

### Federal Communication Commission Interference Statement

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 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 Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. To maintain compliance with FCC RF exposure compliance requirements, please avoid direct contact to the transmitting antenna during transmitting

### RF Exposure Warning!

Please keep product 20cm away from your body or bystander during the radio operation. The typical handheld two-way radios were certified under mobile usage condition

(i.e. keep 20cm away from the user body) and use of such radio closer than 20cm may exceed the US RF exposure limit and shall be avoided.

## PTT- Z or PTT-AZ or PTT-UX-AZ PUSH-TO-TALK USER GUIDE

---



**This manual  
applies to the  
Mobility Sound  
PTT-Z or PTT-AZ  
Push-to-Talk  
transmitter**

**Mobility Sound PTT- Z  
Model No.: PTT- Z or PTT-AZ  
Made in Taiwan**

All other product or service names are the property of their respective owners.

© 2014 Mobility Sound Technology Ltd.,  
All Rights Reserved

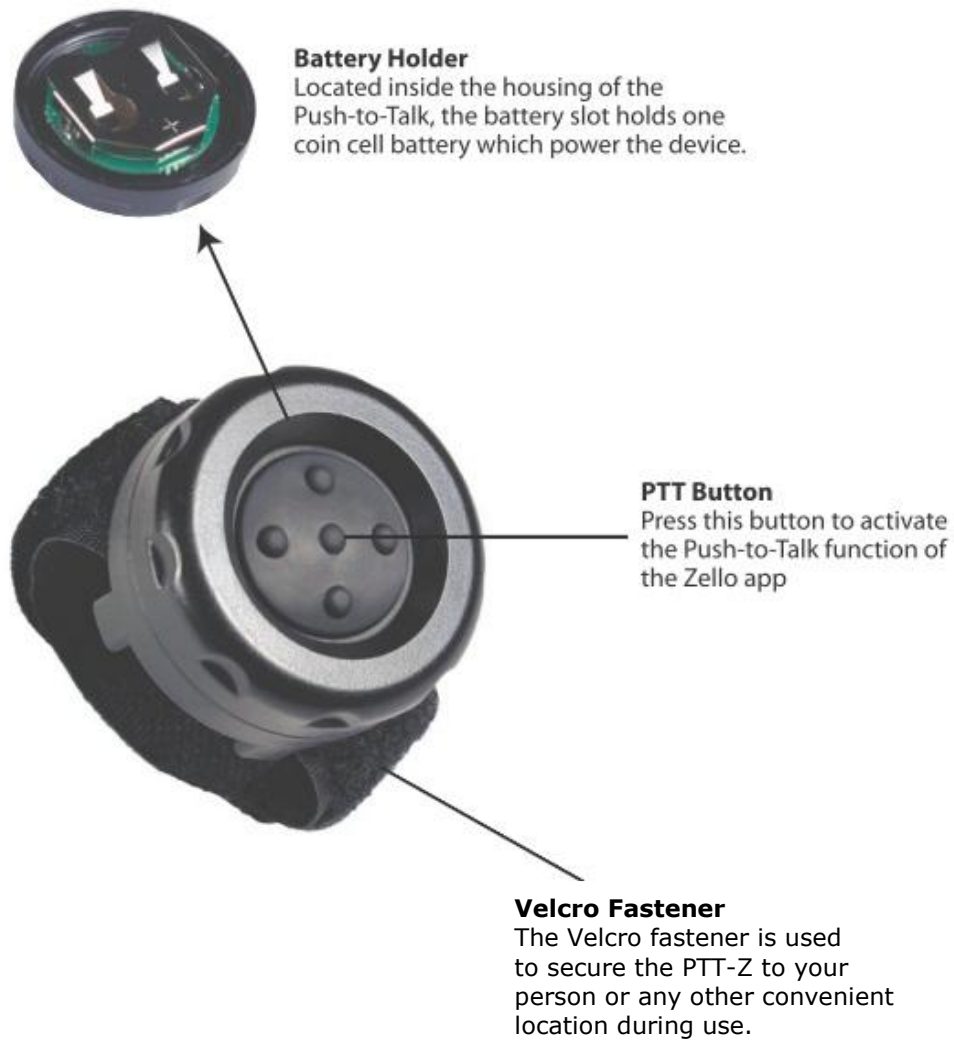


## Features

- . 2.4GHZ transceiver
- . -93dbm sensitivity in Bluetooth low energy mode
- . TX Power -20 to +4dbm
- . RSSI (1db resolution)
- . ARM Cortex – M0 32 bit processor
- . Serial Wire Debug (SWD)
- . S100 series SoftDevice ready
- . Memory
  - . 256kb or 128kb embedded flash programmed memory
  - . 16kb RAM or 32kb RAM
- . Support for non-concurrent multiprotocol operation
- . On-air compatibility with nRF24L series
- . Flexible Power Management
  - . Supply voltage range 1.8V to 3.6V
  - . 2.5us wake-up using 16MHz RCOSC
  - . 0.6uA @ 3V mode
  - . 1.2uA @ 3V in OFF mode + 1 region RAM retention
  - . 2.6uA @ 3V ON mode, all blocks IDLE
- . 8/9/10 bit ADC- 8 configurable channels
- . 31 General Purpose I/O Pins
- . One 32 bit and two 16 bit timers with counter mode
- . SPI Master
- . Two-wire Master (I2C compatible)
- . UART (CTS/RTS)
- . CPU independent Programmable Peripheral Interconnect (PPI)
- . Quadrature Decoder (QDEC)
- . AES HW encryption
- . Real Timer Counter (RTC)

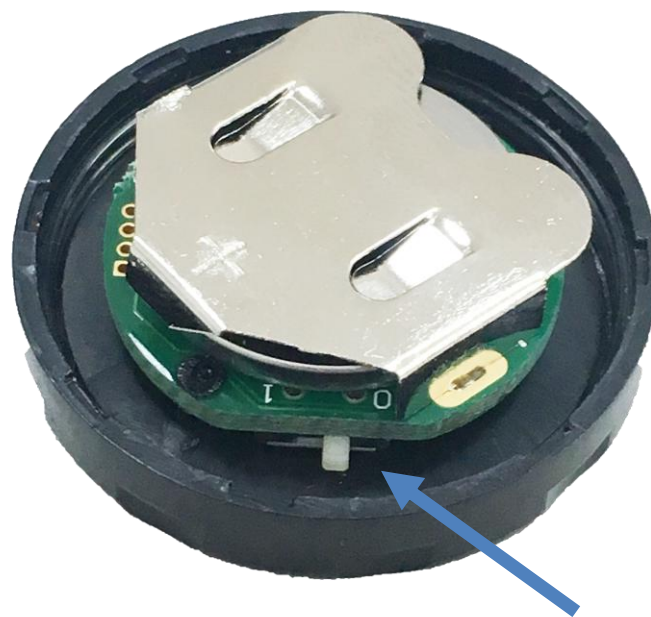


## Controls and connection



## Installing or Replacing the Battery

The PTT-Z uses one replaceable CR2032 coin cell type battery. The first time you use your PTT-Z, you will need to install a new battery or power on the slide switch on the PCB. You will also need to replace the battery at the end of its lifetime. A single battery can provide up to one full year of operating time. However, operating time can vary depending on usage cycle and the age and condition of the battery.



Slide the switch from 0 to 1

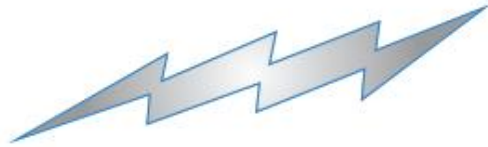


## To change the battery:

1. Separate the two halves of the PTT-Z housing by securely holding the back cover and rotating the front cover in a counter-clockwise direction until the two halves come apart.
2. Locate the battery holder inside of the device. Remove the old battery from the battery holder if one is installed. A ball point pen can be used to push the battery out of the holder if needed.
3. Insert a new CR2032 3-volt coin cell battery into the battery holder, observing proper polarity. The positive side of the battery (marked with a “+” sign) should face away from the circuit board.
3. Reinsert the two halves of the transmitter housing and rotate the top cover clockwise to tighten.

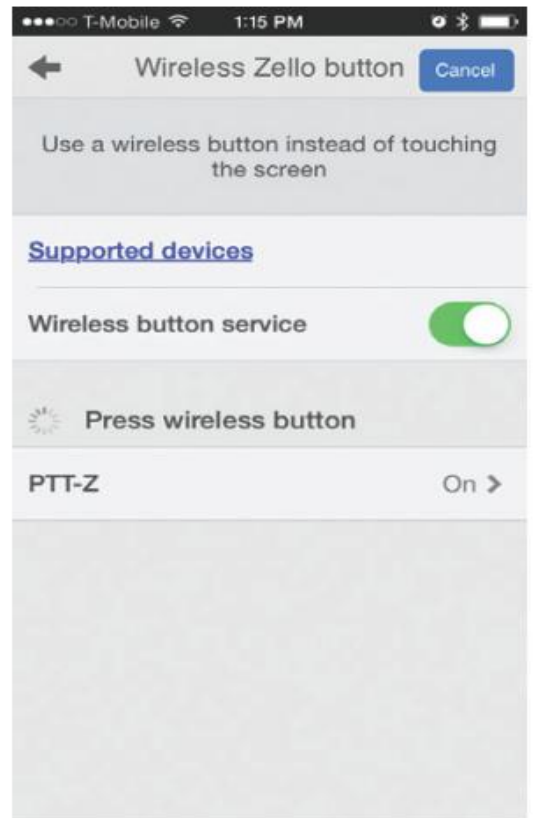


## Setting up the PTT-Z



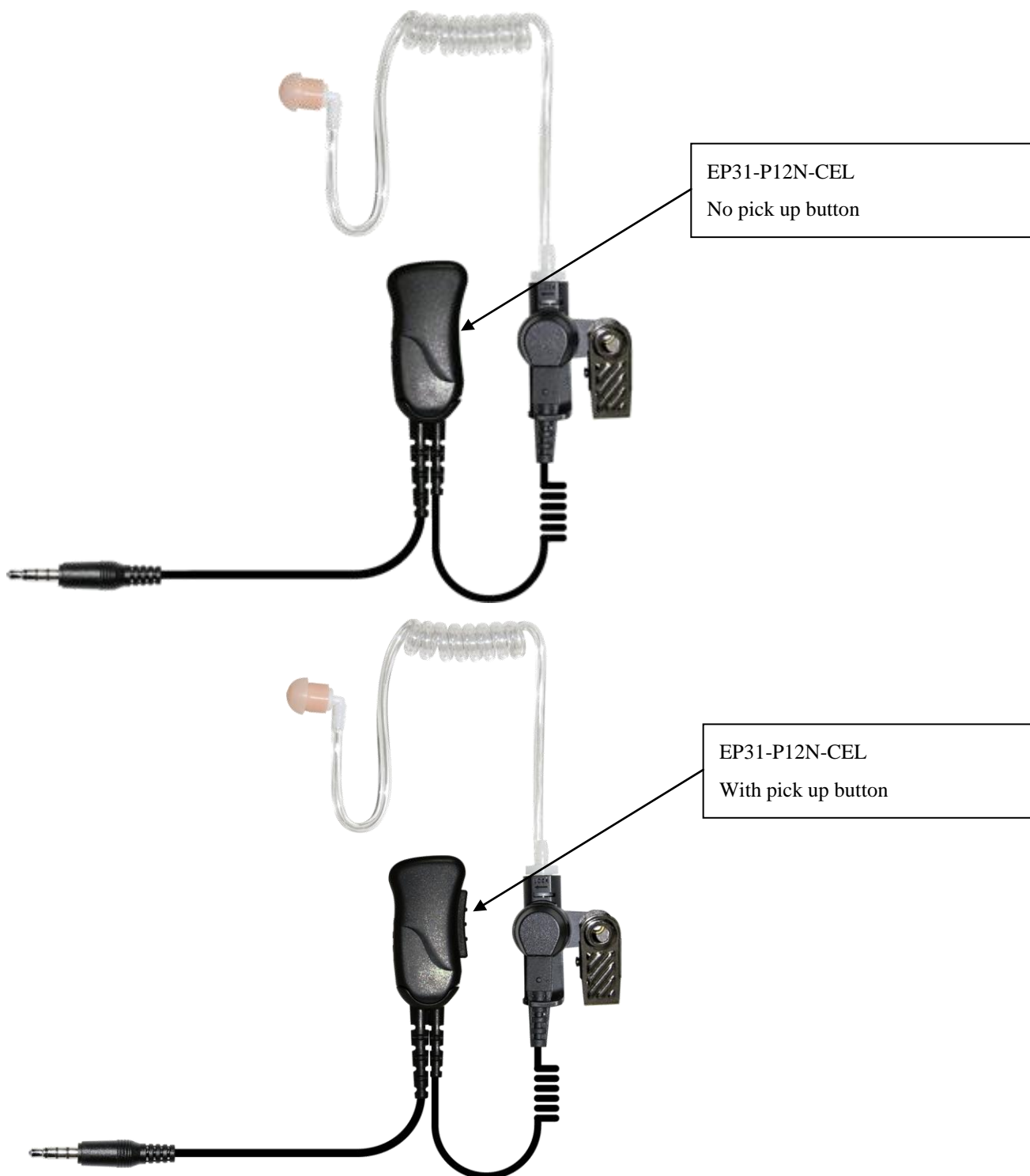
The PTT-Z Push-to-Talk is designed to work with Apple iPhone running the iOS operating system. Prior to normal operation, the phone and Push-to-Talk must be paired together using the following process:

1. Install the Zello app from your Zello@Work network, Or download the app from the Apple App store.
2. Make sure that your phone's Bluetooth is enabled, and that the Push-to-Talk has a fresh battery. The phone and PTT must be nearby each other (within 30 feet).
3. Open Zello and go to: Settings > PTT Button > Wireless Zello Button.
4. Make sure that the "Wireless Button Service" is turned on by sliding the button to the right.
5. Press and hold the PTT button on the PTT-Z.
6. Select "PTT-Z" from the list of PTT devices shown on the screen.
7. Open the Talk screen in Zello (the screen with a big round button). Pressing the PTT button the Push-to-Talk device should now cause Zello to transmit.



## Using EP31-P12-CEL or EP31-P12N-CEL

Mobility Sound releases 2 types acoustic tube earphone for iPhone and Android phone respectively. The difference between these 2 solutions is the pickup phone button on the earphone. Both models are for POC APP only.



## Support and Warranty

Mobility Sound warrants this product against defects in materials or workman-ship for a period of one year from the date of retail purchase. Mobility Sound will repair or replace a defective unit, at our option, without charge for parts or labor. The limited warranty is extended only to the original purchaser. It does not cover damage or failure caused by or attributable to Acts of God, abuse, misuse, improper or abnormal usage, faulty installation, improper maintenance, lightning, or other incidences of excessive voltage, or any tampering or repairs by other than a Mobility Sound authorized repair facility. It does not cover replacement of consumable parts, transportation costs, or damage in transit.

Repair or replacement under the terms of this warranty does not extend the terms of his warranty. This warranty can only be modified by an officer of Mobility Sound, and then only in writing. Should this product prove defective in workmanship or material, the consumer's sole remedies shall be such repair or replacement as provided by the terms of this warranty. Under no circumstances shall Mobility Sound Products be liable for any loss or damage, direct, consequential, or incidental, arising out of the use of or inability to use this product. Some states do not allow limitations on how long an implied warranty lasts or the exclusions or limitations of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights. You may also have other rights, which may vary, from state to state.

For support or warranty service on your Mobility Sound product, contact us at [info@mobilitysound.com](mailto:info@mobilitysound.com) or visit us on the web at [www.mobilitysound.com](http://www.mobilitysound.com).

## Copyright and Trademark Info

© 2014 Mobility Sound Technology Ltd. All rights reserved.

Apple is a trademark of Apple Inc.

iOS is a trademark of Cisco Systems and is used by Apple Inc. under license.

All other product or service names are the property of their respective owners.

DISCLAIMER: The Bluetooth wireless link used by Mobility Sound products is an open standard, unsecured technology. As such, it is not recommended for first-responder or other mission critical users.

