



SPARROW





By

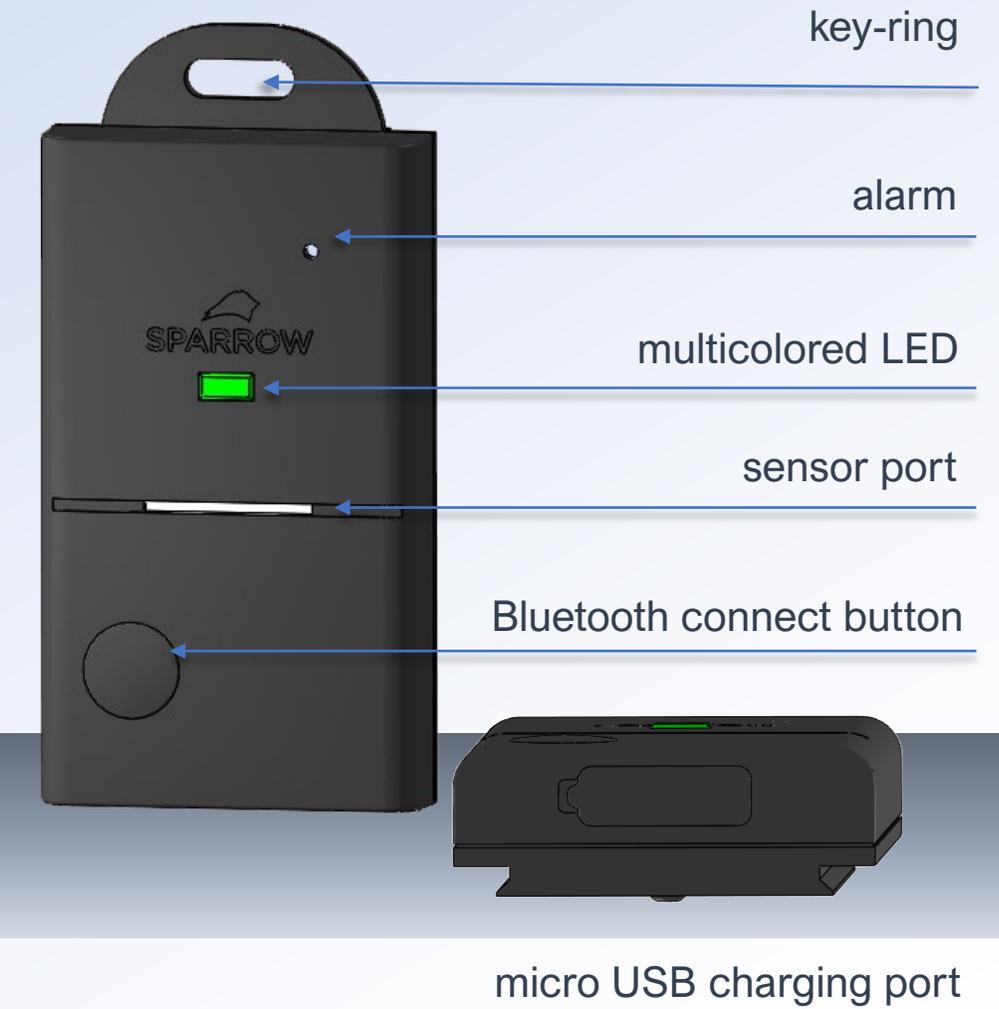
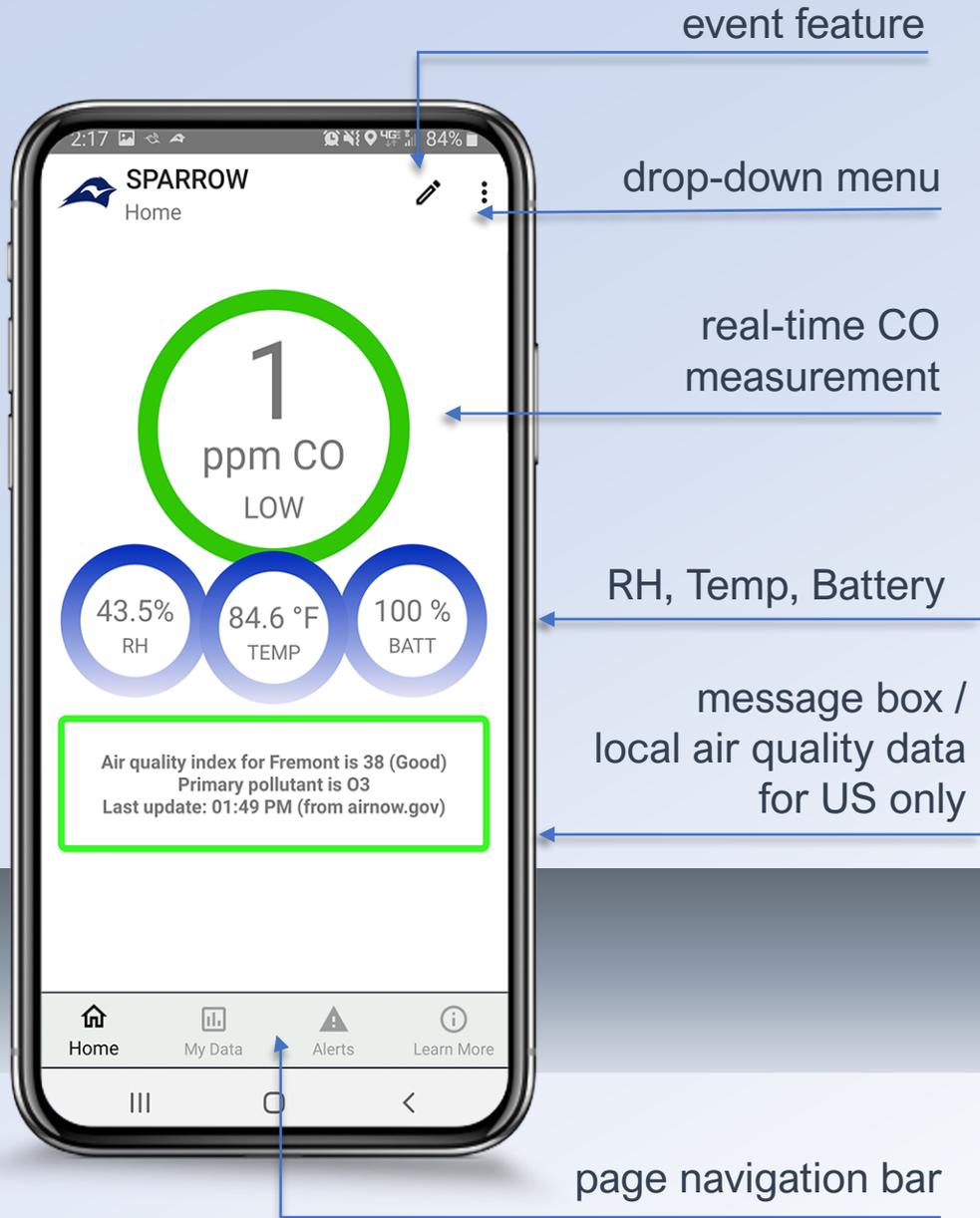


Carbon Monoxide & Air Quality Monitor
User Manual
Model – W500

SPARROW
Eco Sensors, a Division of KWJ Engineering, Inc.
8430 Central Avenue, Suite C
Newark, CA 94560

www.sparrowsense.com





Compatible with Otterbox UniVERSE Case System

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Download the SPARROW app in the Google Play Store or Apple App Store

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GET IT ON Google Play

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Drop-down menu

Click the icon in the top right corner to open the drop-down menu. Five options will be listed. The available options in the drop-down menu differ slightly for each page of the app.

- Account
- Settings
- My SPARROW
- Sleep Device
- Skip Log Download

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My SPARROW

Additional Features

The drop-down menu links to additional features.

My SPARROW Access LED and buzzer check, log sharing and advanced features.

Sleep Device: Turn off SPARROW and disconnect it from the app – SPARROW will give 3 quick beeps before shutting down.

Skip Log Download: Connect directly to the app and skip data transfer from SPARROW to the app (Read more on the My Data page)

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*Alert levels are based on your personalized Sensitivity Mode, found in the Settings menu.

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My Data

My Data Page

Graph your exposure over any period of time.

- Select the **My Data** page and select CO, TEMP, and %RH to create the graph.
- Select **Clear** to clear the graph. This does not erase any data.

Events: Saved events can be viewed on the My Data page graph.

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Alerts

Alerts

- Click the **Alerts** page for a list of recorded CO data with location and time-stamp information.
- Select **Map View** – for the GPS location of past CO data.
- To delete past data select **Clear-Alert File** on the drop-down menu.

Alerts Log

- High CO Logging - Your alerts log will only display high and very high CO levels.
- CO Pollution Logging - Your alerts log will display events to include CO levels.

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Learn More

Learn More

The **Learn More** page Provides contextual information about current air quality, TWA, and helpful links.

This information will change depending on the intensity of CO exposure.

Access the **Learn More** page from the bottom toolbar or by clicking the main display icon on the home page.

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Getting started

Download the SPARROW app in the Google Play Store or Apple App Store



Download and Open



Register and Accept Terms



Press and Hold to connect



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Getting started



- 1. Download and install the app:** Scan the QR code to get started or navigate to either the Google Play Store or the Apple App Store and search for SPARROW CO Monitor.
- 2. Open the SPARROW app:** Click the SPARROW App icon on your phone to open the app. Read and agree to the *App Notice* and allow all requested permissions to continue. When prompted, please follow the instructions to register your SPARROW. In the future the link to this form can be found on the My SPARROW page.
- 3. Press and hold the SPARROW Bluetooth Connect Button until the LED turns blue.** The SPARROW App connect screen will list all compatible Bluetooth devices within range of your smartphone. Your SPARROW device name will appear as SPARROW_W500 XXXXXXXX. Press “connect” next to the device name to pair SPARROW and SPARROW App and proceed to the Home screen. Once you reach the home screen and see SPARROW readings, your device has been activated.

Connect Screen



SPARROW Tip:

- **If you do not see your device on the list**, swipe down on the connect screen to refresh the list of available devices.
- **If the LED does not flash** after holding the button, this may indicate a drained battery. Please charge your SPARROW with the included micro USB cable.



App Notice

Limitations

SPARROW is NOT a substitute for installed or fixed CO alarms in your home or business. CO alarms are necessary for your safety and may be required by law. SPARROW is a portable device that alone is not adequate protection from all potential CO risks.

SPARROW will only sense CO that reaches the sensor: Placement within a closed space and other obstructions may affect the rate at which CO reaches the sensor. Keep SPARROW open to the air around it for accurate measurements.

SPARROW's audible alarm is NOT designed to UL2034 requirements - MAKE SURE TO TEST THE ALARM TO UNDERSTAND ITS VOLUME (LED and Buzzer Check link is found on the My SPARROW page). CO alarms may not waken all individuals.

Do not rely solely on SPARROW for decisions regarding your safety.

Proper Use

For SPARROW to function properly, it MUST:

- Be continuously charged
- Be exposed to the environment
- Be within audible distance and unobstructed
- **Be kept within operating temperatures between 0 – 45 °C.**

SPARROW may not provide accurate readings in the presence of other gases and substances or in environments with high temperatures.



Home

Real-time measurements are color-coded* for easy to read alert level warnings.

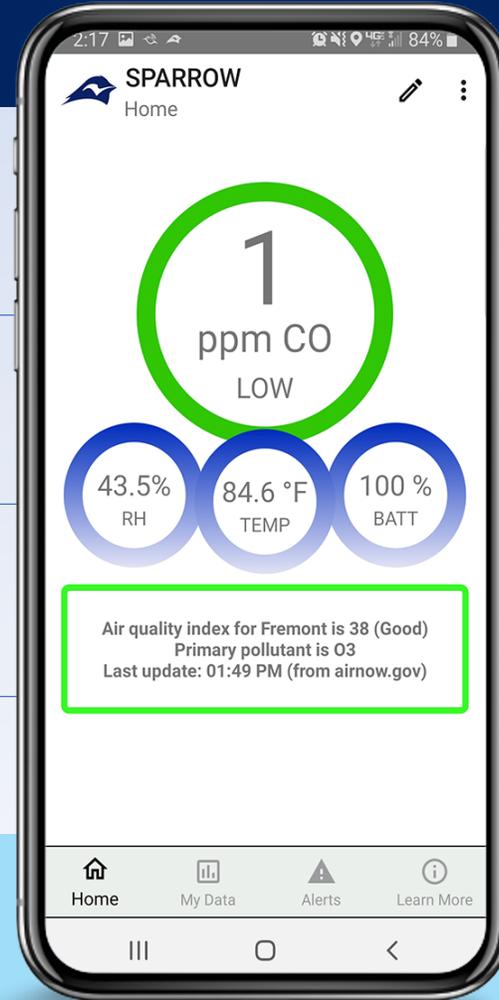
CO - Carbon Monoxide

RH – Relative Humidity

TEMP – Local Temperature

BATT – SPARROW's battery level

Message box / Regional Air Quality



*If you see a flashing light, your SPARROW is working properly and monitoring your environment!



Getting started

Standalone mode: SPARROW enters standalone mode when it is disconnected from the app. In standalone mode, SPARROW will continue to monitor CO, log data, and indicate CO level with the color-changing LED and audible alarm. Certain functions such as TWA and the emergency texting feature will NOT work in standalone mode.

Note: SPARROW will only enter standalone mode and begin tracking CO and air quality after it is paired once with the SPARROW App.



SPARROW monitors CO when connected to the app and in Standalone mode.

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Device Warnings

SPARROW Preset Alert Levels

SPARROW provides an instantaneous alert. Go to *settings* to enable a TWA display.

		1 st Alert Level	2 nd Alert Level	3 rd Alert Level
<i>Sensitivity Mode</i>	Sensitive	9 ppm	15 ppm	25 ppm
	Default	15 ppm	35 ppm	70 ppm
	Home & Work	30 ppm	70 ppm	150 ppm
	Custom	0 – 50 ppm	0 – 200 ppm	25 – 400 ppm
<i>Warning</i>	SPARROW	- LED color change - No audible alert	- LED color change - Short audible beep	- LED color change - Long audible beep
	SPARROW App	- Display color change - No audible alert	- Display color change - Phone vibration - Danger warning	- Display color change - Phone vibration - Danger warning - Text alert to emergency contact

**Phone alerts & TWA require app connection / Emergency Texting Feature requires app and data connection*

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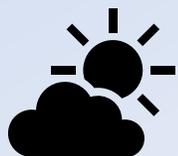
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Device Warnings



SPARROW alerts NOT related to high CO exposure

Low battery warning: When your SPARROW battery is too low, it will alert with 3 quick beeps before putting itself in sleep mode. In sleep mode, SPARROW will be turned off and will not measure CO or communicate with the SPARROW App, and it will not provide LED or audible alerts.



Temperature warning: Do not leave SPARROW in direct sunlight or extreme heat

When your environment becomes too hot for SPARROW to operate accurately (above 45 °C / 113 °F), you will hear 2 quick beeps in intervals. The LED will also begin to flash repeatedly with the following pattern: amber > red > purple.

Account & Settings

Drop-down menu



Click the icon in the top right corner to open the drop-down menu. Five options will be listed. The available options in the drop-down menu differ slightly for each page of the app

- Account
- Settings
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- Sleep Device
- Skip Log Download

Account

The Account Menu

Enter account information, emergency contacts and enable text message alerts.

Emergency Texting Feature: Allows the SPARROW App to send a text alert when very high levels of CO are detected based on the user sensitivity setting. **Note:** This feature is only enabled when SPARROW is connected to the SPARROW App and a data connection is available.

My Account

My Name

Emergency Contact #1

Enable Emergency Messaging

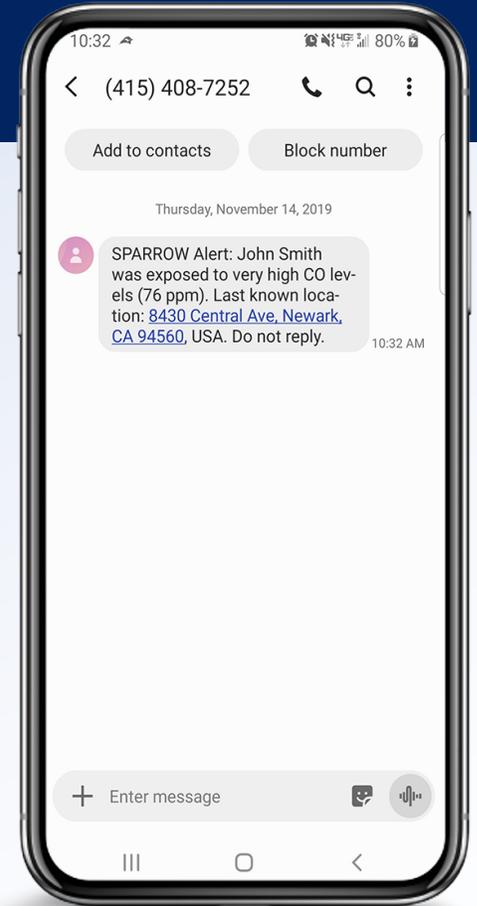
Name 1

Cell Number 1



Account

- **The Account page** stores contact information as well as information for emergency contacts. Eco Sensors & KWJ Engineering do not collect, access, or store any of this information. This information is used for app functions. Any messaging done through the SPARROW App will refer to the user information saved in these settings.
- **Enable Automatic Messaging:** Select Enable Automatic Message to allow the SPARROW App to automatically send a text message to an emergency contact when SPARROW is exposed to a “very high” CO environment. The emergency text will contain the name entered in the account page, the CO ppm level that triggered the alert, and the approximate address based on your phone’s GPS coordinates.
 - To test this feature, select *Emergency Text Alert Test* on the My SPARROW page. All emergency texts will be sent from the following number **1-415-408-7252**. It is recommended to test this feature and let your emergency contact know to save this number.



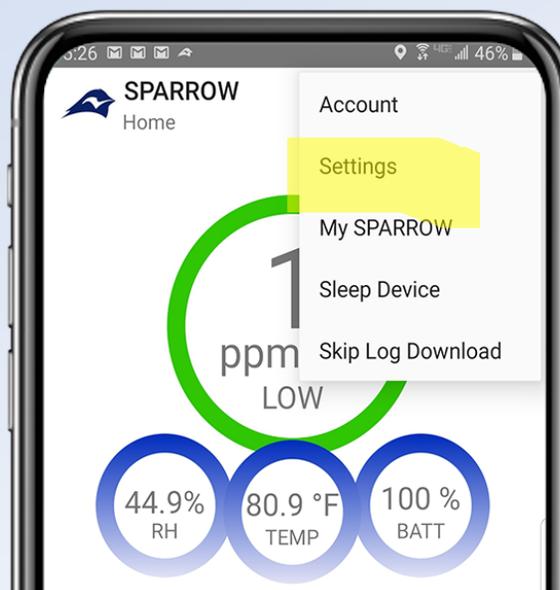
Customize

The Settings Menu

Sensitivity Mode

- Sensitive
(9, 15, 25 ppm)
- Default
(15, 35, 70 ppm)
- Home and Work
(30, 70, 150 ppm)
- Custom
(x, y, z ppm)

CANCEL



1. Set sensitivity mode and alert levels for SPARROW.
2. Scroll down to customize SPARROW display and log settings, and vibration & sound alerts

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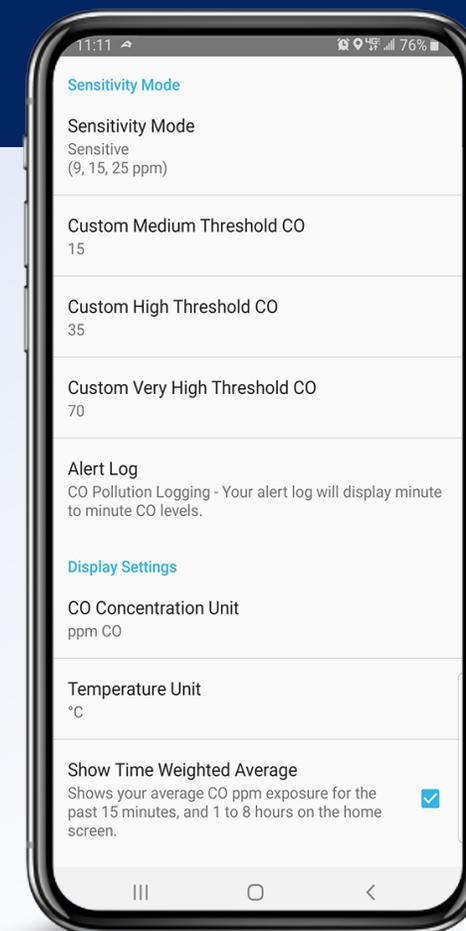
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Customize

- **Sensitivity Mode:** SPARROW is pre-set to alarm at the default sensitivity level (above 15 ppm for medium, above 35 ppm for high, and above 70 ppm for very high)
 - Your SPARROW device can be set to alarm at different concentrations by selecting one of the following:
 - Sensitive: above 9 ppm for medium, above 15 ppm for high, and above 25 ppm for very high.
 - Home & Work: above 30 ppm for medium, above 70 ppm for high, and above 150 ppm for very high
 - Custom alert levels can also be selected by entering any value (in ppm) for the alerts.



Customize

SPARROW Preset Alert Levels

SPARROW provides an instantaneous alert. Go to *settings* to enable a TWA display.

		1 st Alert Level	2 nd Alert Level	3 rd Alert Level
Sensitivity Mode	Sensitive	9 ppm	15 ppm	25 ppm
	Default	15 ppm	35 ppm	70 ppm
	Home & Work	30 ppm	70 ppm	150 ppm
	Custom	0 – 50 ppm	0 – 200 ppm	25 – 400 ppm
Warning	SPARROW	- LED color change - No audible alert	- LED color change - Short audible beep	- LED color change - Long audible beep
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**Phone alerts & TWA require app connection / Emergency Texting Feature requires app and data connection*

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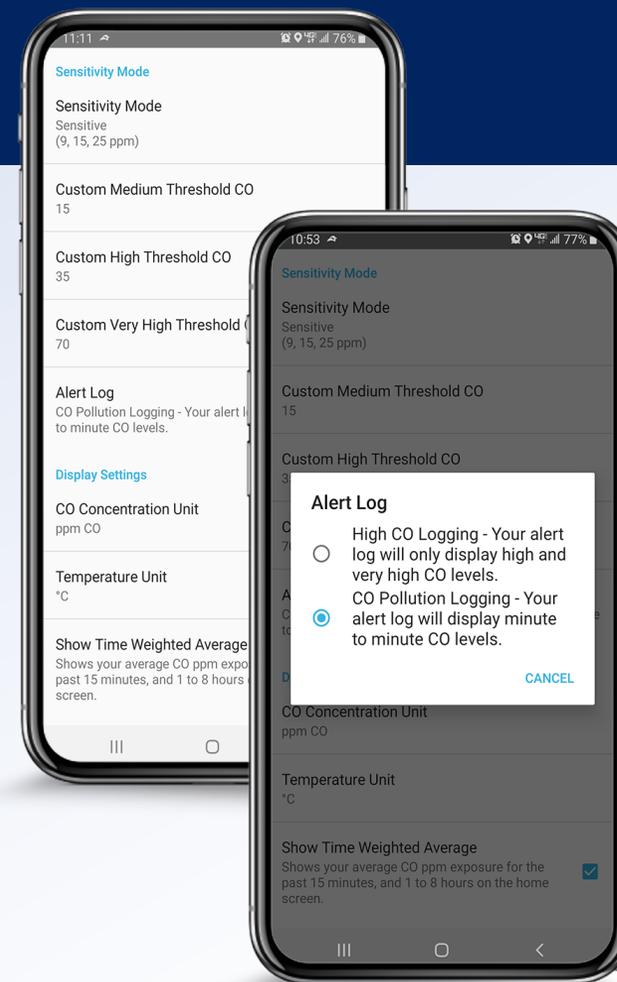
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Customize

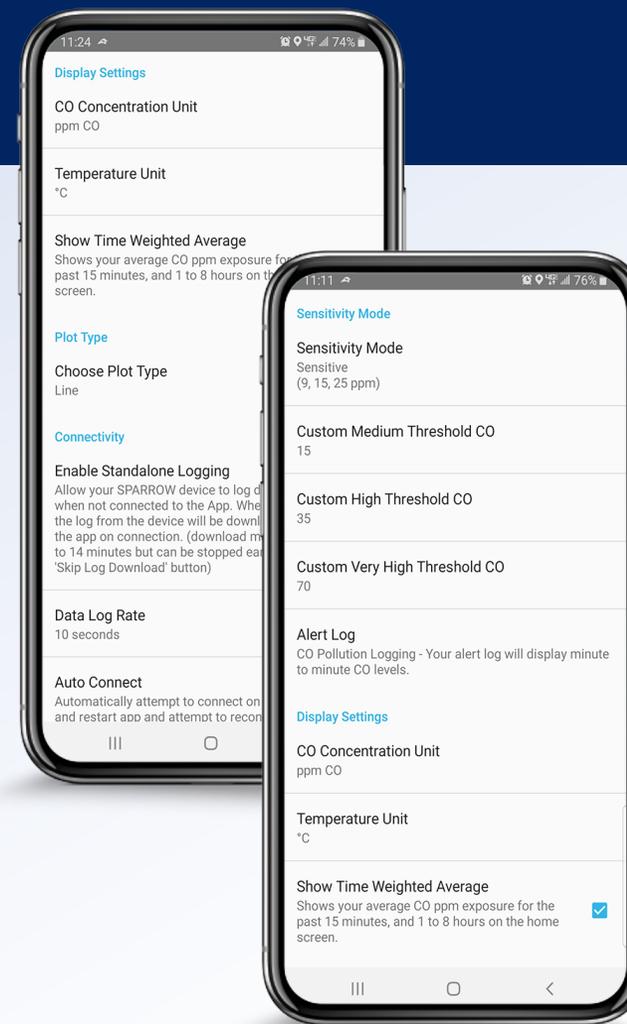
- **Alert Log:**

- High CO Logging (default) – An alert will be added to the alerts page when your CO exposure is above the “high” level for your designated sensitivity mode (10 seconds between each recorded alert).
- CO Pollution Logging – This option will continuously create alert points regardless of sensitivity mode (1 minute between each recorded alert)



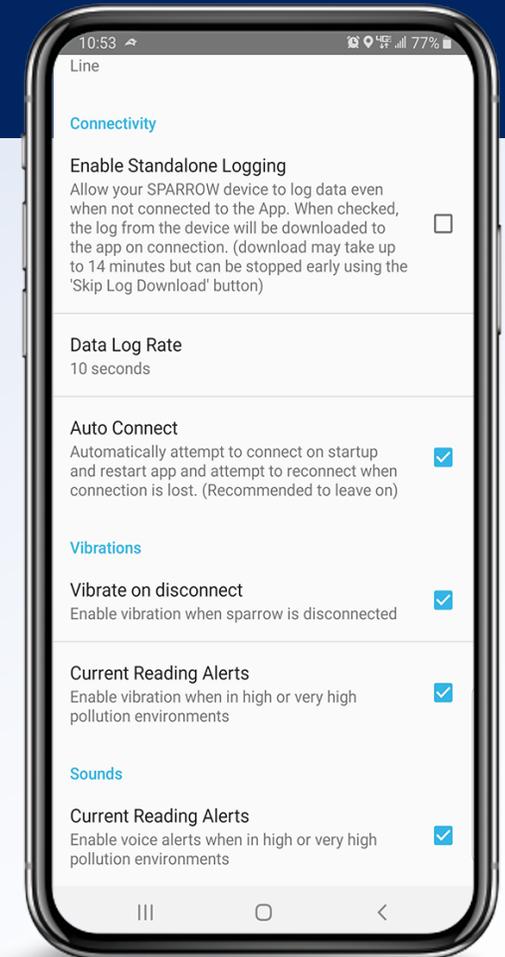
Customize

- **Display settings:**
 - Customize the measurement units for the CO concentration display on the home page as either ppm or mg/m³.
 - Select whether to display the temperature in °F or °C. These settings apply to the home page display only. All CO and temperature measurements will be logged in PPM and °C.
 - Time weighted averages can be displayed on the **Home page** in addition to the **Learn More** page.
- **Plot Type:** Data may be plotted as a 'Point' or a 'Line' on the My Data page graph. Points are useful in that they show gaps in the data unlike line plots that simply connect data points.



Customize

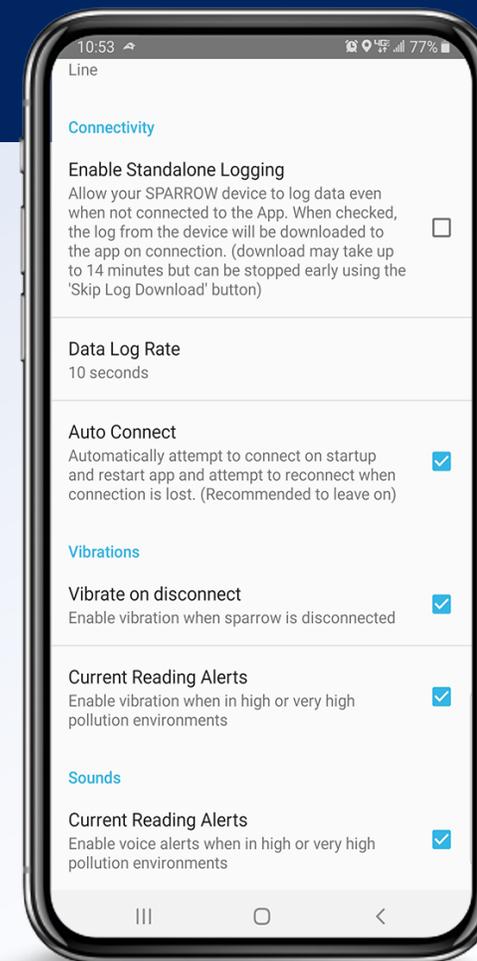
- **Connectivity:** The SPARROW device is designed to store data in standalone mode and to upload that data to the SPARROW app when it reconnects. There are options for controlling this setting.
 - **Enable Standalone Logging:** You can choose whether to always download the log from the SPARROW device on connection or to never download the log. If you would like SPARROW to upload saved data to the SPARROW app when it reconnects, check *Enable Standalone Logging*. This method will preserve your data saved on the SPARROW device. There is also an option to manually skip the download by going to the *drop-down* menu on the **Home page** and selecting *Skip Log Download*.
 - **Data Log Rate:** You can also choose how often the SPARROW App logs data for the My Data Page. The default log rate is 10 seconds. A faster log rate will allow the user to observe changes at a higher resolution but will cause the log file to accumulate faster, creating a larger log file.
 - **Auto Connect:** By selecting “Auto Connect”, the app will automatically attempt to connect with the previously connected SPARROW device on start up, and when the app loses connection. It is recommended to leave this option checked to ensure maximum connectivity with the app and device.



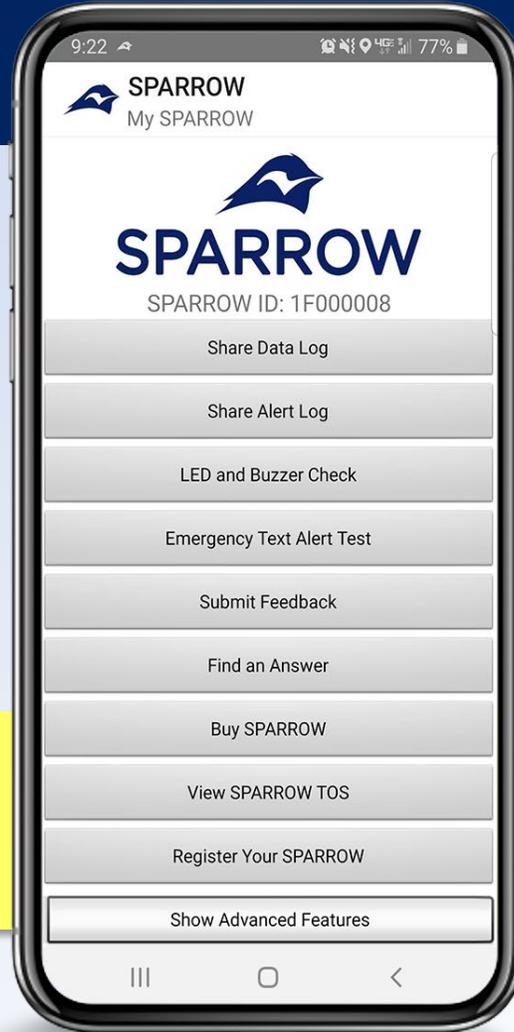
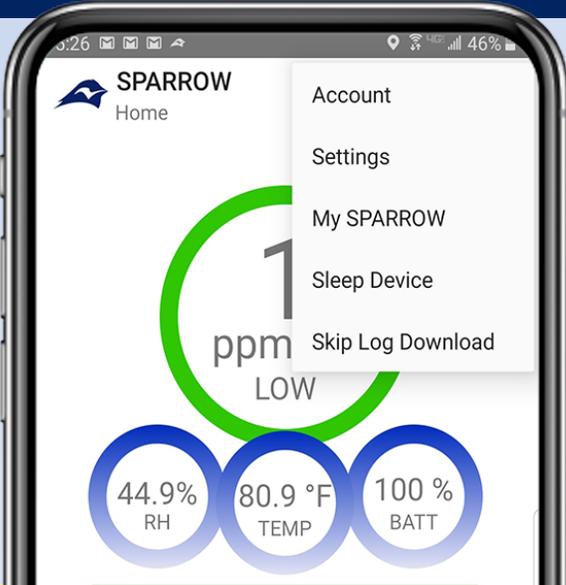
Customize

- **Vibrations and Sounds:**

- The vibration and sound settings control the app and the connected smart-phone. The SPARROW device sound settings can only be changed by adjusting the SPARROW's sensitivity levels and can never be completely turned off unless the device is put into *Sleep Mode*.
- **Vibrate on disconnect** – enables phone vibration when SPARROW disconnects from the SPARROW App.
- **Current Reading Alerts** – enables a phone vibration and/or sound alerts based on your SPARROW's sensitivity settings.



My SPARROW



Additional Features

The drop-down menu links to additional features.

My SPARROW: Access LED and buzzer check, log sharing and advanced features.

Sleep Device: Turn off SPARROW and disconnect it from the app – SPARROW will give 3 quick beeps before shutting down

Skip Log Download: Connect directly to the app and skip data transfer from SPARROW to the app
(*Read more on the My Data page*)

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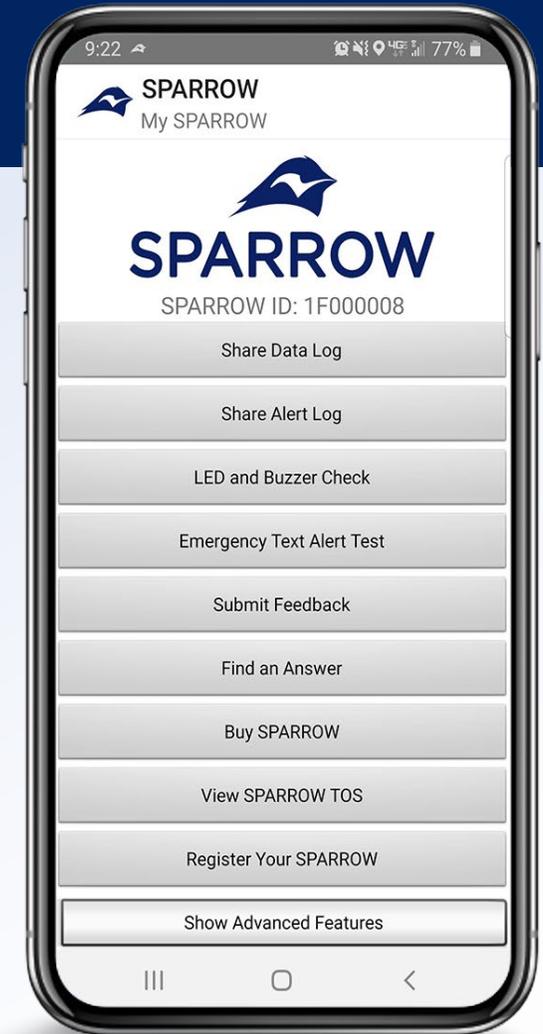
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My SPARROW

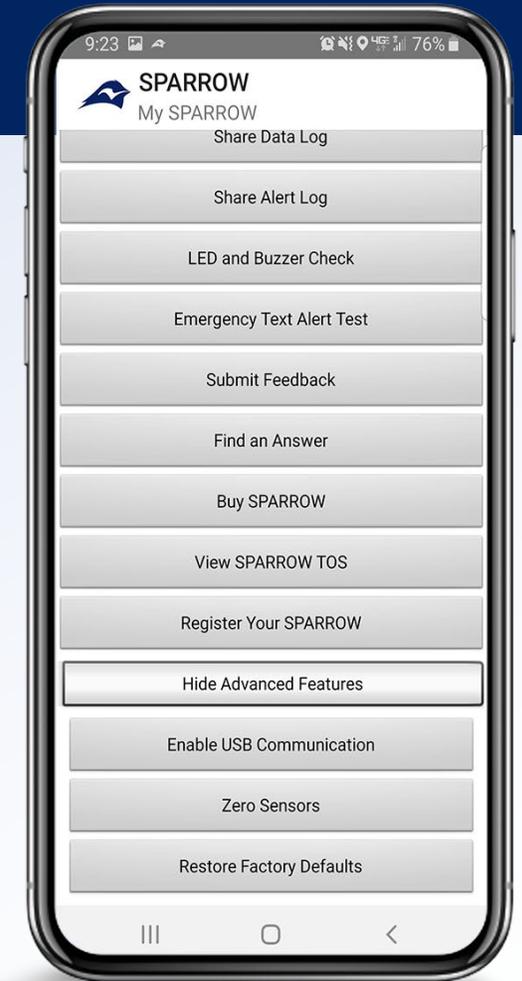
The **My SPARROW** page includes important information specific to your SPARROW device and provides links to key functions.

- **Share Data log:** Send your Data Log (the data used in the My Data page) to yourself or someone else via email (.txt attachment)
- **Share Alert Log:** Send your Alert Log (the alerts stored on the Alerts page) to yourself or someone else via email (.txt attachment)
- **LED and Buzzer Check:** SPARROW will demonstrate a quick 5 second test where it will alternate its LED colors and sound its buzzer in connection with the 4 different alert levels.
- **Emergency Text Alert Test:** The SPARROW app will send an example text to your emergency contacts. This test is useful to ensure they can receive the text and to help them know what to expect when they get one.
- **Submit Feedback:** Press this to send us a question or comment



My SPARROW

- **Find an Answer:** Links to the SPARROW website showing important questions that may be missing from the Learn More FAQ page.
- **Buy SPARROW:** Links to the SPARROW purchasing page.
- **View SPARROW TOS:** View the SPARROW Terms of Service at any time by clicking this button. To continue using SPARROW you must agree to these terms.
- **Show Advanced Features:** Toggles the display of features, for the advanced user.
 - *Enable USB Communication:* Allows the SPARROW device to communicate via USB to a computer.
 - *Zero Sensors:* Reset your CO sensor value to 0 PPM. ONLY DO THIS IF YOU ARE IN A KNOWN 0 PPM CO ENVIRONMENT.
 - *Restore Factory Defaults:* Press this button to restore the factory default settings for alarms and sensor zeros and spans. This will also restart all log, alert, and event files.





Home



*Alert levels are based on your personalized *Sensitivity Mode*, found in the *Settings* menu

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4 personalized settings

Low - Green

Medium – Yellow

High - Red

Very High – Purple



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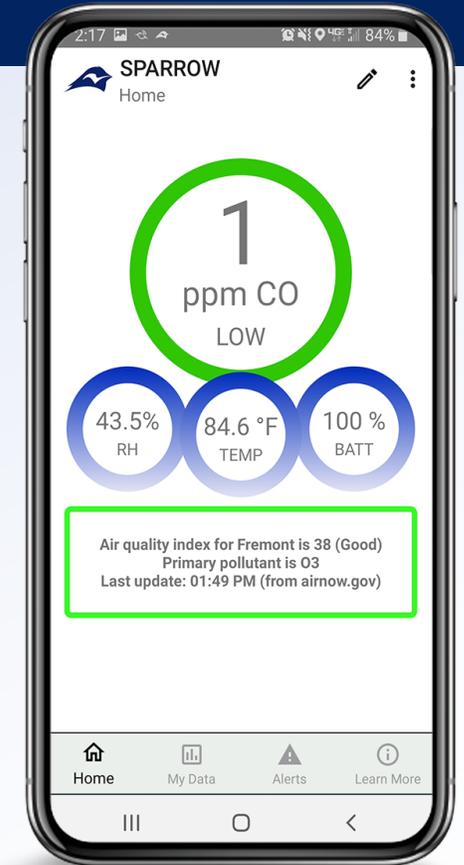
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- **Display:** The SPARROW App will update once per second with data received from the SPARROW device. The app displays CO concentration in PPM, temperature, relative humidity, and battery life, all obtained directly from the sensors on the SPARROW. The temperature measurement is also used in the calculation of PPM CO.
 - The color of the PPM CO display will change depending on the concentration of CO measured, and your personalized sensitivity mode. SPARROW sensitivity settings can be changed under *Settings* in the drop-down menu.
- **Message box / Regional air quality:** The lower message box will show regional air quality or an alert message. Regional air quality is provided by the EPA at www.airnow.gov for users in the US only. If airnow.gov is unavailable, or your current concentration is in the high or very high range, it will display an alert message based on the concentration and your sensitivity mode.
- **Events:** The Events feature provides a customized way to track a CO incident. Use the events icon on the home screen to enter a custom note any time there is a CO incident you want to identify later. Saved events can be viewed on the My Data page.



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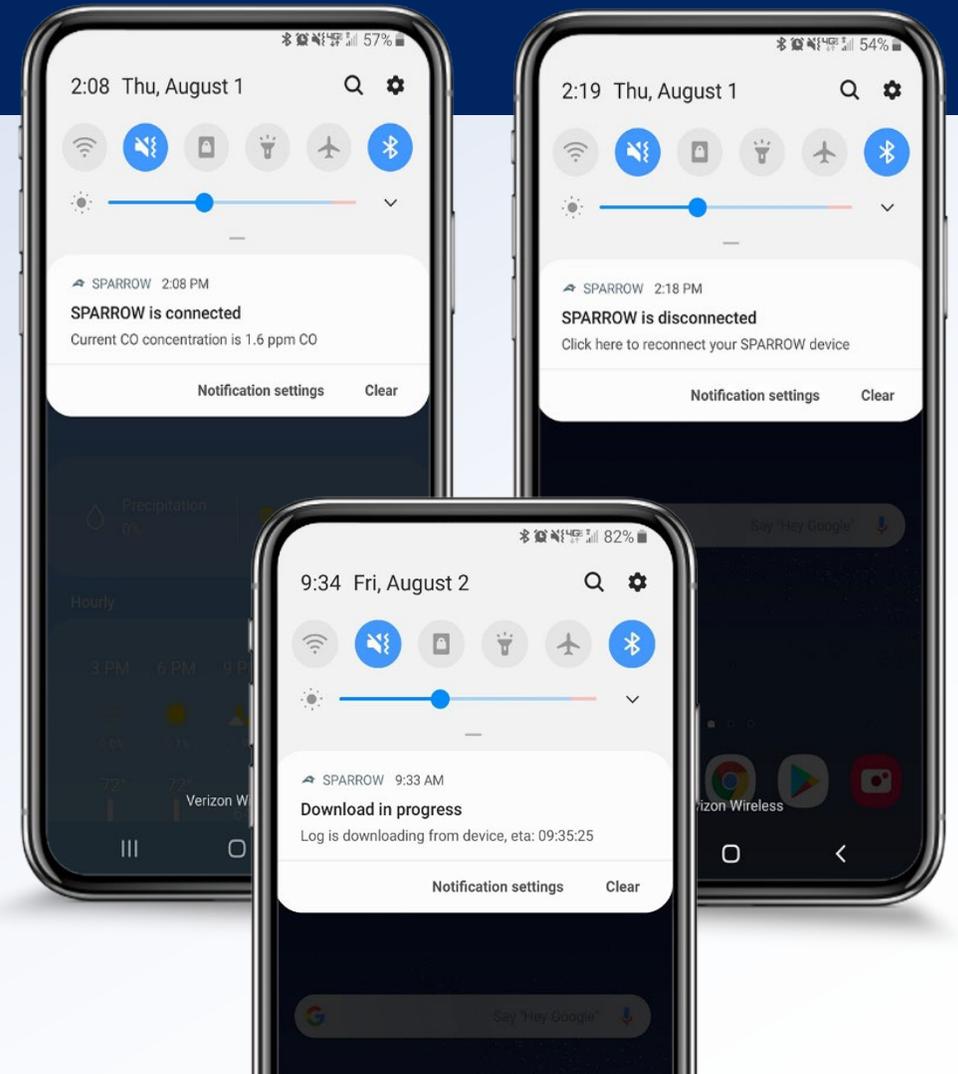
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Home - App Notifications

- **Android notification feature.** Drag down from the android status bar any time the SPARROW App is open to see notifications from SPARROW. These notifications are also visible from the lock screen. Clicking on these notifications will bring the user to the corresponding page in the SPARROW App.
- These notifications will change based on what the SPARROW App is currently processing. You will receive notifications for:
 - Current reading from the sensors updating every second,
 - Disconnection message when SPARROW disconnects from the SPARROW App.
 - Download notification when the log has finished downloading.



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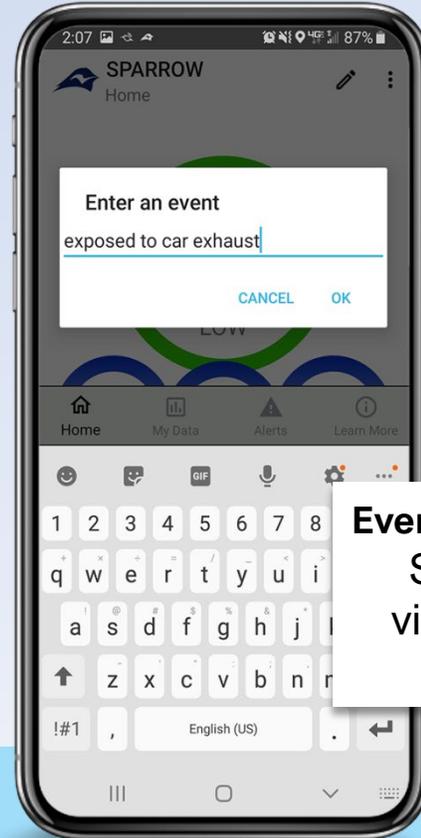
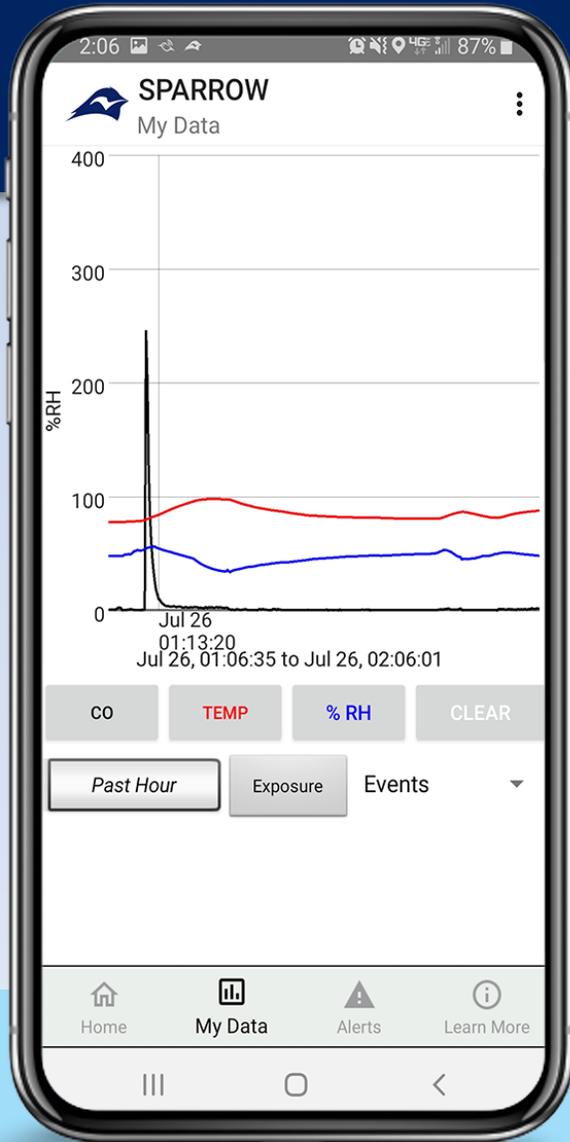
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My Data



Events:

Saved events can be viewed on the My Data page graph.

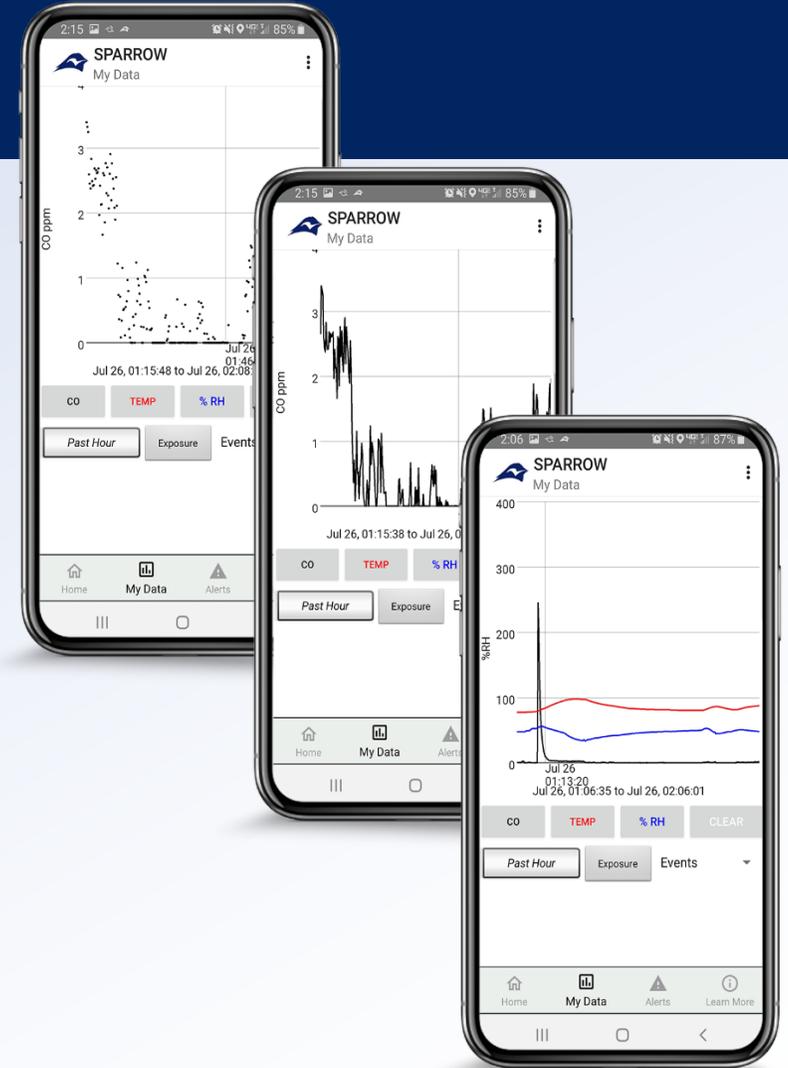
My Data Page

Graph your exposure over any period of time.

1. Select the **My Data** page and select CO, TEMP, and %RH to create the graph.
2. Select *Clear* to clear the graph, this does not erase any data.

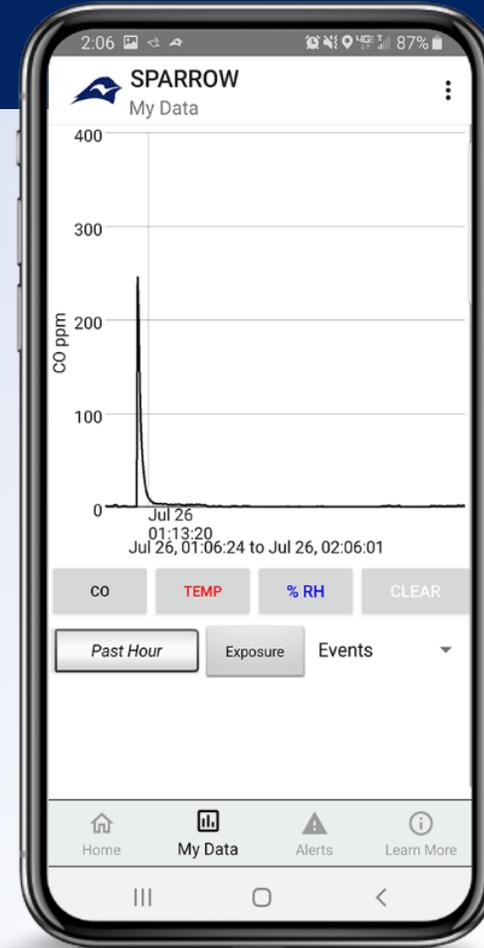
My Data

- **Building your Graph:** The My Data page will plot carbon monoxide ppm, temperature in °C, and percent relative humidity vs time.
 - **Press CO, Temp, or % RH** to plot the real time data from the sensor.
 - Selecting multiple datapoints is useful to see if high CO exposure occurred at the same time as temperature elevations for example.
 - **Line plots / Points:** Adjust the plot settings to display lines or points. **This setting can be changed in *Settings* under “Plot Type”.** Points are useful in that they show gaps in the data, unlike line plots that simply connect data points.
 - Use two fingers to zoom into any part of the graph to expand or contract your view.



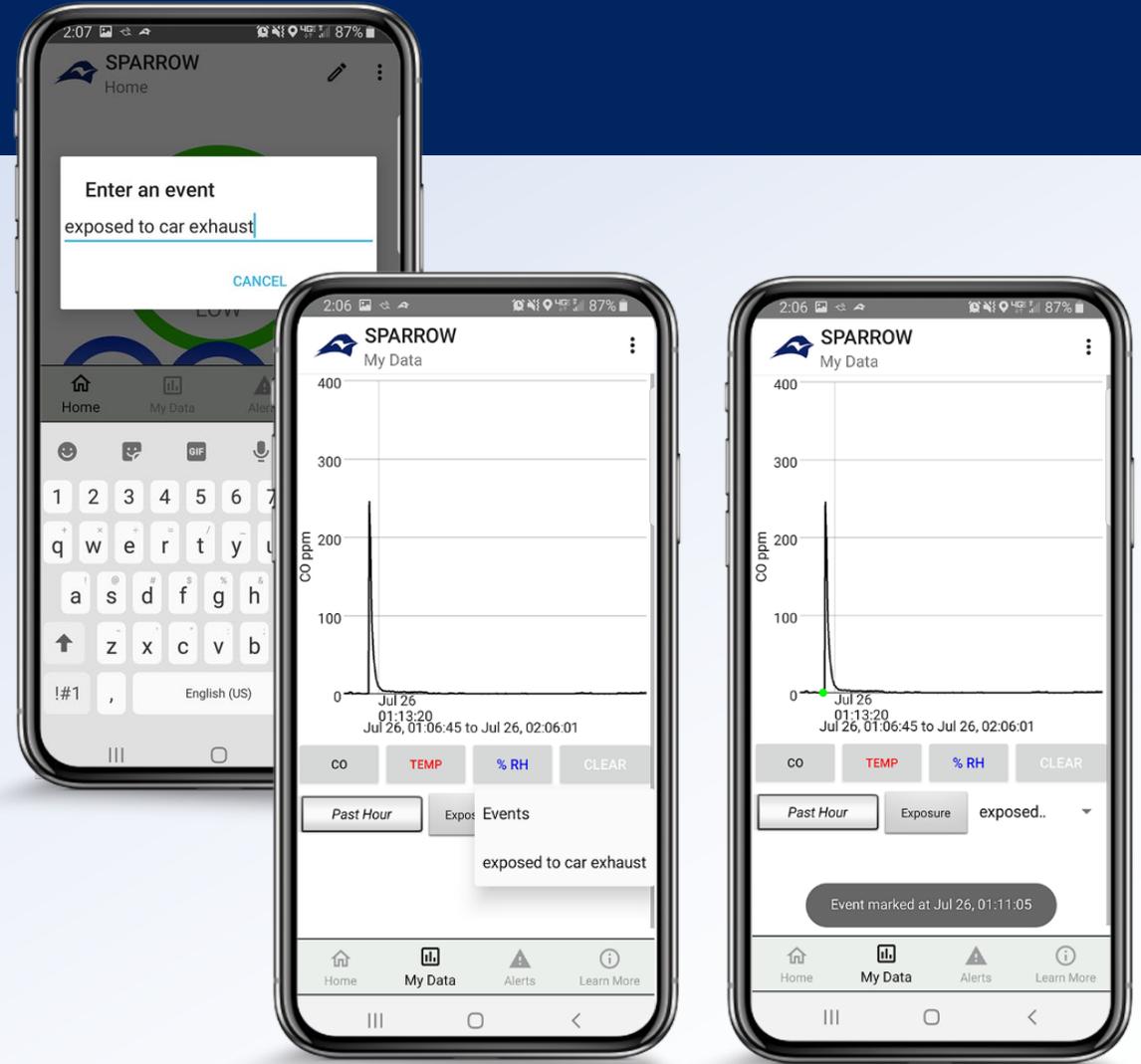
My Data

- Use the Time Selection Toggle labeled **Past Hour** to graph a specific time period
 - Click on **Past Hour** to toggle between Past Hour, Past Day, or Specified Time. Pressing any of the three data options above will plot data points for the indicated time period. To set a specific time period, toggle the button to Specified Time and enter the start and end dates on the lines that appear below.



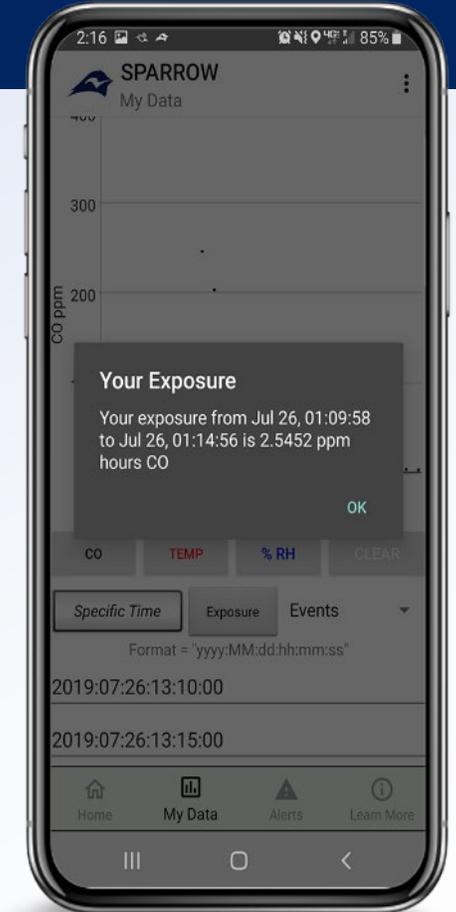
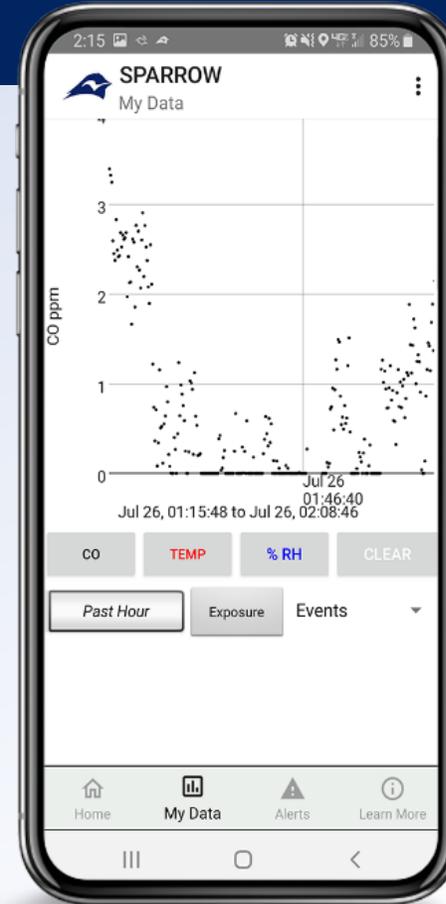
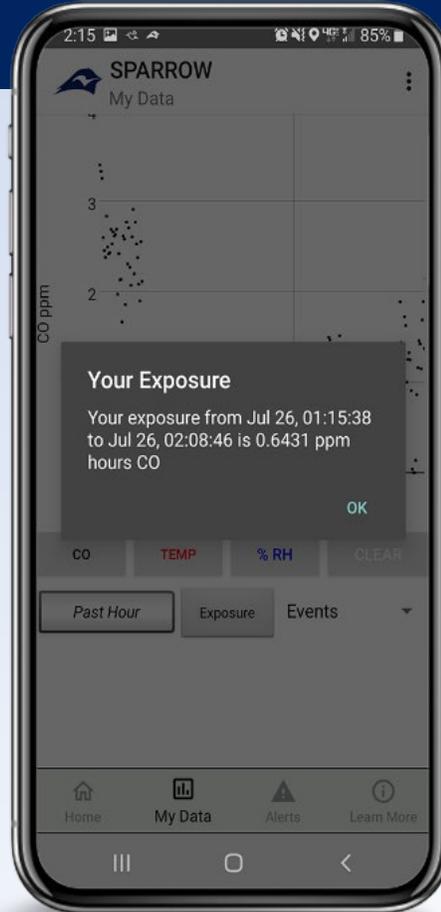
My Data

- **Events feature:** Events saved on the home-page can be graphed on the My Data page.
 - Click the **Events** drop down menu to open a list of all events. Select an event from this list to view that data point on the graph. A green marker will appear at the time in which the event was recorded. This is useful for indicating the time CO levels rise or fall.
 - Select *Clear Events* in the drop-down menu to delete all saved events.



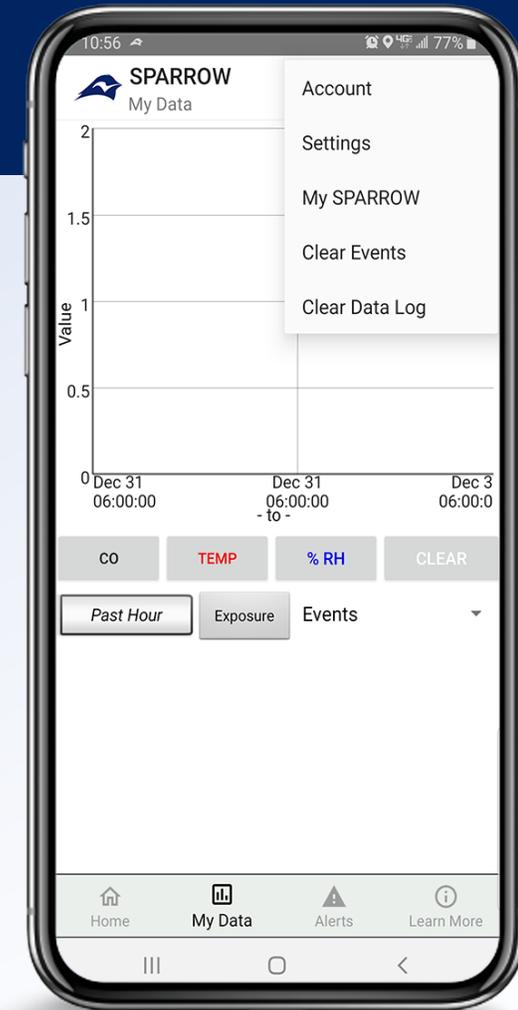
My Data

- **Exposure:** Click on the Exposure button to show your total amount of CO exposure over the indicated time frame. Similar to plotting, toggle between Past Hour, Past Day, or Specific Time to get the dosage to which SPARROW was exposed for that period.



My Data

- **The My Data Drop-Down menu**
 - **Clear Events** deletes all events on the events list
 - **Clear Data Log** will permanently delete all data from the data log. This will effect plotting and dosage calculation for all previous time periods. To save your data use the *Share Data Log* feature first.



My Data

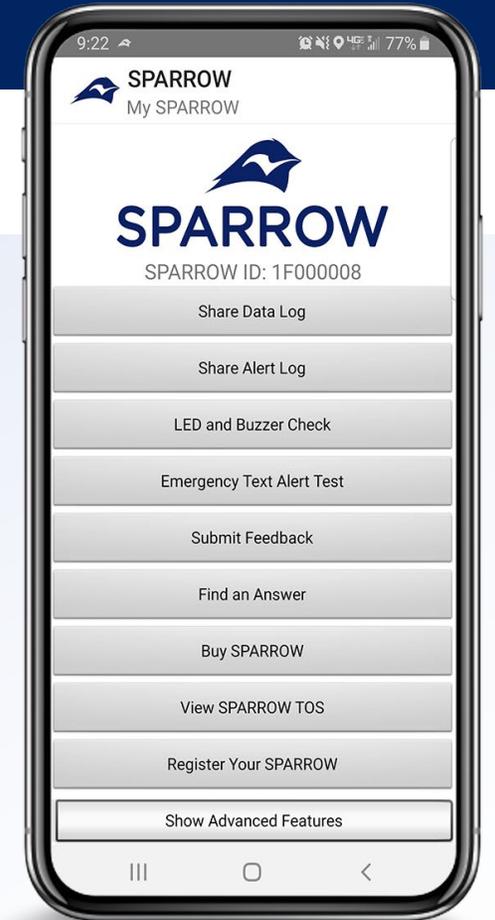
Data storage and sharing for the Advanced User

- **Download data from SPARROW to the app on connection:** SPARROW has the ability to log data in stand-alone mode and download the data to the app on connection.
 - **Enable Standalone Logging:** Select “Enable Standalone Logging” in the settings menu to allow saved data to download to the app every time it reconnects. By default this feature will not be enabled. While downloading, real-time monitoring will be temporarily disabled and will resume automatically when the log has finished downloading. It may take up to 14 minutes for this download to complete.
 - **To skip data transfer:** When “Enable Standalone Logging” is enabled you are still able to skip the download by selecting the **Skip Log Download** button, located on the drop-down menu. The Skip Log Download button, allows you to skip the log download and go straight to real-time monitoring; however, all data points from the log that have not yet been transferred will be lost, which will lead to missing data in the My Data page.

My Data

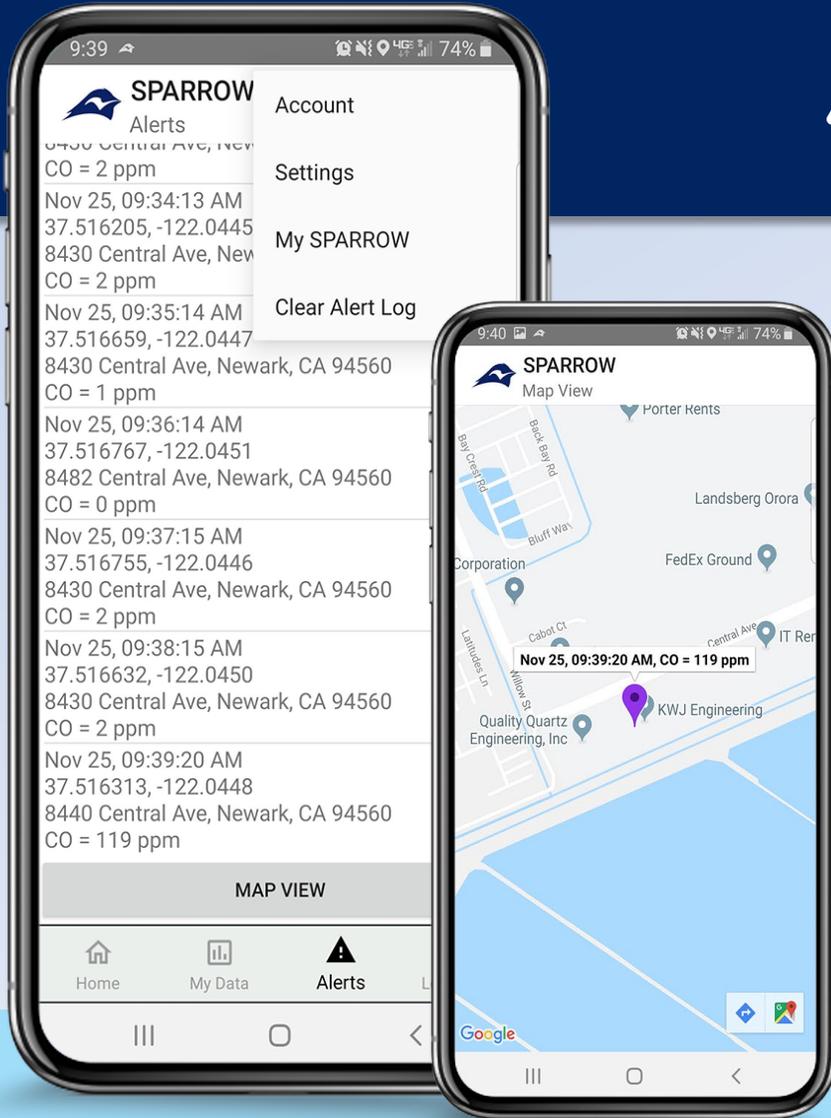
Data sharing for the Advanced User

- **Share Data Log:** To share your log go to **My SPARROW** page and select 'Share Data Log'.
 - You may see several options for sharing the file depending on your phone apps and settings. **Select Email**, to send the file as an attachment to yourself or any email you prefer. On Android devices other sharing options may be available such as link sharing, Google Drive, Dropbox, or share with a friend using WhatsApp.
 - The data log will be sent in a .txt file and will include data ordered as: Date, Time, CO in ppm, Temp in °C, and %RH.
 - The .txt file may open automatically within Microsoft Excel; however, you may also select Data / Get Data / From Text / CSV to open the file within an excel document. Select comma delimiter to convert text file into an excel file that is easy to work with.





Alerts



Alerts

1. Click the **Alerts** page for a list of recorded CO data with location and time-stamp information.
2. **Select Map View** – for the GPS location of past CO data.
3. To delete past data select *Clear Alert File* on the drop-down menu



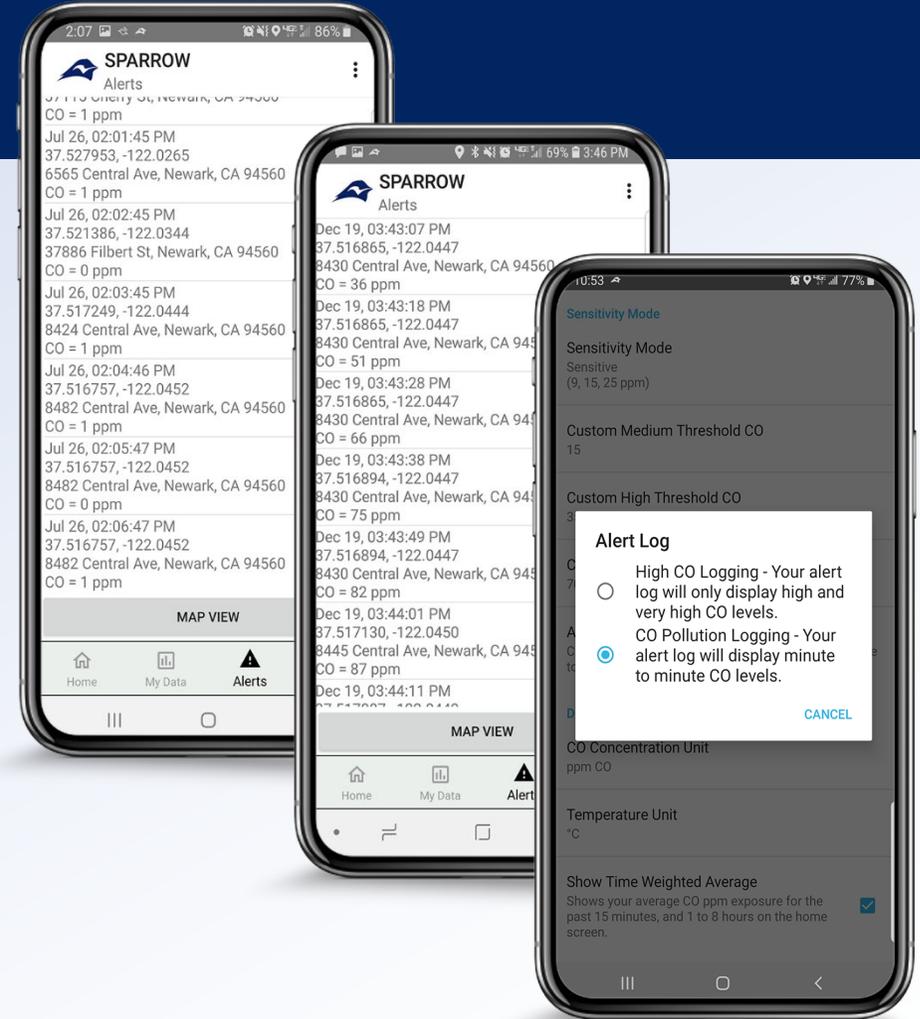
Alerts Log

- High CO Logging - Your alerts log will only display high and very high CO levels.
- CO Pollution Logging - Your alerts log will display minute to minute CO levels.

CANCEL

Alerts

- The **Alerts** page is used to log either high or very high CO exposure data or continuous pollution levels. Each alert item will contain the time of exposure, location, and concentration level, with the most recent occurrence at the bottom. The Alerts Log setting can be changed in *Settings* under 'Sensitivity'.
 - **High CO Logging** is the default setting for SPARROW. The alert log will display high and very high CO levels only based on your sensitivity settings.
 - **CO Pollution Logging** records exposure data every minute regardless of your sensitivity settings.



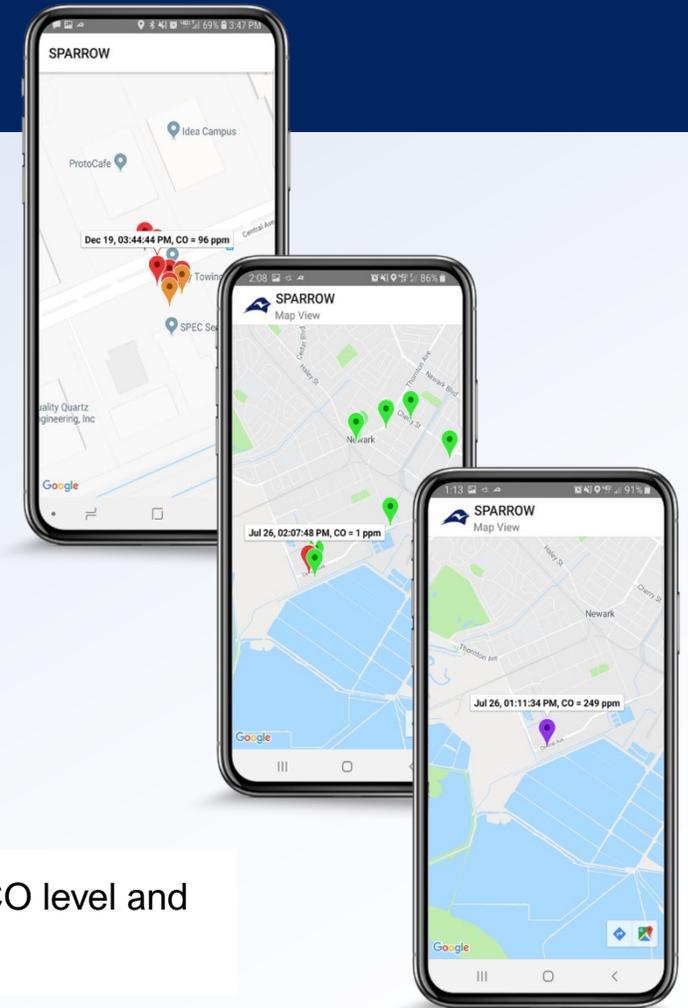
Alerts

- **Map View**

- **Click the Map View** button to open a Google Maps page with a marker for every item in the alert list starting from the oldest available point and ending at the most recent point. **Tip:** If the map does not open to your current location, use two fingers to zoom the map out to find the most recent data points.
- **Click on a single GPS marker** to display the time it was measured and the corresponding CO ppm reading.



Markers are color-coded based on the recorded CO level and your sensitivity mode.

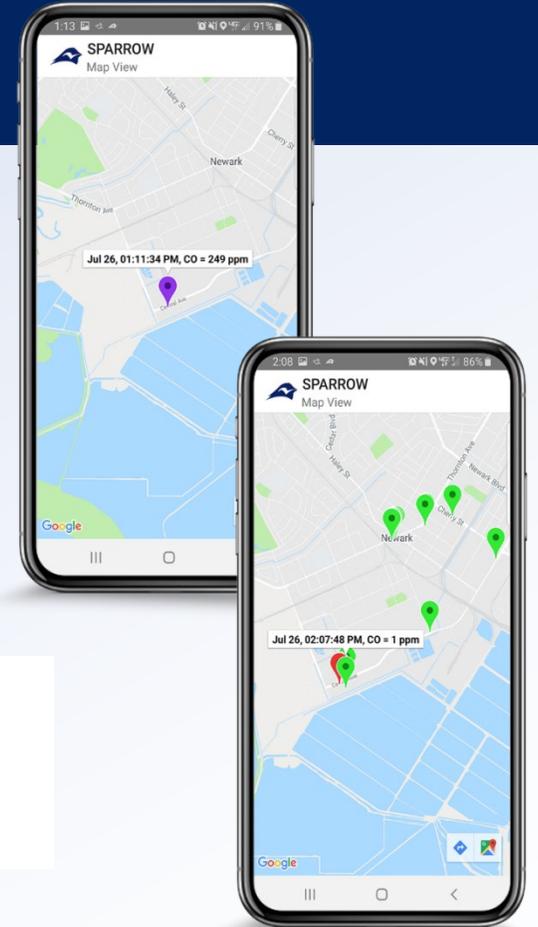


Alerts

- **Map a single alert**
 - Click on a single alert in the alert list to display a marker in Google Maps for that specific alert.

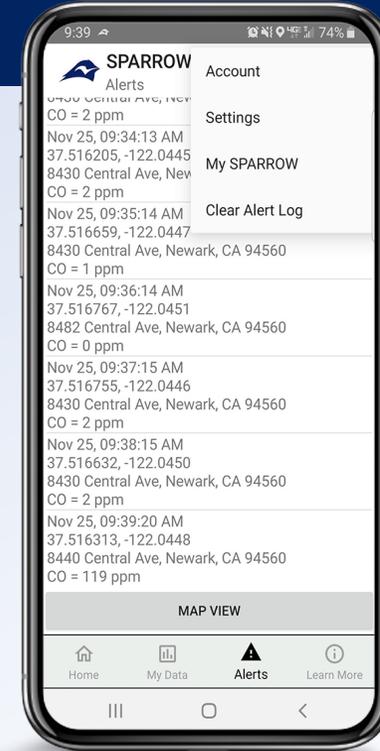


The map with the green markers reflects the setting for 'CO Pollution Logging'. In this setting data is recorded at a rate of once every minute. This is useful for air quality street level mapping.



Alerts

- **The Alerts Drop-Down menu**
 - *Clear Alert Log:* The Alert Log should be cleared when the map view's performance begins to slow. All alerts will be lost when the log is cleared, it is recommended to use the *Share Alert Log* feature if you would like to save your data.



Alerts

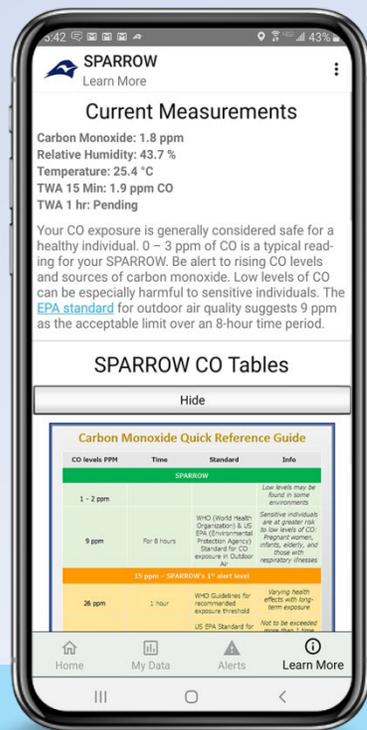
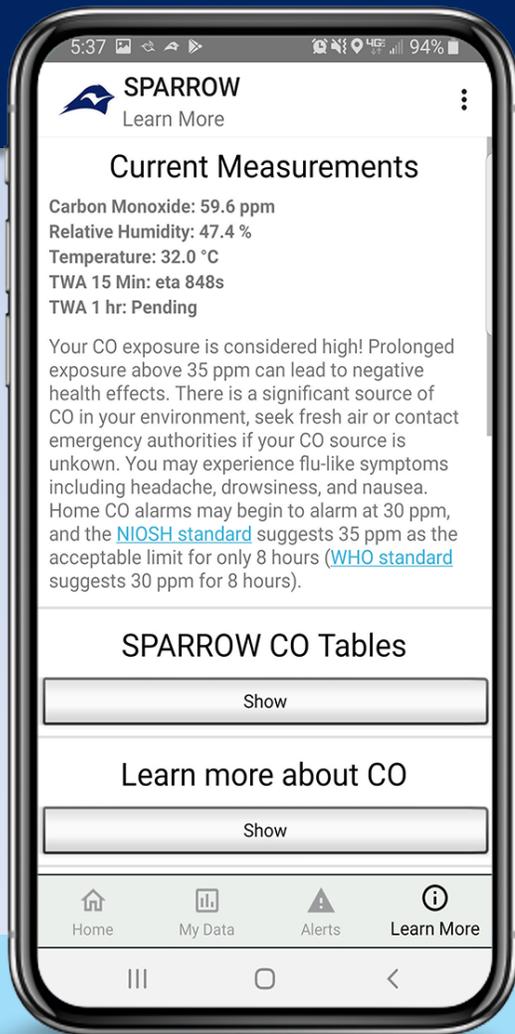
Alert sharing for the Advanced User

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 - You may see several options for sharing the file depending on your phone apps and settings. **Select Email**, to send the file as an attachment to yourself or any email you prefer. On Android devices other sharing options may be available such as link sharing, Google Drive, Dropbox, or share with a friend using WhatsApp.
 - The Alert Log will be sent in a .txt file and will include data ordered as: Date, Time, GPS coordinates, address, and CO in ppm.
 - The .txt file may open automatically within Microsoft Excel; however, you may also select Data / Get Data / From Text / CSV to open the file within an excel document. Select comma delimiter to convert text file into an excel file that is easy to work with.





Learn More



Access the **Learn More** page from the bottom toolbar or by clicking the main display circle on the home page.

Learn More

The **Learn More** page Provides contextual information about current air quality, TWA, and helpful links.

This information will change depending on the intensity of CO exposure.

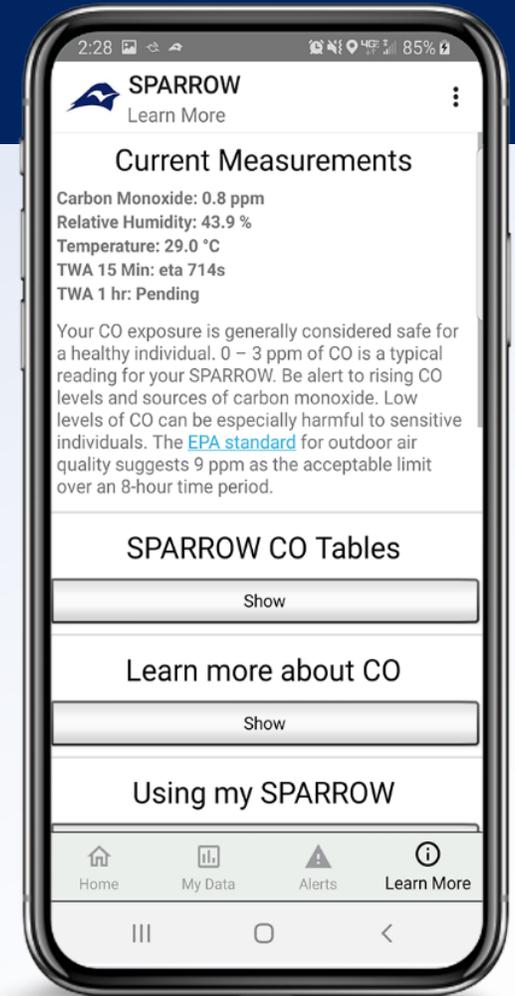
Learn more

- **Time Weighted Average Display**

- TWA (time weighted average) CO readings are calculated for the past 15 minutes, and the past 1 to 8 hour(s). When the 15 minute TWA is not yet unavailable, the number of seconds remaining will countdown. For the 1 to 8 hour TWA, the 1 hour TWA will say *Pending* until the 1 hour TWA is available. The TWA duration will continue to increase every hour up to a maximum of 8 hours. Similar to the home page, these values are updated once per second.

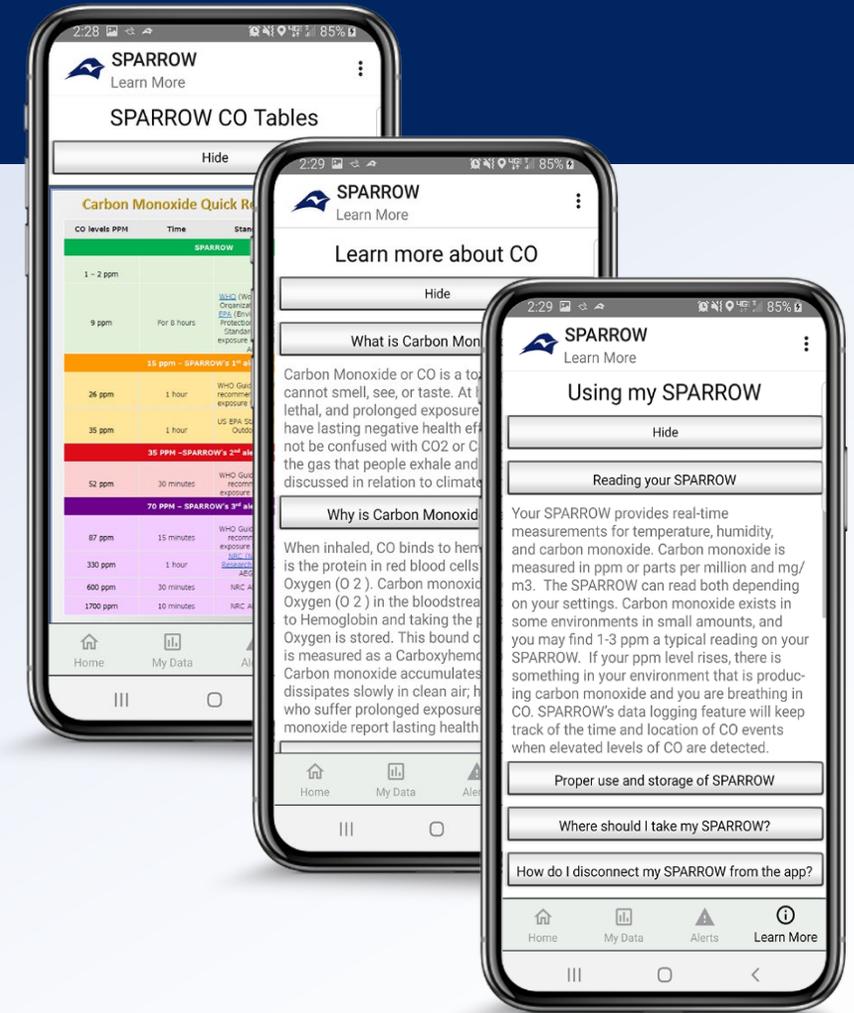


Note: TWA values can only be calculated while the app is on and connected to the device. Upon connection the TWA reading will begin calculating the 15 min TWA.



Learn more

- **SPARROW CO Tables:** Click the “show” button to see useful guidelines for CO exposure based on different standards and recommendations.
- **Learn more about CO:** Click the “show” button to view a list of commonly asked questions about carbon monoxide. The answer will appear below the question and tapping on the question again will hide the answer.
- **Using My SPARROW:** This section contains a list of guidelines on how to use SPARROW as well as some possible issues that may occur and how to address them. The link to this user manual is also found below this list of questions.



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Warranty and Compliance

For more information on using SPARROW, or to contact us directly, visit us at cs@sparrowsense.com

Warranty

Eco Sensors, a division of KWJ Engineering, Inc. warrants, exclusively to the original end-user purchaser of this product, that it shall be free from defects in the materials or workmanship under normal use for 1 year from the date of purchase. KWJ is not responsible for any consequences arising from failure to follow instructions or relating to the product's use. This warranty does not apply to any product that has been subjected to misuse, abuse, neglect, accident, tampering, or unauthorized repairs, and will not apply if the device is stored or used outside the recommended parameters of 0-45 C.

SPARROW has been designed to fit with the Otterbox uniVERSE Case System.

Otter Products, LLC, and its related persons and entities, is not responsible for the operation of this product or its compliance with safety and regulatory standards. This product has been designed for use with certain OtterBox branded products and has been certified by the manufacturer to meet OtterBox performance standards.

IN NO EVENT WILL THE MANUFACTURER DISTRIBUTOR OR OTTER PRODUCTS, LLC BE LIABLE FOR ANY INCIDENTAL, DIRECT, INDIRECT, SPECIAL, PUNITIVE OR CONSEQUENTIAL DAMAGES (SUCH AS, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFITS, BUSINESS, SAVINGS, DATA OR RECORDS) RELATED TO THIS PRODUCT, EXCEPT AS STATED HERIN, NO OTHER WARRANTIES SHALL APPLY.

Regulatory Information

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 product contains FCC ID: 2AA9B04

This product contains IC: 12208A-04

Warranty and Compliance

For more information on using SPARROW, or to contact us directly, visit us at cs@sparrowsense.com

Limitations

SPARROW is NOT a substitute for installed or fixed CO alarms in your home or business. CO alarms are necessary for your safety and may be required by law. SPARROW is a portable device that alone is not adequate protection from all potential CO risks.

SPARROW will only sense CO that reaches the sensor: Placement within a closed space and other obstructions may affect the rate at which CO reaches the sensor. Keep SPARROW open to the air around it for accurate measurements.

SPARROW's audible alarm is NOT designed to UL2034 requirements - MAKE SURE TO TEST THE ALARM TO UNDERSTAND ITS VOLUME (LED and Buzzer Check link is found on the My SPARROW page). CO alarms may not waken all individuals.

Do not rely solely on SPARROW for decisions regarding your safety.

Proper Use

For SPARROW to function properly, it MUST:

- Be continuously charged
- Be exposed to the environment
- Be within audible distance and unobstructed
- Be kept within operating temperatures between 0 – 45 °C.

SPARROW may not provide accurate readings in the presence of other gases and substances or in environments with high temperatures.