

User's Manual BIRDY SLIM

Version 1.0.1





Document history

Edition	Date	Description	Parts revised
V1.0.0	04/12/2015	Document creation	all
		Birdy Slim firmware 1.00.116	
V1.0.1	03/10/2016	New menus (Rotation / Backlight)	5.6.2 and 5.6.4
z is incremented f	or official released versi	a syntax error, adding a detail, a change in format, and are draft versions before o	fficial version

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1 Abbreviations

BIRDY	Name of TPL Systèmes pager
BIRDY SLIM	Pager with POCSAG transmission capability
dBm	Decibel referenced to 1 milliwatt, power unit
EEPROM	Electrically Erasable Programmable Read Only Memory
LCD	Liquid Crystal Display
LED	Light Emitting Diod
L/R	Left / Right
MMI	Man-Machine Interface
POCSAG	Post Office Code Standardization Advisory Group, data transmission asynchronous protocol (used for pagers)
RIC	Radio Identity Code
RSSI	Received Signal Strength Indicator
RX	Related to Reception
ТХ	Related to transmission
U/D	Up / Down
USB	Universal Serial Bus

....





2.1 Birdy Slim

BIRDY SLIM is a POCSAG very light and rugged pager. It can be programmed with 128 numeric and/or alphanumeric addresses. It offers a TX capability.

- Dimensions 97.4x54.7x16.7mm
- Weight 90g
- Screen 96 x 96 pixels

up to 8 lines of 16 characters each

- Multiple coloured screen
- Li-ion rechargeable battery
- IP67 compliant
- Accelerometer for lone-worker monitoring and automatic screen rotation
- Powerful flash LED
- User-friendly MMI with arrow keys
- Belt clip and lanyard







2.2 Birdy Slim cradle

BIRDY SLIM cradle exists in 2 versions :

- Programming and charging cradle
 - You can charge BIRDY battery and programme BIRDY (see BIRDY programming manual)
 - LED strip light is green
- Charging cradle
 - You can only charge BIRDY battery
 - LED strip light is blue





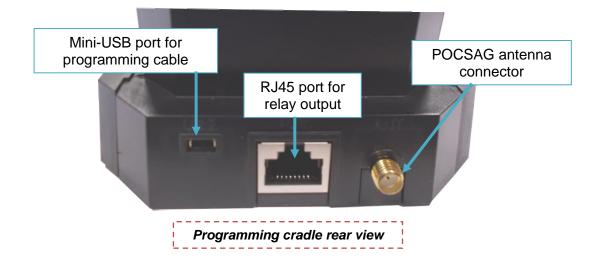






programming cable

power sector adapter





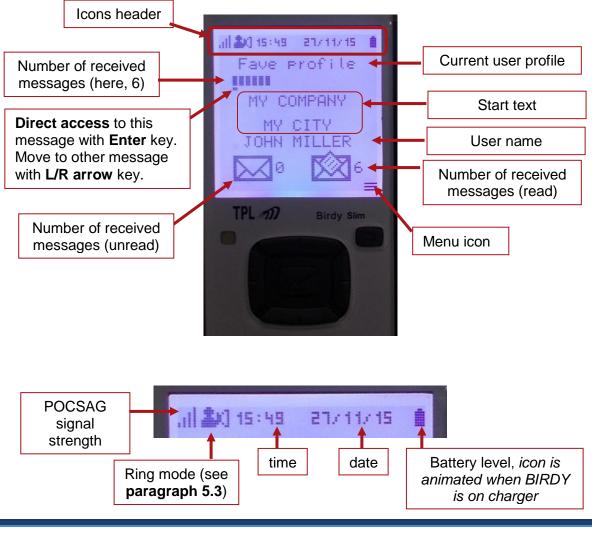
When BIRDY is on charger, LED strip light intensity varies permanently between minimum and maximum.



3 BIRDY keys



4 BIRDY screen





4.1 Screen rotation

BIRDY screen can rotate automatically depending on BIRDY orientation. This feature must be activated in the programming.



5 BIRDY menu

You can access *Menu* by pressing **Menu** key.

You can then navigate into *Menu* with **Arrow** keys. *Sub-menu* under selection is highlighted in **reverse video**. You can enter into a *sub-menu* by pressing **Enter** key.

You can escape from *Menu* or *sub-menu* by pressing **Back** key.

Depending on BIRDY programming some sub-menus may be present or not.

When all possible sub-menus are activated there exist **2 menu pages** on the BIRDY that you can access with **Arrow** keys.

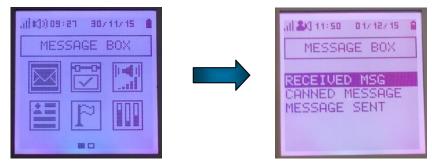




5.1 Message box

To enter Message box menu from BIRDY :

- Enter *Menu* with **Menu** key
- Go to Message box menu with Arrow keys (Message box is on top of menu icons)
- Push Enter key





5.1.1 Received messages

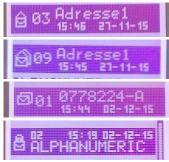
To read a message :

- Go to Received messages with Arrow keys
- Validate with Enter key
 - List of received messages is displayed
 - Go to wanted message with U/D arrow key
- Validate with Enter
 - Message is displayed

al 20 11:50 01/12/15 1 RECEIVED MSG		Message N° Sender address (name and RIC display alternate) Timestamp
■ 88888888888888888888888888888888		Message content

User can press **Back** key to return to main screen.

Different icons are used to show messages status :



Message read (envelope opened)

Message repeated and read (double envelope opened)

Message repeated and unread (double envelope closed)

Message locked (padlock)

5.1.1.1 Lock message

From message display window, press Enter key :

- A menu offers to
 - Lock message
 - Delete message
 - o Delete all messages
- Select *Locking* with **U/D arrow** keys
- Validate with Enter key
- Select Yes with U/D arrow keys
- Validate with Enter key





When messages are locked, message icon in main screen gets different :



5.1.1.2 Delete message

From message display window, press Enter key :

- Go to Delete message with Down Arrow key
- Validate with Enter key
- Select Yes with U/D arrow keys
- Validate with Enter key



Procedure is similar if you wish to delete all messages.

5.1.1.3 Acknowledge message

In BIRDY programming it is possible to demand an "**Operational ACK**" from user to be sure **user has read** the message (refer to **BIRDY Programming Manual** for more details).

If BIRDY is programmed as such, **user cannot exit message** (go back to main screen with **Back** key) without sending an ACK message.

ACK messages are programmed in BIRDY and displayed to user in that case.

From message display window, press **Back** key :

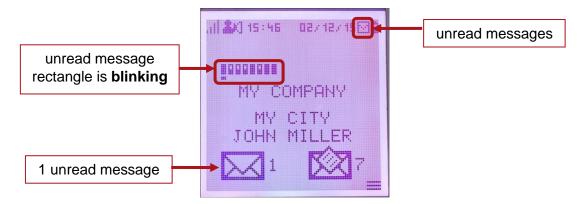
- ACK messages are displayed to user
- Select ACK message with U/D arrow keys
- Validate with Enter key
 - ACK message is sent







5.1.1.4 Unread message

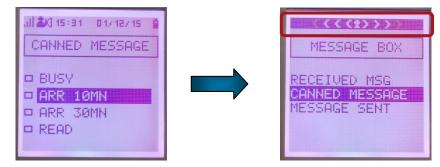


5.1.2 Canned message

In *Canned message*, user can find messages (TX) defined in BIRDY programming (Refer to **BIRDY Programming Manual**).

User can send any of these messages on demand :

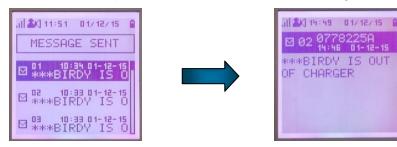
- Enter Canned message menu
- Select message with **U/D arrow** key
- Press Enter key
 - Message is sent immediately. You can see BIRDY transmission animation.
 - o Screen goes back to previous menu



5.1.3 Message sent

In *Message sent*, user has the list of messages sent by BIRDY.

- Enter *Message sent* list of messages
- Go to wanted message with U/D arrow key
- Press Enter to display message
 - User can see recipient address, timestamp of message, and message content





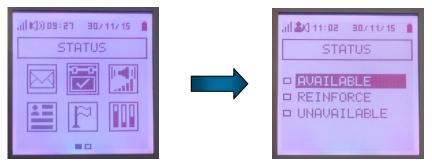
5.2 Status

Status sub-menu availability depends upon status messages creation and use in BIRDY programming.

Status menu enables user to send messages to an address about their availability. Messages and recipient address are pre-programmed in the BIRDY.

To send a Status message from BIRDY :

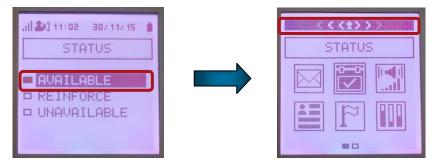
- Enter *Menu* with **Menu** key
- Go to Status menu with Arrow keys
- Push Enter key
- Go to desired Status message with Arrow keys



- Validate with Enter key

0

- Message is then selected and sent immediately
 - Message is highlighted in reverse video and left square is blackened
 - You can see BIRDY transmission animation
- Exit Status menu with Back key



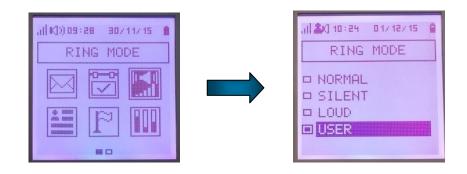
5.3 Ring mode

To modify ring mode :

- Enter *Menu* with **Menu** key
- Go to Ring mode menu with Arrow keys
- Push Enter key
- Go to desired choice with Arrow keys
- Validate with Enter key







Current ring mode is shown in icon header with a specific icon :

RING MODE	(1)× 5:08 01/12/15 € RING MODE	RING MODE	RING MODE
■ NORMAL □ SILENT □ LOUD □ USER	 NORMAL SILENT LOUD USER 	 NORMAL SILENT LOUD USER 	NORMAL SILENT LOUD USER

Normal mode is defined in BIRDY programming for each address and sub-address. *Silent* and *loud* modes are defined in BIRDY programming. *User* mode is defined by user with BIRDY menu **Settings** | Sound & alert | Alert setting.

If address is defined as priority in programming, normal mode is applied whatever the current ring mode and the user profile.

If normal mode is selected, text filters prior to user profiles modes (if defined) will be applied.

If another ring mode is selected (silent, loud, user), this ring mode is applied.

5.4 Profiles

Profiles sub-menu availability depends upon user profiles creation and use in BIRDY programming.

al 10:58 30/11/15

■ **NŨ PROFILE** □ Fave profile □ 2nd profile □ 3rd profile

Profiles is not present if no user profile has been activated in BIRDY programming.

al] K])) 09÷	59 30)	11/15
PR	ROFILE	ES
	2	

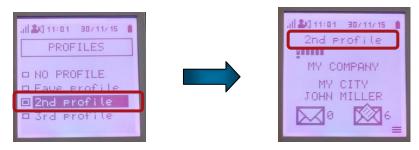
To activate a particular Profile in BIRDY :

- Enter *Menu* with **Menu** key
- Go to Profiles menu with Arrow keys
- Push Enter key
- Go to desired *Profile* with **Arrow** keys





- Validate with Enter key
 - Profile is then selected $(2^{nd} profile on example below)$
- Exit with Back key
 - You can see selected profile on main screen

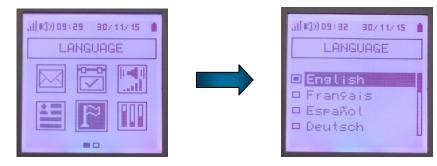


5.5 Language

Language sub-menu needs to be validated in BIRDY programming to be available to user.

To select BIRDY menu language :

- Enter *Menu* with **Menu** key
- Go to *Language* menu with **Arrow** keys
- Push Enter key
- Go to desired Language with Arrow keys
- Validate with Enter key



5.6 Settings

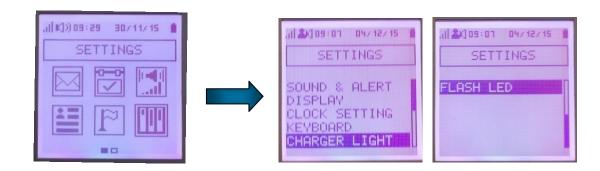
Settings sub-menu content depends upon BIRDY programming. Some items may not be available to user.

To go into BIRDY Settings menu :

- Enter *Menu* with **Menu** key
- Go to Settings with Arrow keys
- Push Enter key
- Go to *desired item* with **Arrow** keys
- Validate with Enter key







5.6.1 Sound & alert

In *Sound & alert* you can define ring and display in case of alert message receipt and for alarm (clock feature).



Alert setting will be applied in user ring mode (see paragraph 5.3)

		 al \$0 10:25 01/12/15⊠1 VIBRATE	
CHOICE OF RING LOUDNESS	all 2011:52 01/12/15 0 CHOICE OF RING □ 1	□ WITHOUT ■ WITH RING □ BEFORE RING	CONFIRMATION VES NO

- Move with Arrow keys
- Validate with Enter key

You can play *ringtone* by pushing **Right** key. You stop playing with **Enter** key.

Alarm clock time can be set in Clock setting (see paragraph 5.6.3)

5.6.2 Display

In Display user can define contrast, zoom level, and screen backlight coulour with Intensity.

- Move to desired item with Arrow keys
- Validate with Enter key.







With Intensity feature you can define several colour shades.

Rotation feature allow the BIRDY screen to rotate automatically depending on BIRDY orientation. This feature must be activated in the programming.

5.6.3 Clock setting

In Clock setting user can define time, alarm (clock) time, quiet period, and battery warning alert period.

- Move to desired item with Arrow keys
- Validate with Enter key.

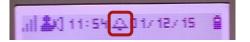


To set a time and/or date

- Move with L/R arrow keys
- Change value with **U/D arrow** keys
- Validate with Enter key
 - Winter/Summer time will be displayed if selected in BIRDY programming

In case alarm clock is not realistic screen backlight colour turns to red.

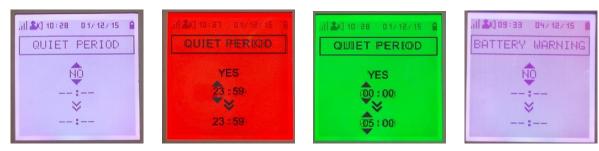
When alarm clock is set a ring icon is displayed in the header :



To define quiet period or battery warning period :







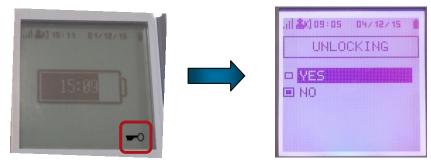
In case time period specified is not possible screen backlight colour turns to red.

5.6.4 Keyboard

	all عمر 14:48 مار 12/15 ه	al 🔐 10:29 01/12/15 🔒	해화 10:25 01/12/15전
	LOCKING	KEYBOARD SOUND	BACKLIGHT
LOCKING KEYBOARD SOUND BACKLIGHT	U YES	■ <mark>YES</mark> ■ NO	■ YES □ NO

In Keyboard user has menus to :

- Lock keyboard
 - o Locking becomes active when BIRDY switches to standby mode



- o Any key press leads to screen menu to unlock keyboard
 - Select Yes with Arrow keys
 - Validate with Enter key
 - Keyboard is unlocked
- Select to play a beep on each key push or not
 - Select Yes or No with Arrow keys
 - Validate with Enter key

.

- Select if key press turns backlight on or not.

5.6.5 Charger light

In *Charger light* user can choose to activate charger light when BIRDY receives a message while being on charger. This feature depends upon BIRDY programming.

- Select Yes to activate the charger light with U/D Arrow keys
 Validate with Enter key
- Select No to deactivate the charger light with U/D Arrow keys



• Validate with Enter key



5.6.6 Flash LED

In *Flash LED* user can activate permanently the flash LED.

- Select Yes to activate the flash LED with U/D Arrow keys
 Validate with Enter key
- Select *No* to switch off the flash LED with **U/D Arrow** keys
 - o Validate with Enter key



5.7 Technical menu

Technical menu sub-menu needs to be validated in BIRDY programming to be available to user.

Technical menu items also depend upon programming.

To go into BIRDY Technical menu :

- Enter *Menu* with **Menu** key
- Go to Technical menu with Arrow keys
- Push Enter key
- Go to *desired item* with **Arrow** keys
- Validate with Enter key







5.7.1 Version



v1.00.1__build 15

In Version you can get info about BIRDY firmware version.

On example above :

- Firmware version :
- EEPROM version :
- POCSAG RX frequency :
- POCSAG baud rate :
- 446.525MHz 512 bauds

B5121.1

03

- Boot version :

5.7.2 Serial number



In Serial number you can read BIRDY serial number.

5.7.3 Battery level



In Battery level you can read current battery level in Volts.

5.7.4 Identities

In Identities, you can :

- Change an identity (above N°1)



- Activate or disable an identity (above N°1)

Go to Identities menu :

- Go to desired identity with U/D Arrow keys
- Validate with Enter key
 - Modify digit value with **U/D Arrow** keys
 - Move to another digit with L/R Arrow keys
 - Move to activation icon with L/R and change with U/D
 - If square is black identity is active
 - Validate with Enter key
 - Possible identity values are in green screen backlight
 - If identity value is prohibited screen backlight turns to red

IDENTITIES			IDENTITIES
001: 0778224 0 002: 0 003: 1234562 0 004: 1234563 0 005: 1234564 0	Adresse3	Adresse3	Adresse3
	003: 1234562 🔳	003: 11234562 🔶	003: 234562 📧

5.7.5 Radio

The *Radio* menu offers to change POCSAG radio parameters in RX, TX and view POCSAG RSSI.

- Select Receiver, Transmitter or POCSAG with Arrow keys
- Validate with Enter key

80 : 00	01/12/15	1
RA	DIO	
Radat Wa:		
TRANSMIT		
POCSAG		

5.7.5.1 Receiver

In *Receiver* you can change :

- RX frequency
 - Digit under change is blinking, you can modify its value with U/D arrow keys. You move to other digit with L/R arrow keys
 - If you enter a wrong value screen back light turns to red
- Data rate
 - You move to baud rate with L/R arrow keys
 - When rate is blinking you can change it with U/D arrow keys
 - Possible values are : 0512, 1200, 2400







5.7.5.2 Transmitter

In Transmitter you can change :

- Recipient RIC code and sub-address
 - Digit under change is blinking, you can modify it with **U/D arrow** keys
 - You move to other digit with L/R arrow keys
- TX frequency
 - Digit under change is blinking, you can modify its value with U/D arrow keys.
 You move to other digit with L/R arrow keys
 - o If you enter a wrong value screen back light turns to red
- Data rate
 - You move to baud rate with L/R arrow keys
 - \circ When rate is blinking you can change it with U/D arrow keys
 - Possible values are : 0512, 1200, 2400



5.7.5.3 **POCSAG**



In POCSAG you can read RSSI level in dBm from POCSAG emitter.



5.7.6 Auto-test

In Autotest menu user has the ability to test :

- LCD display
 - Press Enter key to validate and pursue test
- Red / green / blue LED
- Vibrator Buzzer and ring
- Flash LED
- All keyboard keys
 - Press highlighted key under test to validate and pursue test
- Charger light



5.7.7 Accelerometer

In *Accelerometer* you can have access to integrated accelerometer measurements. Measurements are subject to uncertainty and can vary rapidly.

					-	 TEI	-	
X	:	-0	13	6	3	 -	*	
YZ		100	1300	100V	32			
M	V	-	Ю					

For each axis, second column returns accelerometer measurements raw data.

First column returns angle derived from raw data.

In case of motion, Mv value is at 1.

In case of immobility, Mv value is at 0.

5.8 Lone worker

Lone worker sub-menu needs to be validated in BIRDY programming to be available to user.

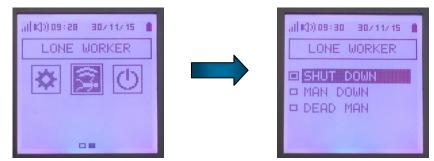
To activate Man down or Dead man functions on BIRDY :

- Enter *Menu* with **Menu** key
- Go to *Lone worker* with **Arrow** keys
- Push Enter key





- Go to desired function with Arrow keys
- Validate with Enter key



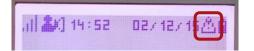
Man down and dead man functions are active after an "activation time".

When function becomes active BIRDY plays two successive beeps (at the end of the activation time delay).

Once function is active only user can deactivate it by using "*Shut down*" function in *Lone worker* menu, or a press on any key.

Refer to **BIRDY programming manual** for more details.

When dead man or man down functions are active, an icon is displayed in the header :

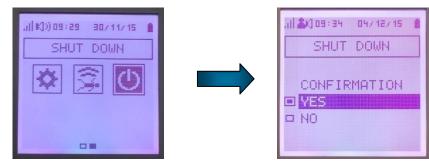


5.9 Shut down

Shutdown menu is available only if authorised in BIRDY programming.

To switch off BIRDY :

- Enter *Menu* with **Menu** key
- Go to Shut down with Arrow keys
- Push Enter key
- Choose Yes with Arrow keys
- Validate with Enter key



BIRDY is switched off immediately.