Further information

Battery and battery life

The PowerUnit has a **3.7V 5AH LiPo rechargeable battery.**

• **Low battery indicator:**
When the battery is low, the PWR led flashes red.

• **Recharging the battery:**
- Connect the USB port of the power cable (supplied) to a USB socket. Unscrew the sealing cap from CHG port and connect the power cable to the CHG port.
- It is recommended to make complete charges (charging time: 10h).
- When the battery is fully charged, the device has a battery life of 50h.
- The PowerUnit has an automatic shutdown function (after 12h), to save the battery.

Technical sheet

• Weight: 1.250 kg
• Dimensions of the PowerUnit: 75 x 140 x 25 mm
• Dimensions of the Tx Flag: 55 x 100 x 23 cm
• Compatibility: FxChip / FxChip BLE
• Transmitter with 2 modes: Tx / Mic
• Transmitter with 3 codes: START / LAP / FINISH
• Detection field: 6 m
• Minimum time between 2 transmitters: 0,7 s
• Accuracy: 2/100 of a second
• Battery: 3.7V 5AH LiPo rechargeable battery
• Battery life: 50 h
• Water resistance: IP67
• Operating temperatures: -20°C to +50°C

Technical support

Find our FAQ (Frequently Asked Questions), as well as other manuals and user guides, on our website at: **www.freelap.com/support**

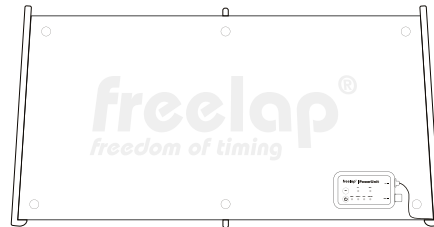If you cannot find the answers to your questions, please contact your Freelap dealer. Find the list of Freelap dealers at: **www.freelap.com/freelap-contact**

After-sales service & warranty

The PowerUnit & Tx Flag are guaranteed 2 years. If you have any questions or if you need assistance with your device, please contact your Freelap dealer.

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freelap®
freedom of timing

PowerUnit & Tx Flag

V220623

About the PowerUnit & Tx Flag

PowerUnit is a versatile transmitter of Freelap timing system. It can be quickly set as START, LAP or FINISH transmitter. It emits a magnetic field automatically detected by your transponder during its passage. PowerUnit is associated with an antenna flag, the Tx Flag, which provides a wider detection zone (6m).

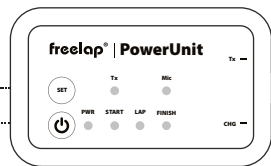# Use of the PowerUnit & Tx Flag

1. Prerequisites

The PowerUnit & Tx Flag transmitter is a part of the Freelap timing system. To get your timing data, you must **attach the transponder to the elastic band of the rider's mask** and **use the MyFreelap app** (cf corresponding user manuals).

2. Get to know the PowerUnit

Set button: To select Tx mode

Tx / Mic Leds : Indicate on which mode the transmitter is set

Tx: To connect the PowerUnit to the Tx Flag

CHG port: To charge the device

Power button: To turn on/off the transmitter, and to select the desired code

PWR led: Indicates if the device is on (green) or if the battery is low (red)

START / LAP / FINISH leds: Indicate on which code the transmitter is set

3. Install the Tx Flag

• Thread the 4 rods horizontally through each notch of the flag (top/right, top/left, bottom/right, bottom/left).

• Thread the 3 support bars vertically into each notch of the flag (left, middle, right).

• Fix the rods to the support bars by fitting them into each other.

• **Connect the Tx Flag to the Tx port of the PowerUnit.**

• Fix the support bars to the ground using pegs.

4. Turn on and set the PowerUnit

• **Press 2s on the Power button to turn on the transmitter.**

• **Press on the Set button to select the Tx mode**. Each press of the Set button switches you to the next mode. The LED of the Tx mode must flash.

• Then, **make short presses on the Power button to select the desired code** (START = start transmitter / LAP = intermediate transmitter / FINISH = finish transmitter). Each short press of the Power button switches you to the next code. The led of the selected code flashes.

5. Place the PowerUnit & Tx Flag on the track

• Fix the Tx Flag to the ground, **on the side and parallel to the track. The Freelap logo must face the track.**

• It must be placed **at max. 6m of the rider's passage** (so that the transponder of the rider crosses the detection field of the transmitter)

⚠ Placing the transmitter at any other location or position may result in inaccuracies or non-detection.

6. Associate it with other Freelap transmitters

To make Freelap timing system work, **you must have a transmitter set with the code FINISH on your track**.

PowerUnit is a versatile transmitter. So, **you can use several PowerUnit transmitters on your track** (set as START, LAP or FINISH transmitter).

You can also use it in combination with other Freelap transmitters (e.g. you can use a Mx Start as START transmitter).

⚠ • **The transmitters must be minimum 0.7 second appart.**
• **Your track must contain a maximum of 11 transmitters.**
• **For an optimal accuracy, take the start 15m before the 1st transmitter.**

> Example - System in loop:
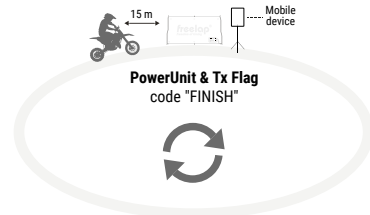
To get your LAP times in a loop system, only 1 PowerUnit & Tx Flag set on the code FINISH is enough.

15 m — Mobile device

PowerUnit & Tx Flag code "FINISH"

> Example - Standard system:

15 m — Mobile device

PowerUnit & Tx Flag code "START"

PowerUnit & Tx Flag code "LAP" *(optionnel)*

PowerUnit & Tx Flag code "FINISH"