

Overview of EID1R Configuration Utility

A Mobile Application for Android Devices

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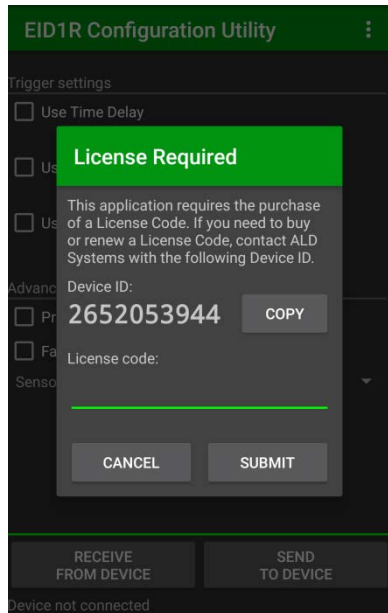
10/3/2024

The EID1R Configuration Utility version 1.2 is a mobile platform application for use on Android devices as an alternative choice to programming Electronic Initiation Devices with the full EID Mission Control software used on Windows-based computers. This document provides a brief overview of the application and its use to program Electronic Initiation Devices. This application version is intended for use only with model EID1R devices. Attempted use with incompatible device models will result in undesirable operation.

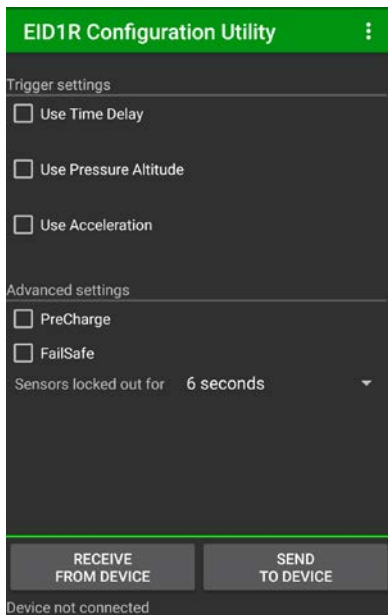
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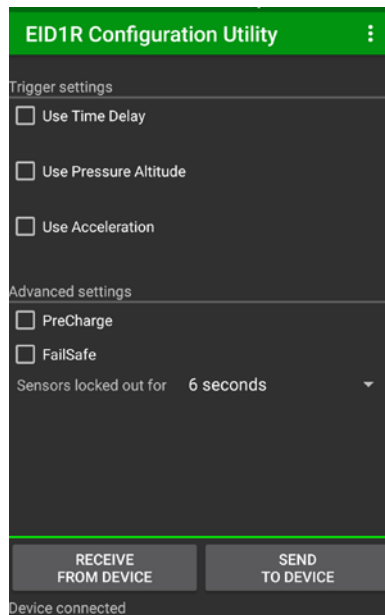
Open the App



First launch of mobile app: *License code required*
-contact ALD Systems with the Device ID to buy or renew

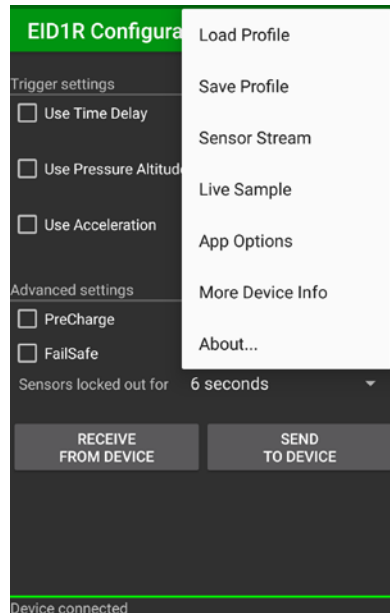


Launch screen of mobile app
-Status Bar in lower left



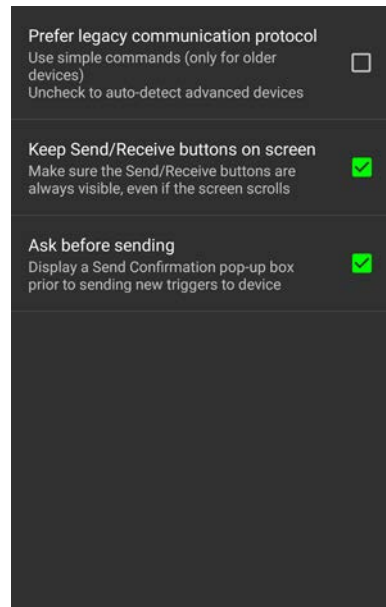
EID1R device plugged in via OTG/USB cable
-Status Bar: *Device connected*

Menu



Menu choices

- Load or Save trigger settings
- Live Sample is one reading of each sensor
- Sensor Stream starts continuous readings (not available on all devices)
- More Device Info shows hardware and firmware details, operation stats, etc.

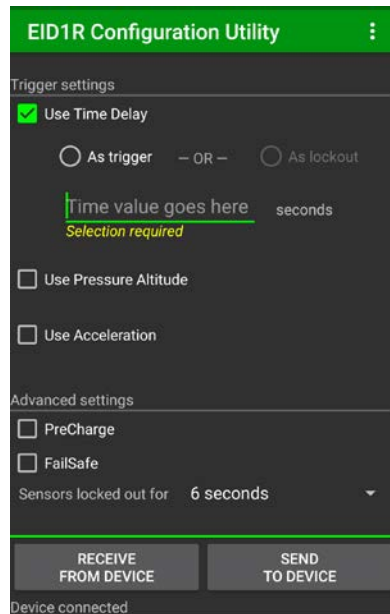


App Options selected

- Checked options enabled by default

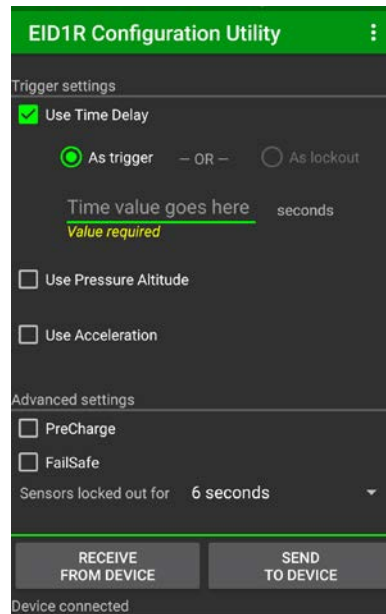
Use Time Delay

Set As Trigger



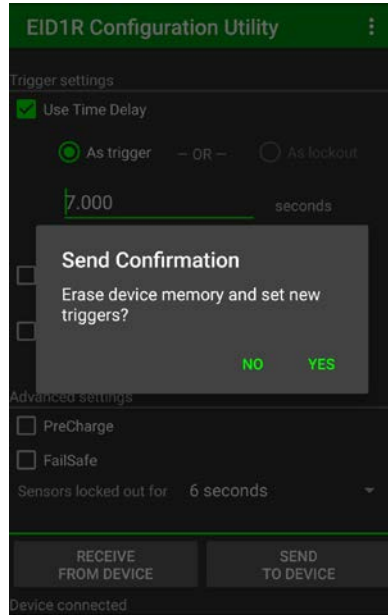
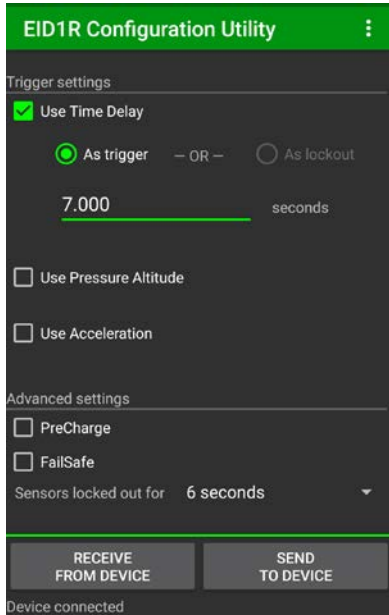
Select which trigger(s) to enable

- Use Time Delay selected
- Read warnings/errors in yellow text



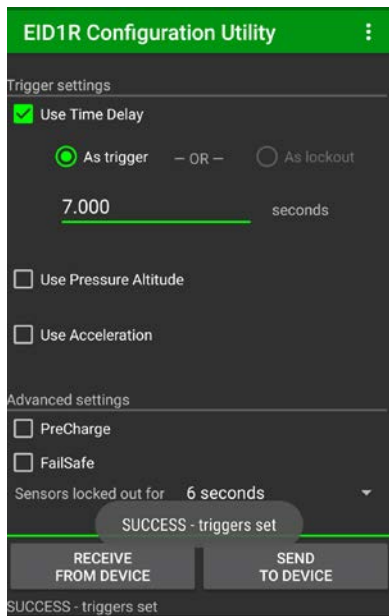
Select how to use the timer

- As trigger selected
- Read warnings/errors in yellow text



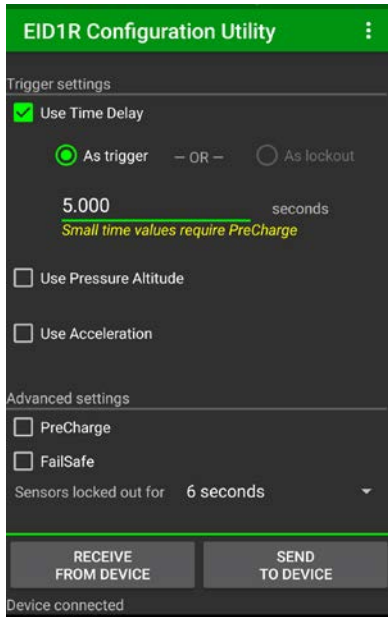
Enter time delay (e.g. 7.000 seconds)
-Ready to program device...

Tap *SEND TO DEVICE* button
-Confirm action by tapping *YES*
-Enable/disable in menu > *App Options*

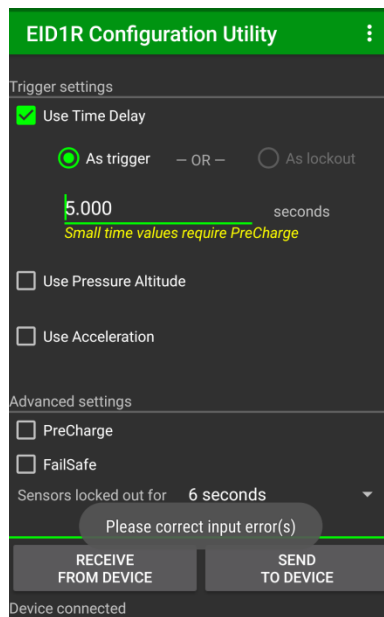


Success indicated by pop-up
-Status Bar: *SUCCESS - triggers set*

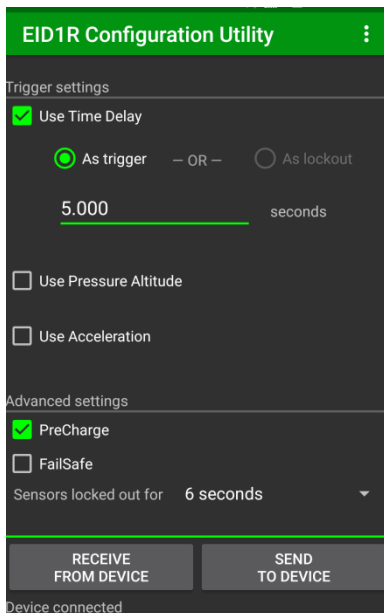
Short Time Delays



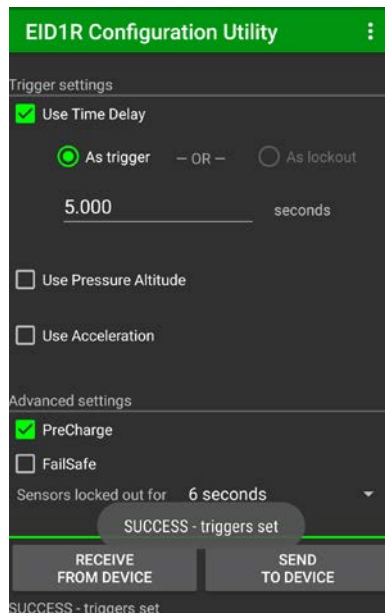
Enter time delay (e.g. 5.000 seconds)
-Read warnings/errors in yellow text



Tap *SEND TO DEVICE* button
-Send fails, pop-up: *Please correct input error(s)*
-Read warnings/errors in yellow text



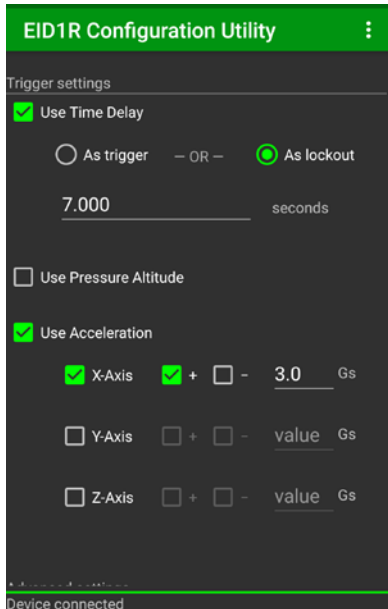
Select *PreCharge* for time < 6 seconds



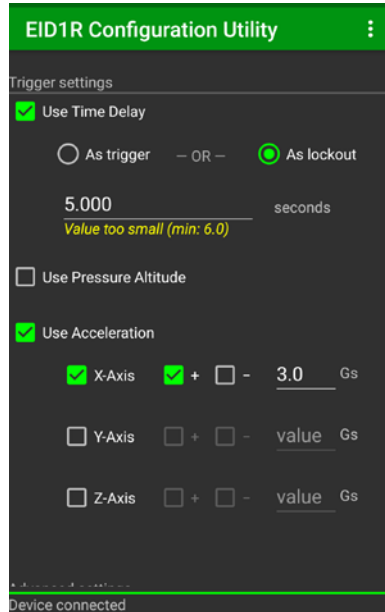
Send success indicated by pop-up

Set As Lockout

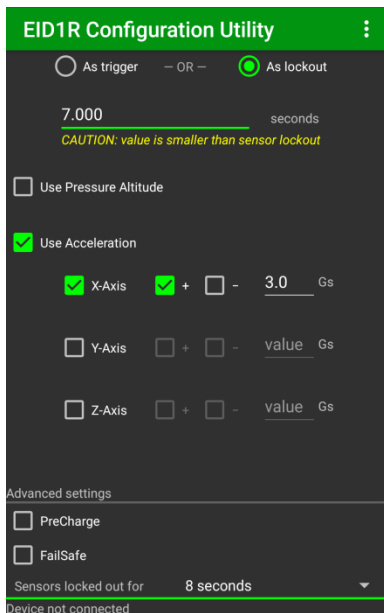
Use Time Delay *As lockout* is available when additionally using *Pressure Altitude* and/or *Acceleration*



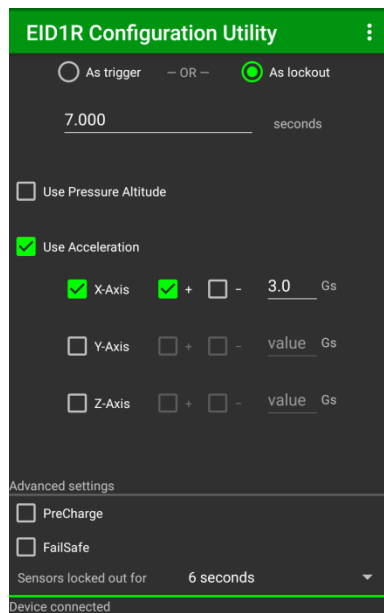
Select *As lockout* radio button
-Enter time value (e.g. 7.000 seconds)



Enter time value (e.g. 5.000 seconds)
-Read warnings/errors in yellow text
-Time value as lockout must be ≥ 6 seconds



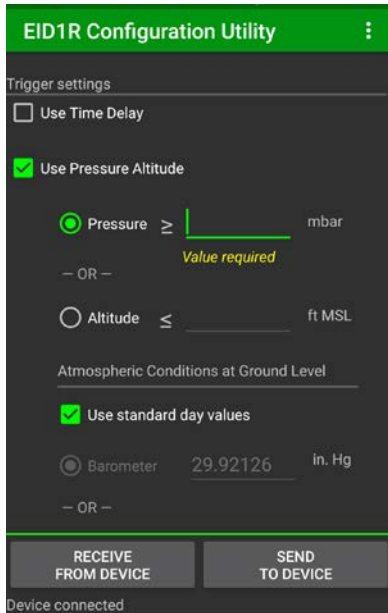
Sensors locked out for "8 seconds"
-Sensor lockout > time lockout
-Read caution in yellow text



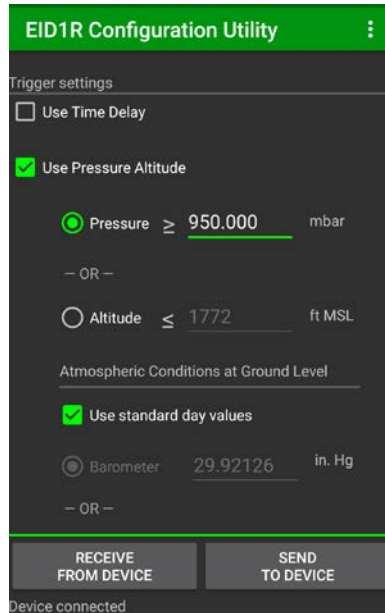
Sensors locked out for "6 seconds"
-Sensor lockout \leq time lockout

Use Pressure Altitude

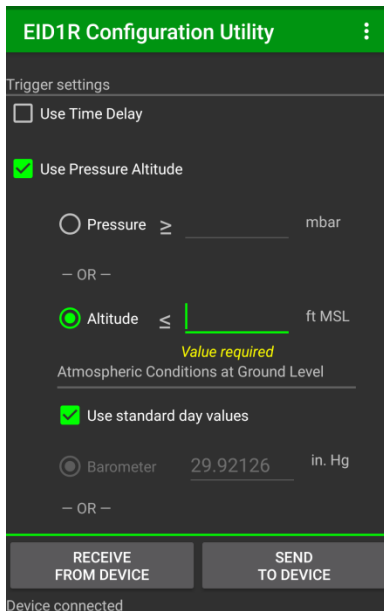
Standard Day Values



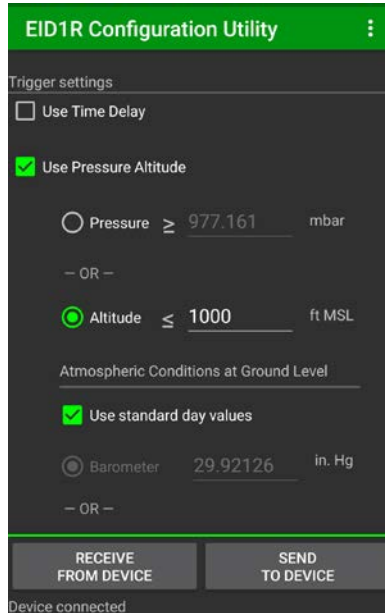
Select which trigger(s) to enable
-Use *Pressure Altitude* selected
-Read warnings/errors in yellow text



Select which value to enter
-*Pressure* selected; enter value (e.g. 950 mbar)
-Read *Altitude* estimate



Select which trigger(s) to enable
-Use *Pressure Altitude* selected
-Read warnings/errors in yellow text



Select which value to enter
-*Altitude* selected; enter value (e.g. 1000 mbar)
-Read *Pressure* estimate

Non-standard Day Values

De-select *Use standard day values*

-Select which ground level pressure value to enter

EID1R Configuration Utility

Pressure \geq 950.000 mbar

— OR —

Altitude \leq 1816 ft MSL

Atmospheric Conditions at Ground Level

Use standard day values

Barometer 29.98000 in. Hg

— OR —

Field Pressure 996.668 mbar

— AT —

Field Elevation 500 ft MSL

Field Temperature 70.0 ° F

Device connected

EID1R Configuration Utility

Pressure \geq 978.730 mbar

— OR —

Altitude \leq 1000 ft MSL

Atmospheric Conditions at Ground Level

Use standard day values

Barometer 29.98000 in. Hg

— OR —

Field Pressure 996.668 mbar

— AT —

Field Elevation 500 ft MSL

Field Temperature 70.0 ° F

Device connected

Select *Barometer*; enter value (e.g. 29.98 inches of Mercury)

-Enter *Field Elevation* (e.g. 500 feet MSL)

-Enter *Field Temperature* (e.g. 70 degrees F)

-Read *Field Pressure* estimate

EID1R Configuration Utility

Pressure \geq 950.000 mbar

— OR —

Altitude \leq 1631 ft MSL

Atmospheric Conditions at Ground Level

Use standard day values

Barometer 29.78773 in. Hg

— OR —

Field Pressure 990.000 mbar

— AT —

Field Elevation 500 ft MSL

Field Temperature 70.0 ° F

Device connected

EID1R Configuration Utility

Pressure \geq 972.159 mbar

— OR —

Altitude \leq 1000 ft MSL

Atmospheric Conditions at Ground Level

Use standard day values

Barometer 29.78773 in. Hg

— OR —

Field Pressure 990.000 mbar

— AT —

Field Elevation 500 ft MSL

Field Temperature 70.0 ° F

Device connected

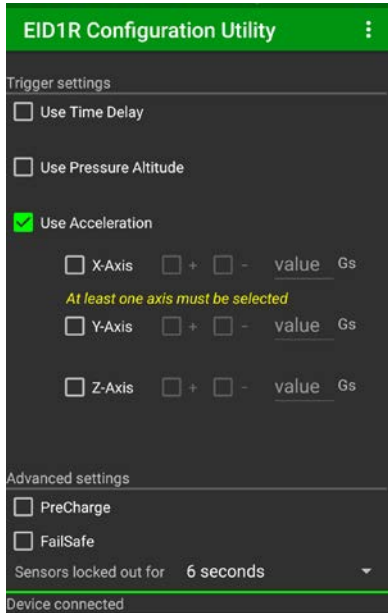
Select *Field Pressure*; enter value (e.g. 990 mbar)

-Enter *Field Elevation* (e.g. 500 feet MSL)

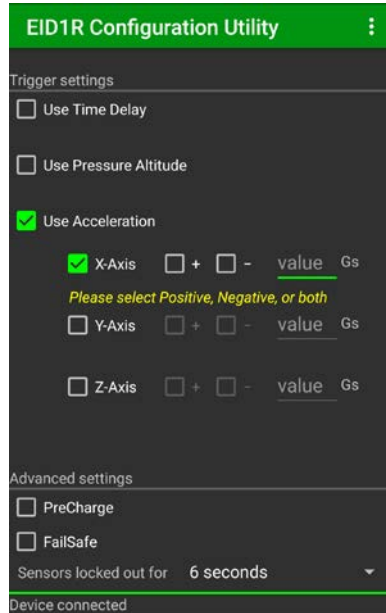
-Enter *Field Temperature* (e.g. 70 degrees F)

-Read *Barometer* estimate

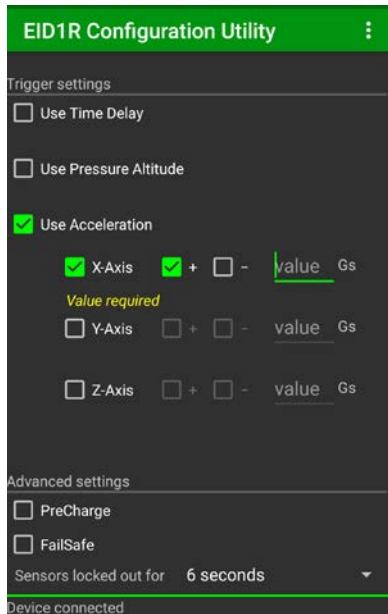
Use Acceleration



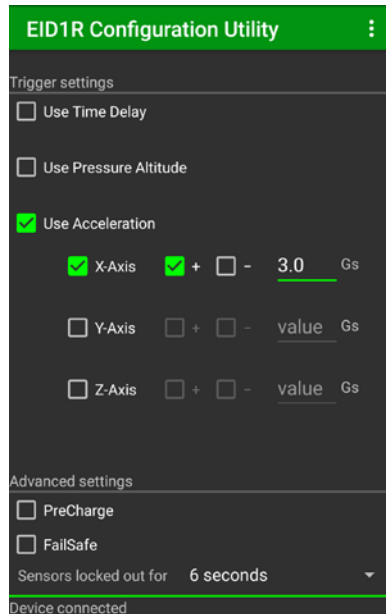
Select which trigger(s) to enable
-Use Acceleration selected
-Read warnings/errors in yellow text



Select which axis or axes to enable
-X-Axis selected
-Read warnings/errors in yellow text



Select axis direction(s)
-Positive direction selected
-Read warnings/errors in yellow text

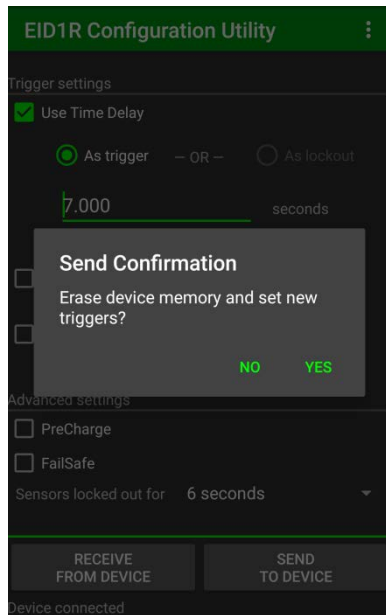


Enter acceleration value
-e.g. 3.0 G's entered

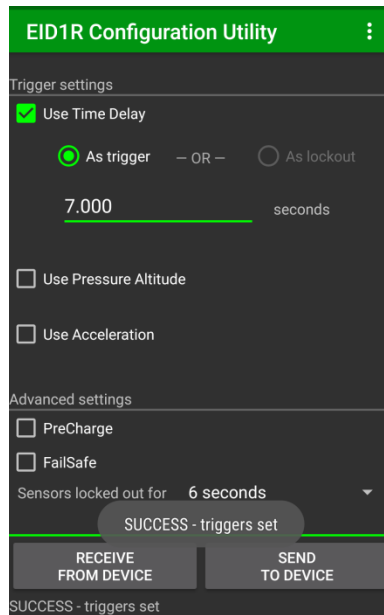
Communication

All communications are reserved for first 5 seconds after device is connected via OTG/USB cable
-Earlier attempts will display a "Please wait" notification until 5 seconds elapses before completing action

Send Configuration



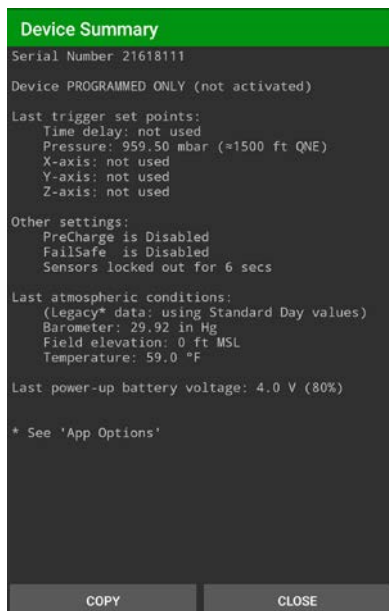
- Tap *SEND TO DEVICE* button
- Confirm action by tapping *YES*
- Can enable/disable in menu > *App Options*



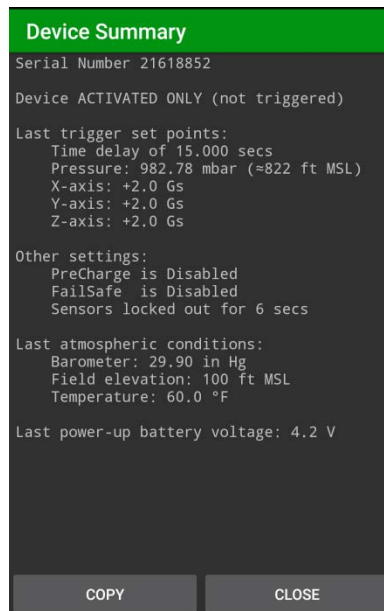
- Success indicated by pop-up
- Status Bar: *SUCCESS - triggers set*

Receive Device Summary

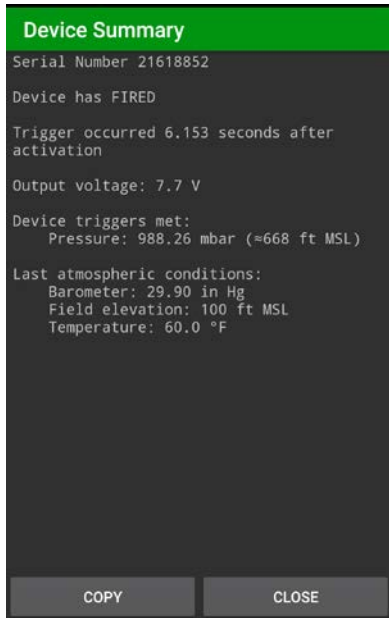
- Tap *RECEIVE FROM DEVICE* button
- Device Summary examples follow



- PROGRAMMED ONLY**
- Device not activated yet
- Note altitude estimate is in *ft QNE*, when *Last atmo conditions: Legacy**



- ACTIVATED ONLY**
- Device was running, triggers not met before power-down
- Note altitude estimate is in *ft MSL*, when *Last atmo conditions* are valid



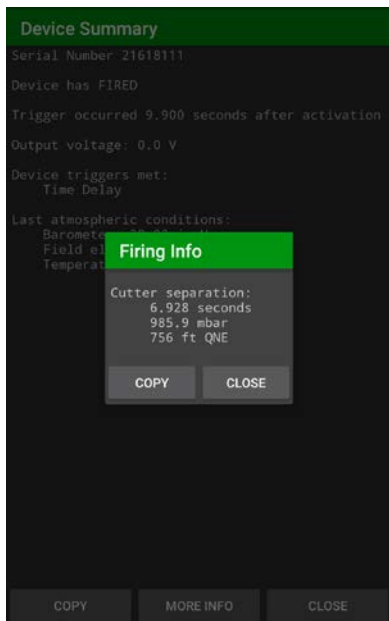
FIRED

-Device was active and met trigger(s)



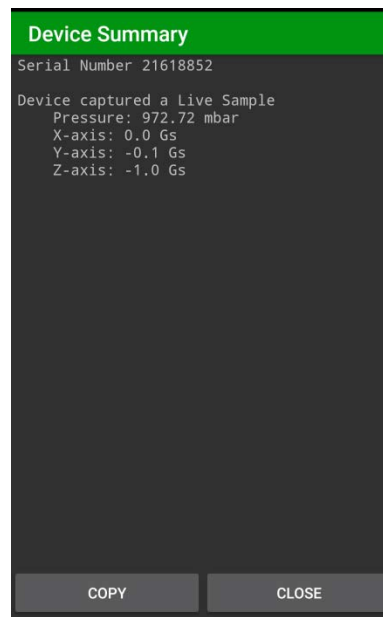
FIRED – no cutter

- Output voltage: 0.0 V indicates cutter was disconnected
 - More Info button appears at bottom



FIRED – Firing Info

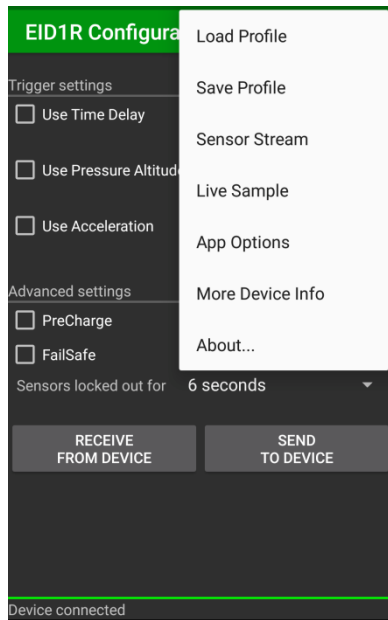
-Displays cutter separation time/alt.



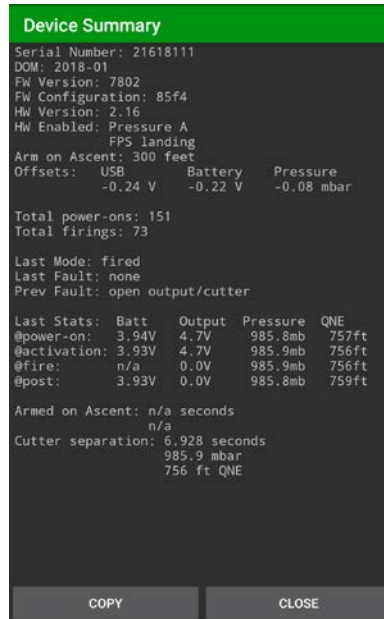
Live Sample

-Device recorded one reading of each sensor

More Device Info



Menu choice
-More Device Info



App Options selected
-Check firmware version, enabled sensors, operation stats, etc.

Notes