

Once the transmitter is on, **press the central button again to select the desired code** (Start = for start transmitter/ Lap = for intermediate transmitter/ Finish = for finish transmitter). Each press of the central button switches you to the next code. The LED of the selected code flashes.

• **Press the "Set" button to select the desired detection mode** (Tx = permanent magnetic field triggered by the transponder OR Cx = magnetic field triggered when the athlete crosses the infrared beam). Each press of the "Set" button switches you to the next detection mode. The LED of the selected detection mode flashes.

» ASSOCIATE CXUNIT AND CXFLAG WITH OTHER FREELAP TRANSMITTERS

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

The CxUnit is a versatile transmitter, so **you can use several CxUnit** 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 the Tx Gate Pro transmitter as start transmitter).

CxUnit must be **at least 20m apart** (between them, or with other transmitters).

/! \ Your FxChip and FxChip BLE transponders have a temporary memory of 10 Laps. It means that **your track must contain a maximum of 11 transmitters.**

3 FURTHER INFORMATION

» BATTERY AND BATTERY LIFE

Your CxUnit has a **rechargeable Lithium-Ion 3.7V 5Ah LiPo battery.**

> **Low battery indicator:** When the battery becomes low, the "PWR" LED turns red.

> Recharging the battery:

- Insert the power cable (supplied) into the "CHG" (charge) connector on the back of the device.

- It is recommended to make complete charges (**charging time : 10h**).

- When the battery is full, the device has a battery life of 60h in Cx mode, 24h in Tx mode

- Your CxUnit has an **automatic shutdown function** (after 12 hours) to save the battery.

» TECHNICAL SHEET

CXUNIT :

• **Weight:** 630 g with handle / Reflector: 160 g

• **Dimensions:** 75 x 85 x 150 mm / Reflector: diam. 80 mm

• **Compatibility:** FxChip, FxChip BLE, LED display

• **Transmitter with 3 codes:** Start / Lap / Finish

• **Technology:** Infrared signal

• **Included:** reflector, controller, battery pack

• **Detection field:** 6.5 meters

• **Accuracy:** Cx mode 1/1000 of a second / Tx mode 2/100 of a second

• **Battery:** 3.7V 5Ah LiPo / low battery indicator / Easily rechargeable using a USB cable (charging time : 10 hours)

• **Battery life:** Cx mode 60 hours / Tx mode 24 hours

• **Water resistance:** 3ATM

• **Operating temperatures:** -20°C to +50°C

CXFLAG :

• **Weight:** 460 g

• **Dimensions:** 500 x 750 mm

• **Compatibility:** FxChip / FxChip BLE / LED Display

• **Emission zone:** 6.5 meters

• **Water resistance:** 5 ATM

• **Operating temperatures:** -20°C to +50°C

» TECHNICAL SUPPORT

Our FAQ (Frequently Asked Questions), as well as other manuals and user guides, can be found on our website at:

<http://www.freelap.ch/support/>

If you cannot find the answers to your questions, please contact your Freelap dealer. Find the list of Freelap dealers at:



<http://www.freelap.ch/freelap-contact/>

» AFTER-SALES SERVICE & WARRANTY

Your CxUnit and CxFlag are **guaranteed 2 years**. If you have any questions or if you need assistance with your devices, please contact your Freelap dealer.



www.freelap.ch

Follow Freelap on  & 

MADE BY FREELAP SA
Av. D.-Jeanrichard 2A
CH-2114 Fleurier - Switzerland
+41 32 861 52 42 - www.freelap.ch

freelap[®]
freedom of timing

CXUNIT
-
CXFLAG

**FREELAP VERSATILE TRANSMITTER AND ITS
ANTENNA FLAG, SPECIALLY DESIGNED FOR
SKIING.**

INSTRUCTION FOR USE

Congratulations on the purchase of your Freelap CxUnit and CxFlag! These devices have been designed to be convenient and simple to use. In this guide you will find all the information about how they work.

1 OVERALL FUNCTIONING

» YOUR CXUNIT

Your CxUnit is the **versatile transmitter with 2 detection modes (permanent magnetic field or photocell) of the Freelap system**, specially designed for skiing. The CxUnit transmitter can be quickly set as **start transmitter, intermediate transmitter, or finish transmitter**. Thus, it allows you to get both **your lap times and your split times**.

This transmitter offers 2 detection modes:

- **Tx mode:** This is the permanent magnetic field detection mode. The transmitter emits a permanent magnetic field automatically detected by your FxChip transponder during its passage.
- **Cx mode:** This is the infrared photocell detection mode. When the athlete crosses the infrared beam of the CxUnit, the CxFlag emits a magnetic signal instantly transmitted to the FxChip transponder.

» YOUR CXFLAG

The CxUnit transmitter is used in association with the CxFlag (regardless of the chosen detection mode). Your CxFlag is the **antenna flag connected to the CxUnit transmitter**. This antenna allows the transmitter to **offer a wide detection field (6.5 meters)**.

2 USE OF YOUR CXUNIT & CXFLAG

» PREREQUISITES

Your CxUnit and CxFlag are part of the Freelap system. In order to make it work you must **attach the transponder(s) to the athlete(s) and use the MyFreelap app** (consult the corresponding user manuals for more details).

» BUTTONS, LEDS, AND PORTS OF THE CXUNIT

> BUTTONS :

1. ON/OFF BUTTON : To turn on / off the transmitter, and set the desired code (start / lap / finish)

2. SET BUTTON : To set the desired detection mode (Tx or Cx)

> LEDS :

- 3. PWR:** Indicates that the device is on, and turns red when the battery is low.
- 4. START:** Indicates that the transmitter is set as "Start" transmitter.
- 5. LAP:** Indicates that the transmitter is set as "Lap" transmitter.
- 6. FINISH:** Indicates that the transmitter is set as "Finish" transmitter.
- 7. Tx :** Indicates that the transmitter is set on "Tx" detection mode.
- 8. Cx :** Indicates that the transmitter is set on "Cx" detection mode.

> PORTS :

- 9. Tx :** To connect your CxFlag to your CxUnit.
- 10. CHG :** To charge the device.



» CHOOSE YOUR DETECTION MODE

This transmitter, specially designed for skiing, offers 2 detection modes:

- **Tx mode** (detection by permanent magnetic field triggered by the transponder):
 - Your CxUnit transmits permanently, and has a battery life of 24 hours. The accuracy of this mode is +/- 0.02s.
 - **Tx mode is recommended for disciplines in which several skiers are skiing at the same time (e.g. : ski cross, boardercross ..)**
- **Cx mode** (detection by magnetic field triggered when the skier crosses the infrared beam):
 - Thanks to its beam, the Cx mode offers a higher precision than the Tx mode: +/- 0.001s. It has a battery life of 60h.
 - **Cx mode is recommended for disciplines in which only one skier is skiing at a time (e.g. : alpine ski).**

» PLACE YOUR TRANSMITTERS ON YOUR TRACK

> PLACE THE CXUNIT :

- **Fix the CxUnit on its "Brushgrip" support (not included) and plant it on the ground:**
 - on the side of the track at a **maximum distance of 6.5m** from where the skier will pass.
 - place the **camera lens photocell at the finish line (or the intermediate line).**

> PLACE THE CXFLAG :

- Connect your CxFlag to your CxUnit.** To do this, place your CxFlag next to your CxUnit:
The CxFlag antenna must be attached to 2 standard slalom poles.
- Plant 2 slalom poles in the snow, **just after your CxUnit**, positioned in the direction of the race. Then, attached your flag by passing the pegs into the notches at each end of your flag.

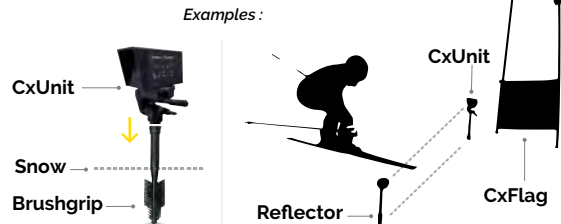
- The CxFlag should be positioned in the direction of the track, and few centimeters above the snow.
- **Connect the flag to the transmitter by connecting the CxFlag cable provided for this purpose to the Tx connector of your CxUnit.**

The CxFlag does not have any buttons, it works as soon as it is connected to the CxUnit.

> FOR CX MODE :

- **Fix the reflector on its "Brushgrip" support and plant it in the snow:**
 - **right in front of the photocell of your CxUnit**
 - **at a maximum distance of 6.5 meters.**
- If the device is not aligned with the reflector, a continuous beep is emitted. A white light at the back of the reflector indicates the proper alignment. **Use the handle to make the alignment** (2 axis adjustments can be made: up / down and left / right)

!/ \ Placing the transmitter and its flag at any other location or position may result in inaccuracies or non-detection.



» TURN ON AND SET YOUR CXUNIT

- **To turn on the transmitter simply press the central "ON/OFF" button for 1 second.**