PERSONAL FORMALDEHYDE MONITOR

CNRY

User Manual



CONTENTS

1. Important safety information
2. Getting to know CNRY
3. Charging
4. Pairing CNRY with your phone
5. Wearing CNRY
6. Understanding the status light
7. Your exposure data
8. Care and storage
9. Troubleshooting
10. Specifications
11. Support, warranty and disposal

1 · Important safety information

Read these instructions before using CNRY and keep them for reference.

Using CNRY for OSHA exposure monitoring

- CNRY is designed to provide the personal exposure monitoring required by the OSHA Formaldehyde Standard (29 CFR 1910.1048). It measures formaldehyde in your breathing zone and records your 8-hour time-weighted average (TWA) and 15-minute short-term (STEL) exposures. Validation against the standard's accuracy requirements is in progress PENDING.
- For results that count toward OSHA monitoring, wear CNRY as described in section 5 for your whole shift, and keep it charged and paired so that no readings are missed.
- Exposure monitoring is one part of the standard. Your employer must still provide the ventilation, protective equipment, training and medical surveillance it requires, so keep using your facility's ventilation and PPE.
- If CNRY shows red, or you notice eye, nose or throat irritation, coughing or breathing difficulty, move to fresh air and follow your facility's procedures. Seek medical attention if symptoms continue.
- CNRY is not a medical device. It does not diagnose, treat or prevent any condition.

Battery safety

- CNRY contains a built-in lithium-polymer battery. Do not open, puncture, crush, bend or incinerate the device.
- Charge it at room temperature, away from heat sources, embalming equipment and flammable materials, using a standard USB charger.
- Stop using CNRY and contact support if it becomes hot, swollen or damaged, or smells unusual.
- The battery is not user-replaceable.

General

- Keep the sensor vents clear. Do not block them, cover them with tape or labels, or insert objects into them.
- Do not spray disinfectants, alcohol or other cleaners directly onto CNRY or into its vents.
- CNRY is not waterproof. Keep it away from liquids and do not immerse it.
- Keep CNRY away from small children. The clip, lanyard and small parts may pose a hazard.
- When wearing CNRY on the lanyard, keep it clear of embalming machines, pumps and other moving equipment.

2 · Getting to know CNRY



1. **Status light.** Glows green, amber or red to show the current formaldehyde level (see section 6).
2. **Front shell.** White finish with the CNRY mark.
3. **Sensor vents.** Room air reaches the sensor here. Keep them uncovered.
4. **USB-C port.** For charging, and for service.
5. **Button.** On the right side, below the USB-C port. Press it with your fingertip. Its functions are listed in section 4.
6. **Clip.** Holds CNRY on a collar, lapel, pocket or strap. You can also wear CNRY around your neck on the lanyard (section 5).

3 · Charging

1. Connect CNRY to a USB charger or computer port with a USB-C cable.
2. Leave it to charge. The status light pulses white while CNRY charges and stays solid white when it's full. CNRY keeps measuring while it charges.
3. Charge fully before first use. A full charge of the 500 mAh battery takes about 2½–3 hours.

Tip: charge CNRY overnight or between shifts so it's ready for a full working day. The battery level is shown in the CNRY app.

4 · Pairing CNRY with your phone

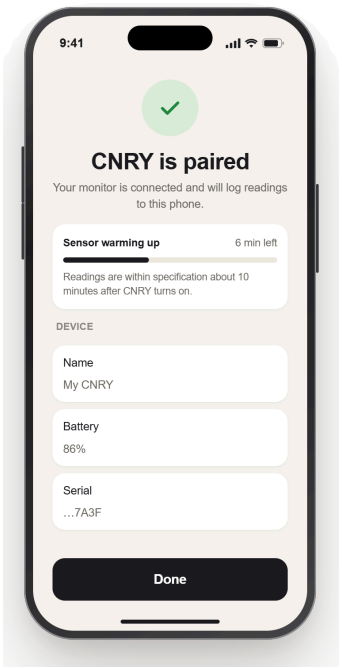
Pair CNRY with the CNRY app once, and it reconnects automatically from then on. Pairing takes about two minutes. You'll need CNRY and your phone.



A Allow permissions



B Press here to pair



C Paired and warming up

1. **Charge and turn on CNRY.** Make sure CNRY is charged (section 3). To turn it on, hold the side button for about 3 seconds, until the status light comes on.
2. **Install the app.** Download the CNRY app from the App Store (iPhone) or Google Play (Android), and turn on Bluetooth in your phone's settings.
3. **Allow permissions** (screen A). Open the app, tap *Continue*, and allow *Bluetooth* and *Notifications*. Notifications are how your phone sounds alerts, so don't skip this.
4. **Hold CNRY near your phone** (screen B). Within a few seconds a card slides up and CNRY turns around on the screen. Check that the last four characters match the serial number on the back of your device.
5. **Press here to pair.** When the card says *Press here to pair*, press the side button once, where the blue ring shows. The status light blinks blue and your phone connects by itself. If your phone asks you to confirm a Bluetooth pairing request, tap *Pair*. (If the card doesn't appear, tap *Set up* next to your CNRY under *Nearby*.)
6. **Finish setup** (screen C). When *CNRY is paired* appears, the status light stops blinking. Give CNRY a name if you like, then tap *Done*.
7. **Let the sensor warm up.** Readings are within specification about **10 minutes** after CNRY turns on. The app shows a countdown until then.

Pairing with a different phone

CNRY connects to one phone at a time. To move it to a new phone, first export any history you want to keep (section 7). Then open the old phone's app, go to *Device* and tap *Forget this CNRY*, and follow the steps above on the new phone.

SIDE BUTTON	ACTION
Press once	Show status: the light shows the current level for a few seconds. On a CNRY that isn't paired yet, a press starts pairing instead (the light blinks blue)
Hold about 3 s	Turn CNRY on or off
Hold about 6 s	Pairing mode, to move CNRY to a new phone: the status light blinks blue
Hold about 10 s	Restart CNRY. Your readings and pairing are kept
Hold about 30 s	Factory reset: clears the pairing and the readings stored on CNRY, and restores factory settings. From 20 s the light blinks red as a warning (faster near the end); let go then to cancel. At 30 s it turns solid red and CNRY resets. Use this only if a restart doesn't fix a problem, and export your history first

5 · Wearing CNRY

For readings that reflect what you're breathing, wear CNRY in your **breathing zone**, within about 25 cm (10 in) of your nose and mouth. There are two ways to wear it:

- **Clip:** clip CNRY to your collar, lapel or upper chest pocket.
- **Lanyard:** wear CNRY around your neck on the lanyard. Adjust the lanyard so CNRY hangs high on your chest, not at your waist, with the status light facing out.

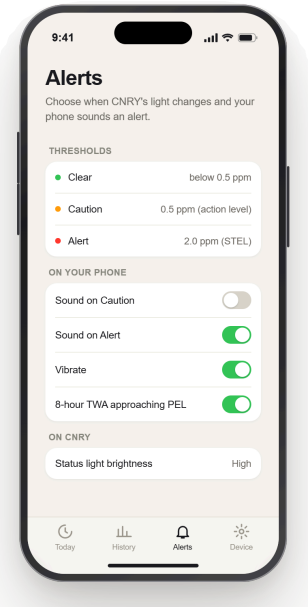
- Wear CNRY on the **outside** of gowns, aprons and coveralls, so the vents face the room air.
- Point the sensor vents outward and keep them uncovered. Don't wear CNRY under a face shield, hood or respirator.
- Turn CNRY on at least **10 minutes** before you start work. The sensor needs that long to warm up before its readings are within specification.
- Wear it the whole time you're in the preparation room, so your 8-hour average is complete.

6 · Understanding the status light

Green · Clear
Formaldehyde is below the OSHA action level of 0.5 ppm. Carry on.

Amber · Caution
Levels are rising toward the exposure limits. Check ventilation, close containers, and limit time near the source.

Red · Alert
Levels are at or near the short-term limit (2 ppm). Ventilate or step away now.



Alerts tab

Your phone sounds an alert and shows a notification when the level changes to amber or red. In the app's *Alerts* tab you can:

- see the thresholds for each color. The defaults are the OSHA action level (0.5 ppm) for amber and the short-term limit (2 ppm) for red;
- choose which levels make a sound, and turn vibration on or off;
- get a warning when your 8-hour average approaches the PEL;
- set the brightness of CNRY's status light.

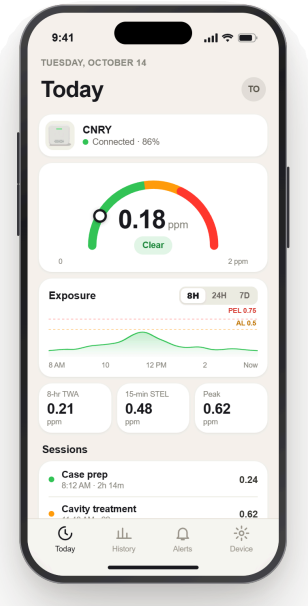
The status light also tells you about CNRY itself:

- **Blinking blue:** pairing mode (section 4)
- **Pulsing white:** charging. **Solid white:** fully charged
- **Amber double-blink every few seconds:** low battery. Charge soon. This differs from the steady amber of a Caution reading

For reference, OSHA's formaldehyde limits are: action level 0.5 ppm and permissible exposure limit 0.75 ppm, both as 8-hour time-weighted averages, and a short-term exposure limit of 2 ppm over 15 minutes. CNRY's measuring range tops out at 2.0 ppm. A red light means the level has reached the top of that range, and the actual concentration may be higher.

---

7 · Your exposure data



Today tab

- **Live reading:** the current formaldehyde level in ppm, updated continuously.
- **8-hour TWA:** your time-weighted average for the shift, for comparison with OSHA's action level (0.5 ppm) and PEL (0.75 ppm).
- **15-minute STEL:** your highest 15-minute average, for comparison with OSHA's short-term limit (2 ppm).
- **Peak:** the highest reading of the day and of each session.
- **Sessions:** each period of wear, with its duration, average and peak.
- **Export:** share your monitoring records as a file for your safety officer and your facility's OSHA recordkeeping. The standard requires employers to keep exposure monitoring records.

If your phone is out of range, CNRY keeps logging and syncs the readings when you reconnect.

---

8 · Care and storage

- **Cleaning:** wipe the outside with a soft cloth lightly dampened with water. Keep moisture out of the vents and the USB-C port, and let CNRY dry before charging.
- **Avoid:** solvents, sprays, ultrasonic cleaners and autoclaves.

- **Where to use it:** CNRY works at 0–50 °C (32–122 °F) and 10–90% relative humidity. Avoid condensation, for example from carrying it from a cold vehicle into a warm room; let it reach room temperature first.
- **Storage:** for the longest sensor life, store CNRY at 10–30 °C (50–86 °F) and 30–70% relative humidity. If you won't use it for a while, charge it to about half before storing, and top it up every few months.
- **Sensor:** the sensor is calibrated at the factory and needs no routine calibration from you. It's rated for more than 6 years of use. Don't open the device; that can damage the sensor and voids the warranty.

9 · Troubleshooting

PROBLEM	WHAT TO TRY
CNRY doesn't turn on or light up	Charge it for at least 30 minutes with a known-good USB-C cable and charger, then try again.
The app can't find CNRY	Make sure Bluetooth is on and the app has Bluetooth permission. Keep CNRY close to your phone, then press the side button once (section 4). If CNRY was paired with another phone, hold the button for about 6 seconds instead, until the light blinks blue.
Readings stopped updating	Open the app, keep the phone within range, and wait for it to reconnect. If that doesn't help, restart CNRY: hold the side button for about 10 seconds.
Readings seem higher than expected	Check for nearby sources: open containers, recently treated surfaces, fluid spills or waste. Make sure the vents are uncovered and point toward the room air.
No sound alerts	Allow notifications and sound for the CNRY app in your phone's settings, and check that the phone isn't on silent or Do Not Disturb.
Status light double-blinks amber	The battery is low. Charge CNRY (section 3).
Nothing else works	Export your history, then factory-reset CNRY: hold the side button for about 30 seconds, through the red blinking, until the light stays red. Pair it again (section 4).
CNRY is hot, swollen or damaged	Stop using it, unplug it, and contact support.

10 · Specifications

Sensor	Sensirion SFA40 formaldehyde sensor, with humidity and temperature measurement
Range · accuracy	0–2.0 ppm · ±20 ppb or ±20% of reading, whichever is larger (sensor specification, 0–0.2 ppm). Accuracy at OSHA levels is being validated PENDING
Alerts	Three-color status light; sound and notifications on the paired phone
Connectivity	Bluetooth Low Energy
Response · warm-up	Under 2 minutes · about 10 minutes after power-on
Power	Built-in 500 mAh rechargeable lithium-polymer battery; lasts a full work shift (8+ hours); USB-C charging in about 2½–3 hours
Operating conditions	0–50 °C, 10–90% RH, non-condensing
Size · weight	50 × 50 × 16 mm (1.97 × 1.97 × 0.63 in), body · 28 g (0.99 oz)

See the CNRY Technical Specifications sheet for full details.

11 · Support, warranty and disposal

Support: support@mementotools.com · cnrysensor.com

Warranty: CNRY comes with a two-year limited warranty against defects in materials and workmanship, from the date of purchase. Full warranty terms are included with the product and at cnrysensor.com/warranty.

Regulatory information: FCC, ISED and CE statements will be added when certification is complete PENDING.

Disposal: CNRY contains electronics and a lithium battery. Do not throw it away with household waste. Take it to an electronics or battery recycling point, as local regulations require.

© 2026 CNRY. CNRY is a trademark. Bluetooth is a trademark of Bluetooth SIG, Inc.; App Store is a service mark of Apple Inc.; Google Play is a trademark of Google LLC. This manual describes a pre-release product. Items marked TBC or Pending are not final.