User's Manual

Birdy Button

Version 1.0.2

Document history

Edition	Date	Description	Parts revised
V1.0.0	2024.12.18	Document creation Birdy Button firmware 1.00.0__0	all
V1.0.1	2025.03.31	Charging temperature update	all
V1.0.2	2025.12.11	Add FCC Radiation Exposure and Lora specification	§10 & §5.4-5.5

Version naming convention : Vx.y.z
z is incremented for a minor change like a syntax error, adding a detail, a change in format, and are draft versions before official version
y is incremented for official released versions
x is incremented for a major change like adding a chapter, a new function

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NOTE

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1 Abbreviations

Birdy	Name of **TPL Systèmes** pagers range
Birdy Button	Birdy Button device
BLE	Bluetooth Low Energy
dBm	Decibel referenced to 1 milliwatt, power unit
EN 300 220-1	ETSI standard on : Short Range Devices (SRD) operating in the frequency range 25 MHz to 1 000 MHz ; Part 1: Technical characteristics and methods of measurement
EN 300 220-2	ETSI standard on : Short Range Devices (SRD) operating in the frequency range 25 MHz to 1 000 MHz; Part 2: Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU for non specific radio equipment
EN 300 224	ETSI standard on : Land Mobile Service ; Radio Equipment for use in a Paging Service operating within the frequency range 25 MHz - 470 MHz; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU
EN 301 489-1	ETSI standard on : Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements
EN 301 489-2	ETSI standard on : ElectromagneticCompatibility(EMC)standard for radio equipment and services; Part 2: Specific conditions for radio paging equipment; Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU
EN 301 489-3	ETSI standard on : ElectroMagnetic Compatibility (EMC) standard for radio equipment and services ; Part 3: Specific conditions for Short-Range Devices (SRD) operating on frequencies between 9 kHz and 246 GHz ; Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU
EN 62368-1	International standard : Audio/video, information and communication technology equipment –Part 1: Safety requirements
EN 62479	International standard : Assesment of the compliance of low-power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz)
e.r.p.	Effective Radiated Power
ETSI	European Technical Standards Institute
EU	European Union
FCC	Federal Communications Commission, independent US government agency in charge of interstate and international communications regulations in USA territories
IoT	Internet of Things
LED	Light Emitting Diode
LoRa	LoRa is a patented digital wireless data communication technology developed by Cycleo, www.lora-alliance.org

POCSAG	Post Office Code Standardization Advisory Group, data transmission asynchronous protocol (used for pagers)
PSU	Power Supply Unit
RIC	Radio Identity Code
RSSI	Received Signal Strength Indicator
RX	Related to reception
TX	Related to transmission
U/D	Up / Down
USA	United States of America
USB	Universal Serial Bus

CE	Compliant to European Union health, safety, and environmental protection standards, compliant to be sold within European Economic Area
UKCA	Compliant to Great Britain rules
FC	Compliant to FCC rules
	This product must not be thrown out with household waste (see **paragraph 7**)
	Scan code of BIRDY BUTTON serial number

2 Safety instructions

! Before using this radio device, read this document which contains important operating instructions to use it safely.
For more information on product details, handbooks, manuals and approved accessories, please refer to www.tplsystemes.com or to reseller, or send an e-mail to support@tplsystemes.com.

! Any changes or modifications of this product not expressly approved by the body responsible for compliance could void your authority to operate this equipment.

! Use the equipment only with the accessories supplied or approved in the list published on www.tplsystemes.com.

! Follow “Warning on batteries” paragraph (below) to properly use the Li-ion battery.

! Do not use this product if it is visibly damaged.

! This product may malfunction if not installed and used in accordance with the Installation, Programming and User’s handbooks. The use of radio systems near other electrical equipment, metallic surfaces or influenced by architectural obstacles may affect the proper function respectively the radio coverage.

2.1 Warning on batteries

- Charge the Birdy Button internal battery using the approved **TPL Systèmes** charger only.
- Use the battery in accordance with its water and/or dust Ingress Protection (IP) rating.
- Do not discard your battery into fire.
- Do not replace the battery in any area labeled “Hazardous Atmosphere”.
- Do not disassemble, crush, puncture, shred, or otherwise attempt to change the shape of your battery.
- Do not dry a wet or damp battery with an appliance or heat source, such as a hair dryer or microwave oven.
- Do not allow conductive material such as jewelry, keys, or beaded chains to touch exposed battery connectors.

3 Product overview

3.1 Birdy Button

Birdy Button is a very light and rugged POCSAG pager. It can be programmed with 128 numeric and/or alphanumeric addresses. It offers a TX capability. It is equipped with a Bluetooth module, and a LoRa module.

- Dimensions 97.4x54.7x16.7mm
- Weight 60g
- Li-ion rechargeable battery
- IP67 compliant
- Accelerometer for lone-worker monitoring

Birdy Button is packaged with:
- Birdy Button
- a battery

Birdy Button

3.2 Accessories

Programming and charging cradles are supplied as accessories. They both include power adapter and programming USB cable. Refer to **Birdy Button Operating Manual for Programming Software** to program Birdy Button.

Below is detail about available Birdy accessories and their reference at **TPL Systèmes**.

Birdy USB Programmer (and charger)

BIRDYSLIM_PROG
BIRDYSLIM_PROG_T (with TPL logo)

Birdy Charger

BIRDYSLIM_CHARG
BIRDYSLIM_CHARG_T (with TPL logo)

Power sector adapter
100-240V~/5V@1A_ for Europe
+ programming USB cable
BIRDYSLIM_PSU_EU

Power sector adapter
100-240V~/5V@1A_ for United Kingdom
+ programming USB cable
BIRDYSLIM_PSU_UK

Power sector adapter
100-240V~/5V@1A_ for USA
+ programming USB cable
BIRDYSLIM_PSU_US

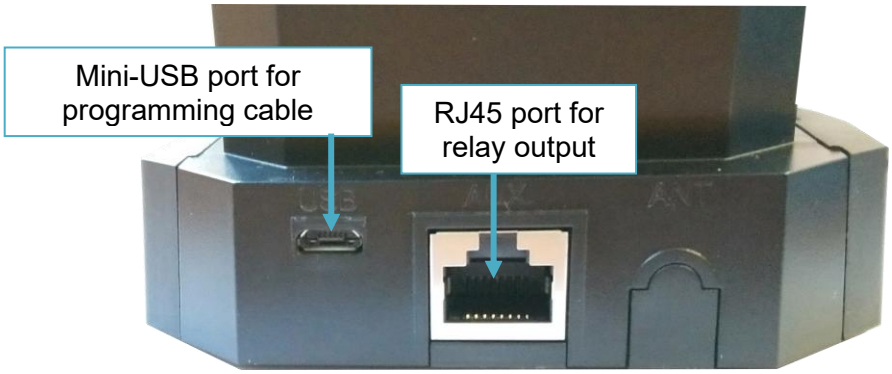
Wall Mount Hoster
BIRDYB1_WMOUNT

Lanyard
BIRDYW_DRAGONNE

Birdy Slim Charger Lite (front)

Birdy Slim Charger Lite (side)

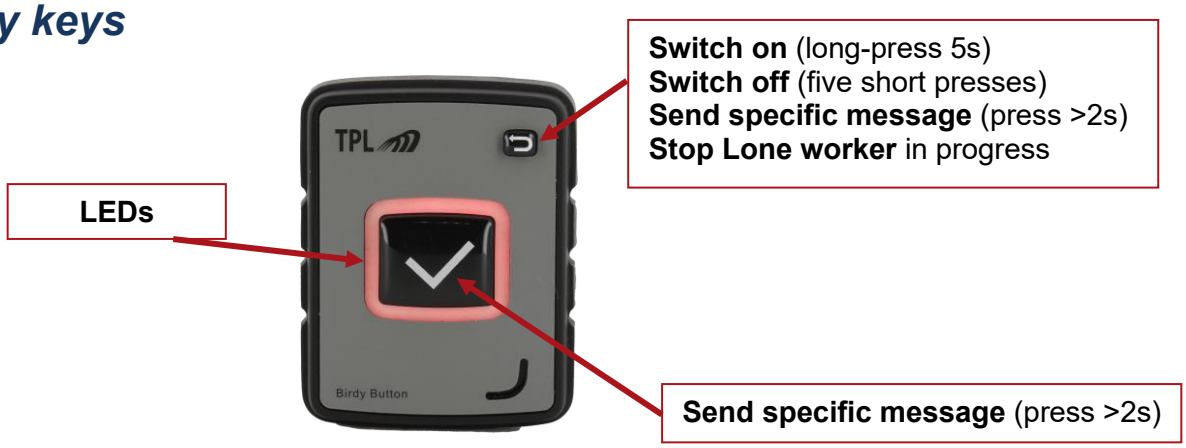
Birdy Slim Charger Lite does not enable Birdy Programming.
BIRDYSLIM_CHARG_L with PSU EU (for Europe)
BIRDYSLIM_CHAR_UK with PSU UK (for United Kingdom)
BIRDYSL_CHG_L_US with PSU US (for USA)



Programming or charging cradle rear view

When BIRDY is on charger, LED strip light intensity varies permanently between minimum and maximum.
Green LED → charging and programming
Blue LED → charging only

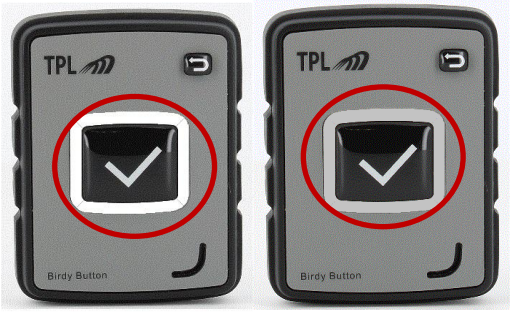
4 Birdy keys



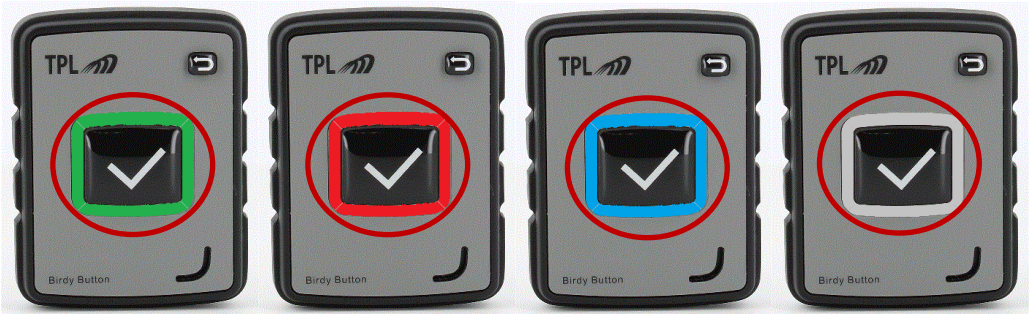
4.1 Switch on

A long press on the escape button switches on the product.

The product lights white, then turns off.



Then the start music is playing, and the product lights green, red, blue alternatively before turns off.



The product is now turned on.

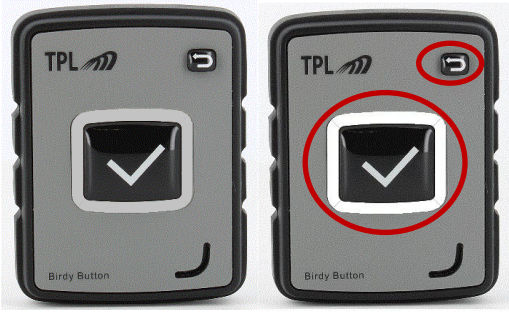
A simple press lights white the product; it indicates the product is started.

4.2 Switch off

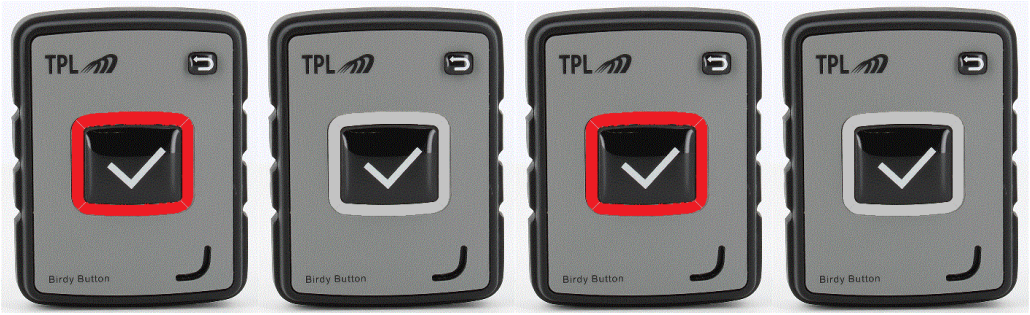
Five short presses on the exit button will light up the product then light off, the product is now swithc off.

4.3 Send specific message

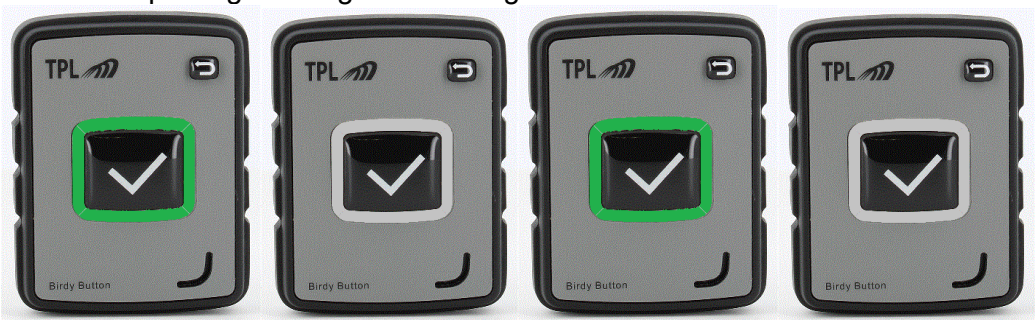
A long press on the escape button or on the central button will send a specific message.



The product will ring and blink like describe in customer programming software.

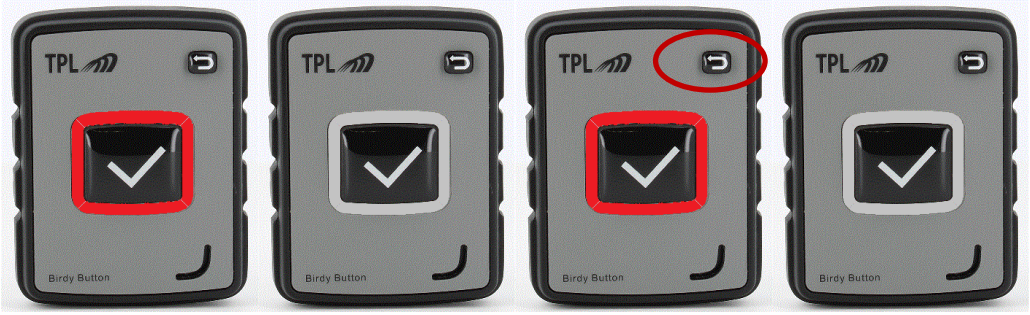


Then send pocsag message and blink green.



4.4 Suspend lone worker alert

The product rings, blinks and send pocsag message. A standard press on the exit button suspend lone worker process.



5 Technical characteristics

5.1 Environmental

Operating temperature range:	-10°C to +60°C
Operating humidity range:	5-95% non condensing
Storage temperature range:	-10°C to +50°C (1 month)
Water resistance:	IP67

5.2 Battery

Battery type:	Li-ion Polymer 3.7V@850mAh (UFX 503440)
Temperature range (charging):	0°C to +45°C
Temperature range (discharging):	-10°C to +60°C
Battery autonomy:	up to 450 days

5.3 Dimensions – Weight

Dimensions *(excluding belt clip):*	H97.4 x W54.7 x D16.7mm
Overall weight:	60g approx.
Case:	PC YH10

5.4 RF Specifications

Frequency bands MHz:	POCSAG 438-470MHz / IoT TX (EU) : 868-870MHz / IoT TX (USA) : 902-928MHz (USA) (depending on ordering code)
RF channel bandwidth:	12.5 / 20 / 25kHz
Maximum output power :	< 20mW e.r.p (EU) / 100mW (USA)
Frequency stability:	± 2ppm
Modulation:	FSK (POCSAG)
Data rate:	512, 1200, 2400 Bds
Sensitivity VHF band:	2.0µV/m (512bds), 2.5µV/m (1200bds), 3.0µV/m (2400bds), (body-worn)
Selectivity:	>60dB ±25kHz
Intermodulation rejection:	>65dB
FCC ID:	2ATEXBIRDYB1

5.5 IoT Specifications

Output power:	< 20mW e.r.p (EU) / 100mW (USA)
Frequency:	ISM Bands 868–870 MHz (EU) / 902–928 MHz (USA)
Modulation:	LoRa
Channel Spacing:	200 kHz
Operating Channel:	125 kHz
Bluetooth Low Energy	V4.2/V5.0
FCC ID:	2ATEXBIRDYB2

6 Warranty – Customer Support

All **TPL Systèmes** products are guaranteed one (1) year, parts and labor, return to factory, from their delivery date.

Warranty on products parts cannot not be applied in following cases :

- Abnormal use of products : breakage, vandalism, handling errors, thefts
- External causes : thunderlightning, faulty power supply, flooding, water damage, fire, industrial disaster, nuclear disaster, natural disaster
- Repairs, addings, changes performed by personel not authorised by **TPL Systèmes**

At the end of warranty period, products can be returned to TPL Systèmes – Sarlat – France for analysis and repair after customer agreed the quotation.

A customer technical support exists within **TPL Systèmes**.
This service can be contacted :

- By phone, via **TPL Systèmes**-Sarlat office : +33 5 53 31 55 00
- By mail : support@tplsystemes.com

Office is open all working days : 8h30-12h and 14h-17h30, 16h30 on Friday (Paris time).

TPL Systèmes has a computerised follow-up for its technical support.

7 Recycling & Waste management

Birdy Button product contains electronic components which must not be thrown out with household waste.

The Directive **2012/19/EU** of the European Parliament and the Council on waste electrical and electronic equipment was implemented in order to ensure that products are recycled with best techniques of re-use, recycling and recovery of such wastes, and so preserve, protect and improve the quality of the environment, and protect human health.
This product has been designed and manufactured with materials and components of high quality that can be reused or recycled. It is compliant with Directive **2011/65/EU** on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

8 Regulation aspects

Users of **Birdy Button** must satisfy to the use of European frequencies plan following ERC Recommendation (70-03), Annex1, and must also check with local authority of frequency regulation in their respective country.

9 EU Declaration of Conformity

TPL Systèmes hereby declares that **Birdy Button** complies with Directive 2014/53/EU. The full text of the Declaration of Conformity is available at www.tplsystemes.com, through TPL Systèmes Support or at your reseller, or by sending an e-mail to support@tplsystemes.com.

10 FCC Statement for use in the USA

FCC Part 15.19 warning statement
This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

FCC Part 15.21 warning statement
Note: The **grantee** is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. Such modifications coud void the user's authority to operate the equipment.

FCC Part 15.105(b) warning statement (Only required for 15.109-JBP devices)
Note:This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.
These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure
When using the product, maintain a distance of 20cm from the body to ensure compliance with RF exposure requirements. FCC ID：2ATEXBIRDYB1

The device has been evaluated to meet general RF exposure requirement; The device can be used in portable exposure condition without restriction. Federal Communication Commission (FCC) Radiation Exposure Statement Power is so low that no RF exposure calculation is needed. FCC ID：2ATEXBIRDYB2