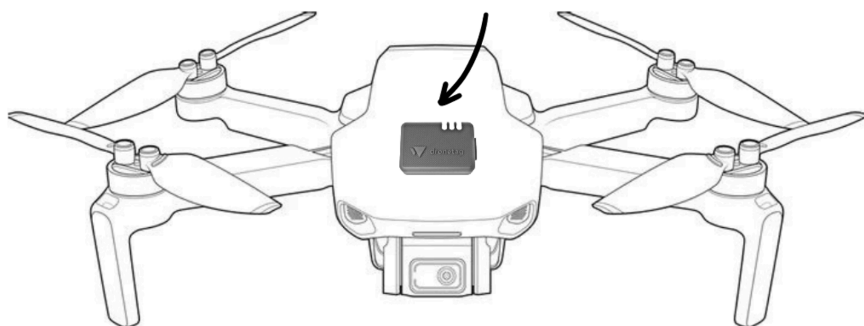7. Ensure the glue on both parts holds firmly by repeatedly removing the device from the drone.

Proper location

⚠ **WARNING**: When looking for a suitable location to place the Beacon on your drone, you need to watch out for the following potential issues:

1. Don't place the Beacon over a curved surface because it might unsnap during the flight.

2. Don't place Beacon on a soft material that can bend during mating (such as plastic covers). The Dual Lock may not hold properly.

3. Don't place Beacon over or close to other electrical components such as flight controller, IMU, GNSS antennas, RF transceivers.

4. Don't place Beacon in inaccessible locations. You should have the button and all the LEDs always reachable and visible.

NOTICE: Remember, if you put your Beacon on top of your drone, you can expect a better GNSS signal. When underneath, a better range for Bluetooth Remote ID. Therefore, the proper location might also depend on your use case.

User Interactions

Dronetag Beacon is operated with the button located on the shorter side of the device.

BUTTON FUNCTIONS

long press (2 s)	Switch the device on/off
short press (0,1 s)	Start flight/end flight (while on)
short press (0,1 s)	Battery indication (while off)
extra-long press (4-16 s)	Force device hardware restart

- **Long press (2 s):** Switch the device on or off

- **Short press (0.1 s):** Start flight or end flight (while the device is turned on)

- **Short press (0.1 s):** Battery indication (while the device is turned off)

- **Extra-long press (4-8 s):** Force device hardware restart

LED indications

- All LEDs are green lit - Flight ready to start

- Flashing white on one or more LEDs - Device in Flight

- Running cyan on all LEDs - turning off

- LED is pulsing yellow - waiting for specific component (i.e. GNSS signal)

- LED is lit/blinking red - specific component shows an error

For detailed LED status explanation please refer to:

https://help.dronetag.cz/dronetag-beacon-gen2/led-indications

General usage

> 🗩 **NOTICE**: The device usually works in all outdoor areas with GNSS signal.

To quickly start your flight:

- Check the battery level while the device is turned off by a short button press (0.1 s).

- Turn on the device by long-pressing the button (2 s).

- Wait until all device components are ready and 3 LEDs transition to solid green.

- The flight will start automatically, or you need to confirm it with a short button press (based on your Flight auto start configuration).

- Do your mission.

- End the flight by short button press (0.1 s).

- Switch off the device by a long button press (2 s).

Device charging

⚠️ **NOTICE**: Dronetag Beacon requires a USB-C charger capable of delivering 5V.

To charge your device:

1. Connect your Dronetag Beacon to a USB charger or power bank (charger or power bank not included) using the supplied USB-C cable.

2. The device will begin charging, and the current charge level will be indicated by blue LEDs.

3. When fully charged, three blue LEDs will illuminate.

4. To check the battery level while the device is turned off, briefly press the button (0.1 seconds).

Battery level is indicated by LED status:

- 1 LED - Low charge level
- 2 LED - Medium charge level
- 3 LED - Fully charged.

⚠️ **NOTICE**: When fully charged, LEDs turn off.

Specifications

Parameter	Value
Short-range radio	Bluetooth 2.4 GHz
Sensors	GNSS, barometer, accelerometer
Positioning	GPS L1, GLONASS L1, Galileo E1, SBAS
Built-in antennas	Bluetooth and GNSS
Bluetooth output power	8dbm
External ports	Via USB-C
Battery	Li-Po 3.7V 200 mAh
Battery life	10-18 hours (depending on the configuration)
Charging	5V USB-C
Charging time	2 hours from a discharged state
Average current consumption	15mA
Maximum current consumption	100mA
Enclosure	plastic
Fastening mechanism	3M Dual-lock SJ4570
IP rating	IP43
Operating temperature	-20°C to +60°C (-4°F to 140°F)
Dimensions	37 x 26 x 16 mm (1.4 x 1.02 x 0.6 in)
Weight	17 grams (0.59 oz)

Troubleshooting

For full troubleshooting steps please visit our help website:

https://help.dronetag.cz

Warranty

Dronetag products are warranted to be defect-free in material and workmanship one year after the purchase. For the duration of the warranty period, Dronetag, at its sole option, will repair or replace any product which fails in normal use. Such repairs or replacement will be made at no charge to the customer for parts or labor, provided that the customer shall be responsible for any transportation cost.

Restrictions

⚠ **NOTICE**: Warranty does not apply to cosmetic damage, consumable parts, damage caused by accident, abuse, misuse, water, fire or flood, damage caused by unauthorized servicing, or product that has been modified or altered.

Contact information

support@dronetag.cz

Address:

Dronetag s.r.o.

Veltruská 602/16

Prague, 19000

Czech Republic

dronetag

Dronetag Beacon gen.2

快速入門指南

202403
版本 0.01

Dronetag Beacon 快速入門指南

歡迎使用 Dronetag Beacon 快速入門指南！首先，感謝您選擇使用我們的產品，以提升您在操作無人機時的安全性。這份指南的目的，在協助您有效地設定並使用您的 Dronetag Beacon。無論您是經驗豐富的遙控無人機操作人還是初學者，我們致力於為您提供可靠的解決方案，以確保飛行的安全。現在，就讓我們自信地開始保護您的飛行吧。

請注意！

對所有說明書、保固條件和其他相關文件內容，Dronetag 公司保留完全自主決定修改的權利。所有最新的產品資料，請訪查以下網址 https://help.dronetag.cz。

特殊名詞解釋

以下是在整份產品文件中可能出現的特殊名詞，用於解釋在使用產品時可能面臨的不同程度潛在風險：

警告：如果未按照正確的使用程序操作，可能導致財產損失、連帶損害和嚴重受傷，或很可能造成輕微受傷。

注意：如果未按照正確的使用程序操作，很可能導致實際財產損壞和嚴重受傷。
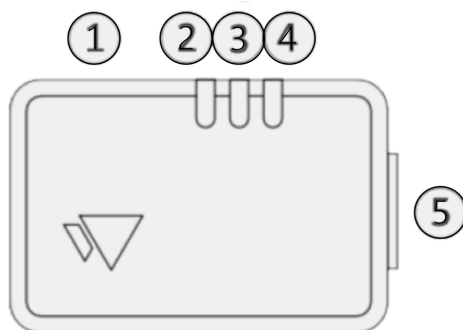
注意事項：如果未按照正確的使用程序操作，可能導致實際財產損壞，以及造成輕微或不會受傷。

警告：在使用本產品之前，請務必完整閱讀使用說明書，以熟悉產品的各項功能。未正確操作本產品可能導致產品損壞、個人財產損失和嚴重受傷。本產品設計複雜，必須小心操作，並具備一定的常識和基本的機械操作能力。未能安全和負責任地使用本產品可能導致受傷，或對產品或其他財產造成損害。本產品不適合未成年兒童在無成年人直接監督下自行操作使用。請勿恣意拆卸產品外殼、使用不相容的零附件或任何未經 Dronetag 公司測試驗證的增益組件。本使用說明書包含有關安全、操作和維護的說明。在組裝、設定或使用本產品之前，請務必仔細閱讀並遵循此使用說明書中的所有說明和警告，以正確操作並避免損壞或嚴重受傷。

年齡建議：不適合14歲以下兒童使用。本產品非玩具。

注意：本產品僅適用於無人、遙控載具和航空器使用。Dronetag 公司對使用目的以外的任何責任概不負責，並將不提供任何形式的相關保固服務。

產品介紹

Dronetag Beacon 提供了一種輕鬆的方式，讓您的無人機符合最新的歐盟和美國法規有關要求無人機配備 Direct / Broadcast Remote ID。Dronetag Beacon 可相容於任何構型的無人機，且可在全世界任何地方正常運作。

產 品 說 明

- ① USB-C 插孔
- ② GNSS 感測器狀態燈號
- ③ Remote ID 狀態燈號
- ④ 裝置狀態燈號
- ⑤ 開關按鈕

產品特點

- 射頻識別（Remote ID）透過藍牙廣播傳送，有效廣播距離最遠可達 3 公里／1.8英里。

- 符合歐盟 EN 4709-02 和 美國 ASTM F3411 技術規範。

- 使用裝置內建充電電池或無人機電力作為電力來源。

- 支援 OTA 更新韌體。

- 長期韌體更新。

- 企業客戶可用 MAVlink 和 DJI A3 整合。

- 飛航記錄儲存／資料管理。

包裝內含

- 1 x Dronetag Beacon

- 1 x USB-C 充電線

- 2 x 強固型魔鬼氈
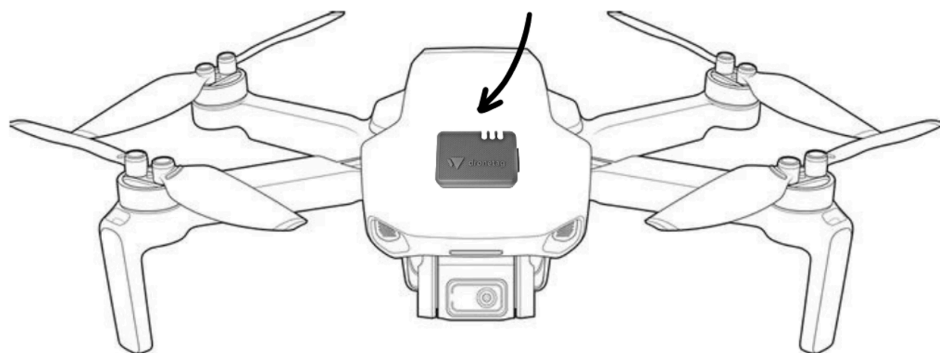
- 1 x 酒精清潔棉片

- 1 x 快速入門指南

產品安裝

1. 請於無人機上，確認適合黏貼強固型魔鬼氈的平整表面。

2. 取出清潔用酒精棉片，清潔無人機上選定之平整表面。

3. 等待約 3 分鐘，讓酒精揮發乾燥。

4. 取出一片強固型魔鬼氈，撕開背膠黏貼至無人機上之平整表面。

5. 等待約 5 分鐘，使背膠黏貼牢固。

6. 將 Beacon 按壓固定至無人機上之強固型魔鬼氈上

7. 透過反復數次將 Beacon 從無人機上取下，以確保強固型魔鬼氈已牢固地黏貼。

適當的安裝位置

警告：在無人機上尋找適合放置 Beacon 的位置時，您必須注意以下潛在問題：

1. 請勿將 Beacon 放置於彎曲的表面上，因為在飛行過程中可能會脫落。
2. 不要將 Beacon 放置在可彎曲的軟材料上（例如塑料蓋），因為這可能導致連接不牢固。
3. 請避免將 Beacon 放置在其他電子組件（如飛行控制器、IMU、GNSS 天線、RF 收發器）的上方或附近。
4. 請確保 Beacon 放置在方便接近的位置，以便隨時按下開關按鈕並觀察所有 LED 燈號顯示。

注意事項：請記住，將您的 Beacon 放置於無人機頂部時，您可以預期獲得更佳的 GNSS 信號。然而，若將其安裝於無人機底部，則可獲得更佳的藍牙射頻識別（Remote ID）範圍。因此，適當的安裝位置應根據您的使用情境而定。

使用者操作介面

Dronetag Beacon 的開關按鈕位於裝置較短的一側。

按鈕功能說明

切換裝置開/關（2 秒）	切換裝置開/關
短按（0.1 秒）	啟動飛行/結束飛行（當裝置為開啟狀態）
短按（0.1 秒）	電池電量顯示（當裝置為關閉狀態）
持續長按（4-8 秒）	強制裝置硬體重新啟動

- 長按（2秒）：開啟或關閉裝置
- 短按（0.1秒）：啟動飛行或結束飛行（當裝置開啟時）
- 短按（0.1秒）：電池指示（當裝置關閉時）
- 持續長按（4-8秒）：強制裝置硬體重啟

LED 燈號顯示

- 所有 LED 恆亮綠色 – 飛行準備就緒
- 一個或多個 LED 閃爍白色 – 裝置正在飛行中
- 所有 LED 都顯示青色 – 裝置關機中
- LED 閃爍黃色 – 等待特定感測器訊號（例如 GNSS 訊號）
- LED 恆亮/閃爍紅色 – 特定組件發生錯誤

注意事項：有關 LED 燈號狀態的詳細說明，請參閱以下網站

https://help.dronetag.cz/dronetag-beacon-gen2/led-indications

一般使用

注意事項：此裝置通常在 GNSS 訊號良好的戶外場域運作。

快速地啟動您的飛行：

- 在裝置關閉狀態下，短按開關按鈕（0.1秒）檢查電池電量。

- 長按開關按鈕（2秒）啟動裝置。

- 等待直到所有裝置組件就緒，且三個LED變為綠色恆亮。

- 飛行將自動啟動，或根據您的飛行自動啟動設定，您可能需要短按開關按鈕啟動飛行模式。

- 執行任務。

- 按下開關按鈕（0.1秒）結束飛行。

- 長按開關按鈕（2秒）關閉裝置。

裝置充電

注意事項：Dronetag Beacon 需要一個提供5V的USB-C充電器。

1. 使用隨裝置附贈的 USB-C 充電線，連接您的 Dronetag Beacon 到 USB-C充電器或行動電源（充電器或行動電源並非隨裝置內含項目）
2. 裝置將開始充電時，LED 以藍色燈號顯示當前的充電電量。
3. 當充電電池充電滿時，LED 顯示三個藍燈。
4. 要在裝置關閉時檢查電池電量，請短按開關按鈕（0.1秒）。

電池電量由 LED 燈號顯示：

- 1 個藍色 LED 燈號 - 電量不足
- 2 個藍色 LED 燈號 - 電量中等
- 3 個藍色 LED 燈號 - 電量充足

注意事項：當充電電池充滿電時，LED 燈號將熄滅。

故障排除

有關於裝置故障排除的說明，請訪查我們的網站 https://help.dronetag.cz

Dronetag Beacon gen.2 規格

參數	值
短距無線傳輸	藍牙 2.4 GHz
內建感測器	GNSS, 氣壓計, 加速度計
支援GNSS	GPS L1, GLONASS L1, Galileo E1, SBAS
內建天線	藍牙與 GNSS
藍牙輸出功率	8dbm
外接連接埠	USB-C
充電電池	Li-Po 3.7V 200 mAh
電池續航力	10-18 hours (隨功能設定而有不同)
充電埠規格	5V USB-C
充電時間	從無電量到充飽電約2 小時
平均功耗	15mA
最大電流消耗	100mA
外殼材質	塑膠
固定機制	3M 強固型魔鬼氈 SJ4570
防水係數	IP43
工作溫度	攝氏 -20° 到 +60° (華氏 -4° 到to 140°)
大小尺寸	37 x 26 x 16 毫米(1.4 x 1.02 x 0.6 吋)
重量	17 克 (0.59 盎司)

保固條件

在正常使用情況下，Dronetag 產品在購買一年內保證材料和工藝無瑕疵。在保固期內，Dronetag 將根據其單方面確認，決定修理或更換任何在正常使用中失效的產品。這些維修或更換將不收取客戶任何零件或人工費用，但客戶需自行負擔必須的運輸與處理費用。

限制說明

注意事項：保固不適用於表面損傷、耗材部件、事故、濫用、誤用、水、火災或水災造成的損壞、未經授權的維修造成的損壞，以及已被修改或變更的產品。

技術支援

support@dronetag.cz

地址：
Dronetag s.r.o.
Veltruská 602/16
Prague, 19000
Czech Republic