Using The HESS Four Gas Meter App Healthcare Education Simulation Station

Revised 7/1/2025

www.BetterNurseEducation.com

PLEASE READ

DISCLAIMER

The information in the HESS is not intended or implied to be a substitute for professional firefighting expertise or advice.

There is no representation and no responsibility for the accuracy of information contained within the HESS.

The HESS Four Gas Meter is only intended to be used as an instructional aide by qualified firefighting educational professionals.

About The HESS Four Gas Meter App

The HESS Four Gas Meter App was created to let firefighting professionals conduct learning exercises that involve a simulated Four Gas Meter device in a safe and "low stakes" environment.

The Four Gas Meter App can be used to simulate the presence of gas in enclosed spaces during firefighting training exercises.



Tablets Suitable To Run The HESS Four Gas Meter App

The HESS Four Gas Meter App can run on Android tablets with Version 8 or above of the Android operating system and with a screen size of at least 7 inches.

Android tablets with screen sizes smaller than 7 inches may not display the Four Gas Meter App screen elements correctly.

The Four Gas Meter App can be run on larger screen sizes if the educational exercise dictates using a larger tablet – such as displaying the Four Gas Meter App screen on a monitor or projector.

HESS Values Accepted By The HESS Four Gas Meter App

The HESS Four Gas Meter App will recognize and use the following values transmitted from the HESS Instructor tablet.

1. Four Gas Meter Values

The Four Gas Meter Values that the Four Gas Meter App recognizes and uses are the Oxygen - O2 (% Volume), Carbon Monoxide – CO (PPM), Hydrogen Sulfide – H2S (PPM) and the Lower Explosive Limit – LEL (%).

Using The HESS Four Gas Meter App

1. Starting the Four Gas Meter App



The HESS Four Gas Meter App can be started by touching the HESS Four Gas Meter App icon on the Android tablet.

2. Silencing The Four Gas Meter Alarms

AFTER the Four Gas Meter Values have been transmitted successfully from the HESS Instructor App, the "Silence Alarm" button can be used to silence any alarms that are sounding due to gas levels falling below or rising above the set alarm limits.

NOTE: The tablet volume level may need to be adjusted to hear the alarms.

SILENCE ALARM

The "Silence Alarm" button will only silence the alarms momentarily if the current Four Gas Meter Values remain below or above the set alarm limits.

For the "Silence Alarm" button to cause the alarms to remain silenced, the current Four Gas Meter Values will need to be within the set alarm limits.

HESS Four Gas Meter App Settings

The HESS Four Gas Meter App has the following Settings available via the Android "3 dots menu" in the upper right corner of the Four Gas Meter App screen:

1. Oxygen Low And High Alarms

Sets values, that if the Oxygen – O2 (% Volume) falls below or rises above, will trigger the Four Gas Meter App to sound an audible alarm.

2. Carbon Monoxide Low And High Alarms

Sets values, that if the Carbon Monoxide - CO (PPM) falls below or rises above, will trigger the Four Gas Meter App to sound an audible alarm.

3. Hydrogen Sulfide Low And High Alarms

Sets values, that if the Hydrogen Sulfide – H2S (PPM) falls below or rises above, will trigger the Four Gas Meter App to sound an audible alarm.

4. Lower Explosive Limit Low And High Alarms

Sets values, that if the Lower Explosive Limit (%) falls below or rises above, will trigger the Four Gas Meter App to sound an audible alarm.

5. Gas Alarms On

Enables/Disables the Four Gas Meter App alarms.

6. Device Address

The Four Gas Meter App receiving address for the Values – which must match the transmission address for the Values in the HESS Instructor App. Device Addresses are 4 characters made up of the characters 0-9 and A-F. **DO NOT USE** "0000" or "FFFF" as Device Addresses. "0000" and "FFFF" have special uses within the HESS. Using these special Device Addresses can cause unpredictable results.

HESS Four Gas Meter App Usage Notes

1. Bluetooth Reset Button



If, after numerous attempts, the Four Gas Meter App is still not receiving Values transmissions – even though the Instructor transmission and the Device receiving addresses match – the "Bluetooth Reset" button in the upper right corner of the screen can be used to reset the Android tablet's Bluetooth functions. This often will resolve Bluetooth oriented issues without having to stop or disrupt the app.

2. When Done, "Power Off" Tablets - Don't Just "Suspend" Them

The Android tablets should be completely "powered off" when stored or the battery will drain to 0% charge. Completely drained batteries can then take 20-30 minutes of charging just to get the tablet to power up for usage. Even if the tablet screen is dark it can be misleading because the tablet may only be "suspended". Pressing the power button for ½ second will indicate if the tablet is completely powered off – by either "unsuspending" the tablet screen if the tablet is only "suspended" – or remaining dark if the tablet is completely powered off.