ZN
ZERONOISE

BRAND OF RACING FORCE

Upgrading the ZeroNoise Wired Wireless (WW) System to a new firmware version
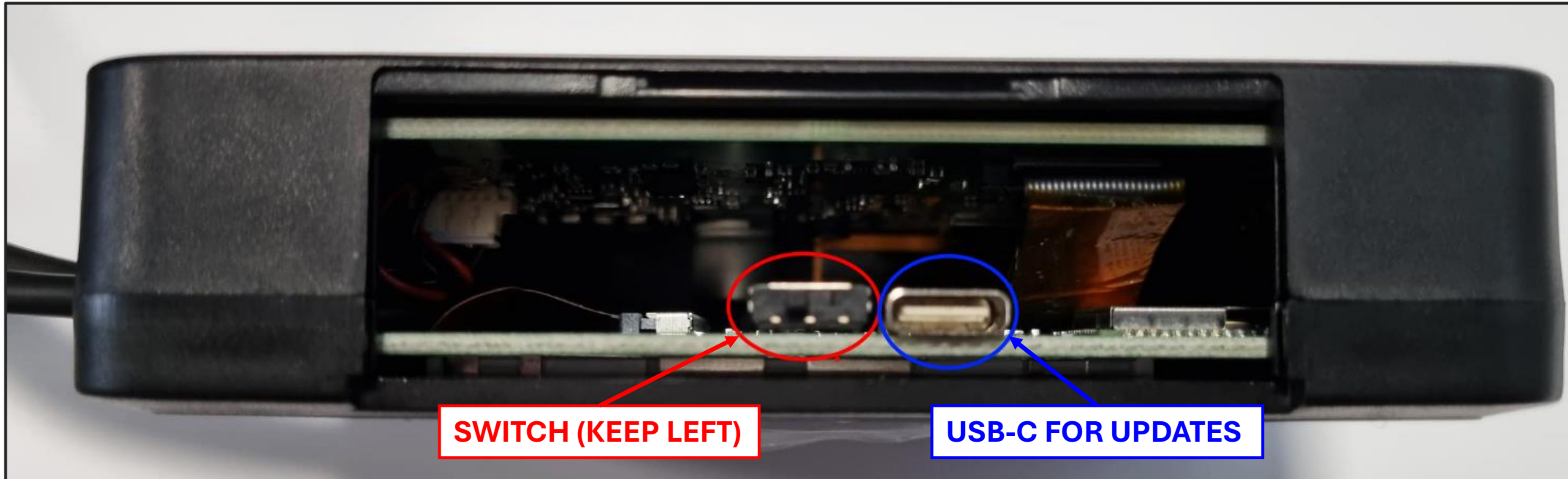
Scan for full product instructions
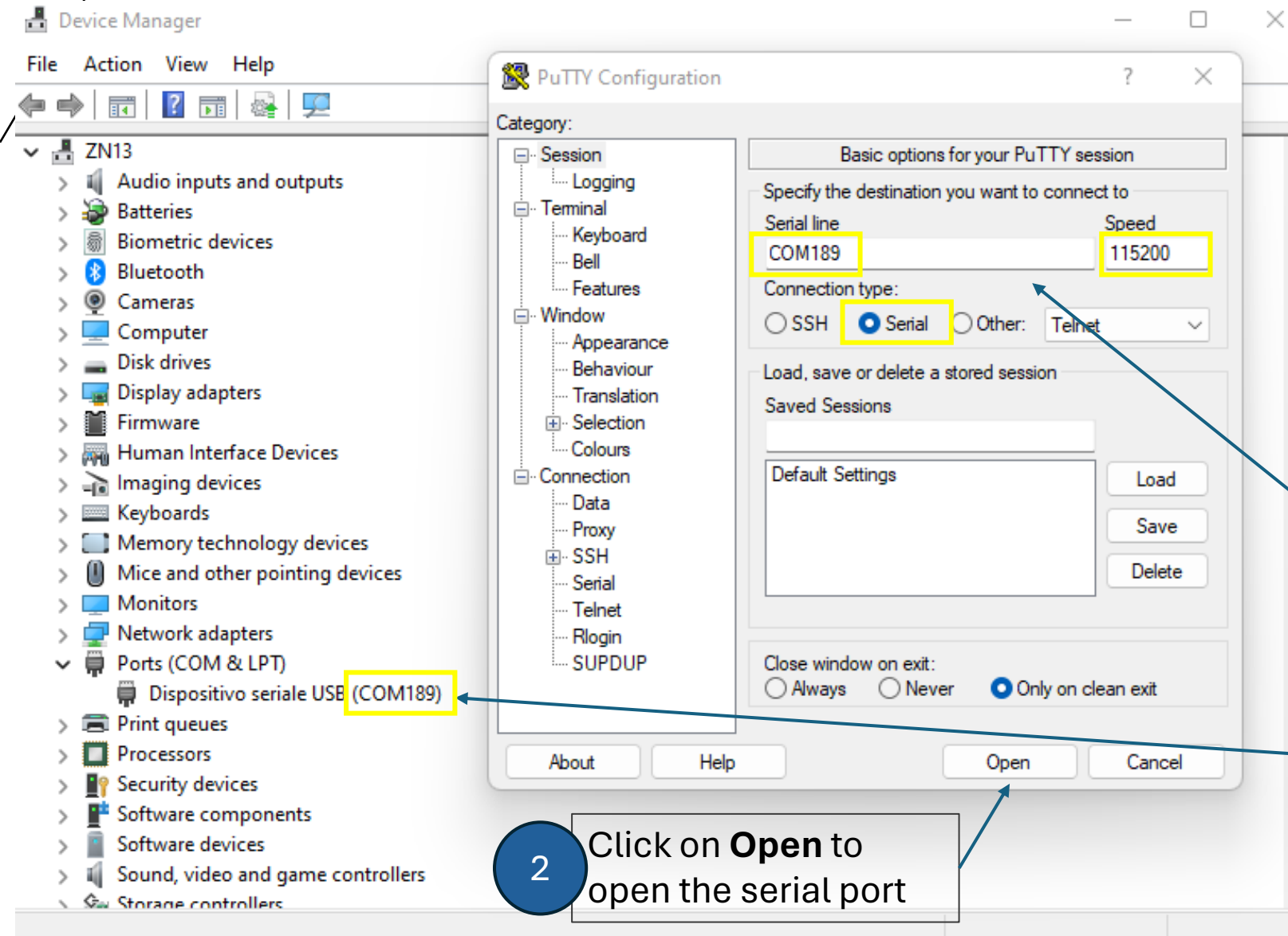
Short guide for firmware update

- When a new firmware is released for bug fixing and general improvements of the product, this simple procedure can be followed to upgrade the WW System components

- This short guide shows how to update the intercom and the units on the helmets

- What you will need to perform the required steps:

  - A PC and a USB-A to USB-C cable

  - To update the display only: you will need to use a serial port program like PuTTY and serial commands

    - Most common case:

      - If you have a Windows PC, download this installer or use the Microsoft Store

    - Otherwise, you can download a different version of PuTTY from this download page (see "Package files" section)

Intercom Unit: display

SWITCH (KEEP LEFT)

USB-C FOR UPDATES

- Move the rubber bumper and open the sliding panel at the top of the intercom to access the USB port of the display
  - From left to right, you have a switch and the USB-C for updates
  - Move the switch to its LEFT position (further away from the USB-C connector)
- Connect the display to your computer using the USB-C port

Intercom Unit: display

- Open PuTTY and follow the instructions in the following figures

- On Windows, you can find the port number of your connected display from DeviceManager

Set the correct **COM port** and speed (**115200**) and connection type to **Serial** ①

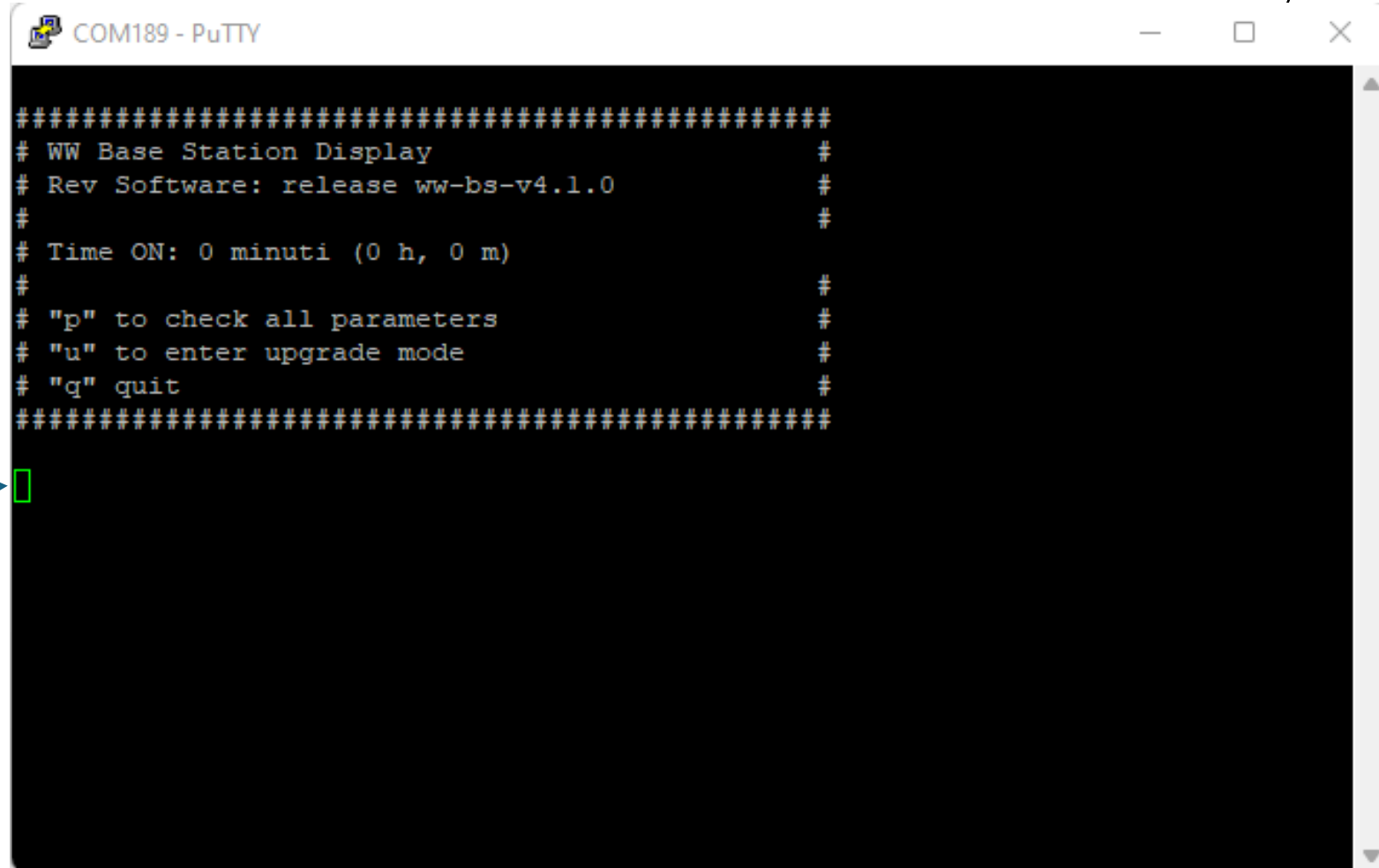② Click on **Open** to open the serial port

Intercom Unit: display

- The serial connection will be opened in a new window

  - write **z** (lowercase letter, make sure to disable CapsLock first!) **1**

  - You will see a text like the one on this figure

  - write **u** (lowercase letter) to enter upgrade mode **2**

  - the intercom display will turn off and PuTTY will show an error for connection lost: simply click OK **3**

```
#################################################
# WW Base Station Display                       #
# Rev Software: release ww-bs-v4.1.0            #
#                                               #
# Time ON: 0 minuti (0 h, 0 m)                  #
#                                               #
# "p" to check all parameters                   #
# "u" to enter upgrade mode                     #
# "q" quit                                      #
#################################################
```

COM189 - PuTTY

Intercom Unit: display

- The serial connection will be opened in a new window

  - write **z** (lowercase letter, make sure to disable CapsLock first!)

  - You will see a text like the one on this figure

  - write **u** (lowercase letter) to enter upgrade mode

  - the intercom display will turn off and PuTTY will show an error for connection lost: simply click OK


```
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#                                                 #
# "p" to check all parameters                     #
# "u" to enter upgrade mode                       #
# "q" quit                                        #
##################################################

Entering bootloader mode
```
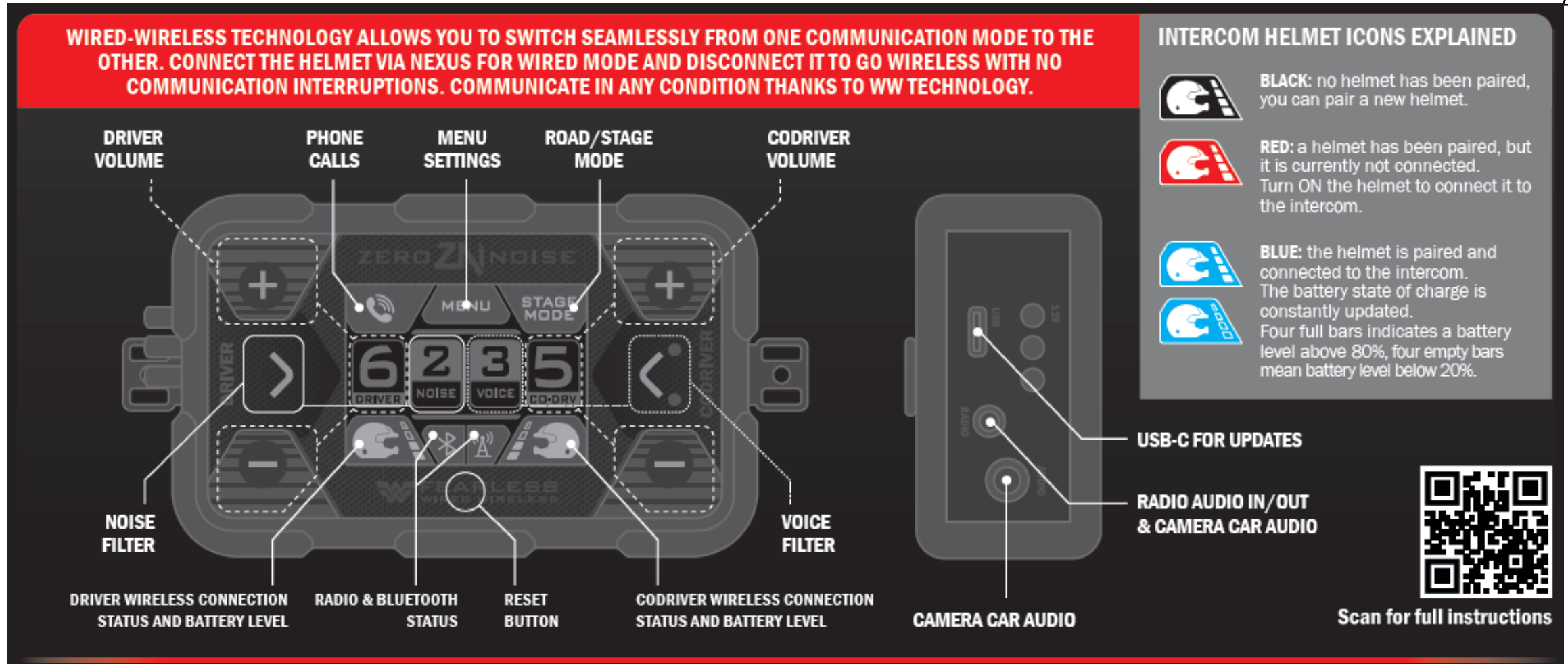
PuTTY Fatal Error

Error reading from serial device

OK

Intercom Unit: display

- Your computer should now recognize the intercom display as an external memory device named RPI-RP2

- Now you can simply copy and paste (or drag and drop) the firmware file into the RPI-RP2 device
  - ***Firmware file for display:*** WW_BS_LCD_v4.1.0_RELEASE.uf2

- After the firmware upload is successful, you can disconnect the intercom display from the computer and reboot

Intercom Unit: device
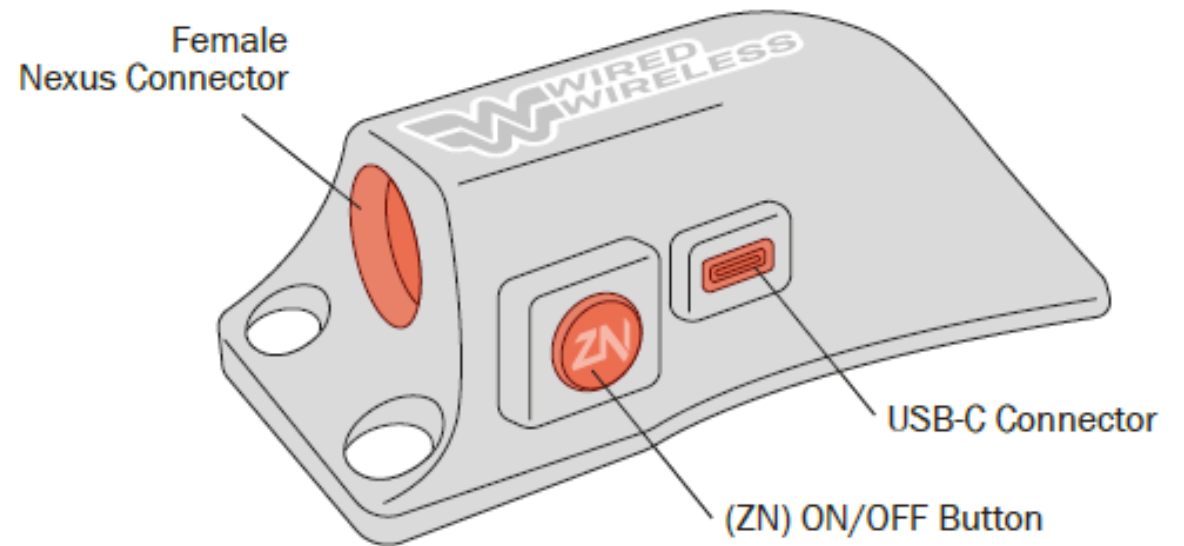
Intercom Unit: device

- Connect the 12V cable (required to properly use the RESET button)

- Connect the unit to your computer using the USB-C port on the left side of the intercom

- Quickly press 5 times the RESET button positioned under the Fearless Wired Wireless logo on the bottom front part of the unit, the intercom display will turn off

Intercom Unit: device

- Your computer should now recognize the intercom as an external memory device named RPI-RP2

- Now you can simply copy and paste (or drag and drop) the firmware file into the RPI-RP2 device
  - ***Firmware file for intercom:*** WW_BS_v4.1.0_RELEASE.uf2

- After the firmware upload is successful, you can disconnect the intercom from the computer and reboot it

Helmet Unit

- Connect the unit to your computer using the USB-C port on the bottom part of the helmet side cover: the unit will turn on automatically

- Quickly press 5 times the ON/OFF button positioned on the bottom part of the helmet side cover

Female Nexus Connector

USB-C Connector

(ZN) ON/OFF Button

Helmet Unit

- Your computer should now recognize the helmet unit as an external memory device named RPI-RP2

- Now you can simply copy and paste (or drag and drop) the firmware file into the RPI-RP2 device

  - ***Firmware file for helmet unit:*** WW_PU_v4.0.0_RELEASE.uf2

- After the firmware upload is successful, you can disconnect the device from the computer and reboot it