CW-CON 2023 DIY Wireless Driveway System User Manual

Contents

CW-CON

CW-CON 2023 DIY Wireless Driveway System

Product Information

- **Product Name:** CW-CON DIY Wireless Driveway System
- **Version:** 1 – September 2023

What's in the Box

- 1 Sensor Puck
- 1 Sounder
- 2 CR123A Batteries with Battery Clips
- 2 Auger Screws

Serial Number: The barcode serial number can be found on the back of the sounder, bottom of the puck, and on the product box. Please have one of these numbers handy when contacting support.

WHAT'S IN THE BOX

1. SENSOR "PUCK"
2. SOUNDER
3. CR123A BATTERIES WITH BATTERY CLIPS (2)
4. AUGER SCREWS (2)

SERIAL NUMBER
There is a barcode serial number on the back of the sounder, the bottom of the puck, and the product box. When calling to talk about your product, please have one of these numbers handy.

INSTALLING BATTERIES/LOW BATTERY

1. Use CR123A batteries and match polarity with the battery terminal in the puck.
2. If batteries are put in backward, they will not make contact.
3. Push batteries in place fully to make contact.
4. Snap the plastic battery holder over each battery and onto the battery terminal.
5. The sensor will power up automatically when batteries are installed.

LOW BATTERY
When batteries need replacing in the sensor, the sounder's LED will remain a constant RED. Replace both batteries at the same time.

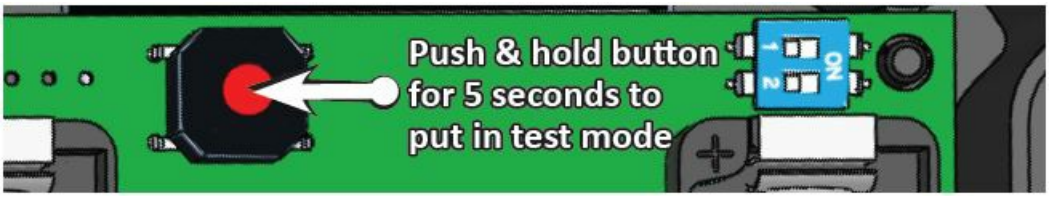
REPLACE BOTH BATTERIES. NO RECHARGEABLES.

TEST MODE FOR SENSOR PUCK

Test mode allows the sensor puck to be tripped without a vehicle. This is useful when testing radio range (see #5 below) and solo installations.

1. Press and HOLD button on the sensor puck for 5 seconds
2. The red LED will be solid and dim while waiting the 5 seconds
3. Once the 5 seconds has expired, the LED will be bright red
4. Test mode is activated when the button is released
5. Additional transmissions will occur every 15 seconds
6. Test mode will be exited when the button is pressed again
7. Test mode will automatically be exited after 30 minutes

NOTE: This button is also used to pair the sensor to the sounder when pushed quickly.



TESTING RANGE

Your system has a radio range of at least 350 feet to over 1000' line-of-sight. To determine the range in your application, test before final installation.
Radio range depends on several variables:

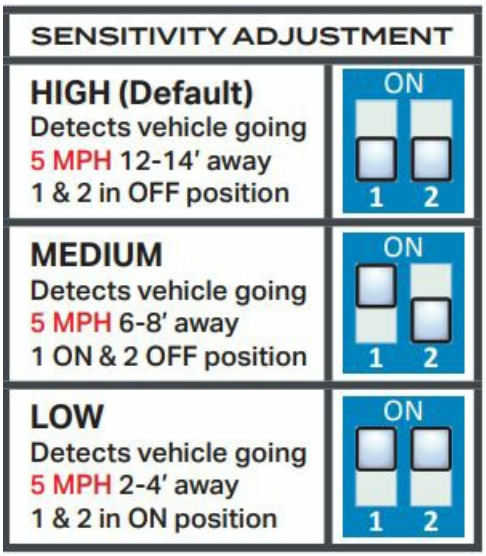
- How the puck is installed (in-ground or above ground on post)
- Obstacles blocking radio signals, such as soil, trees, foliage, buildings, concrete, etc.

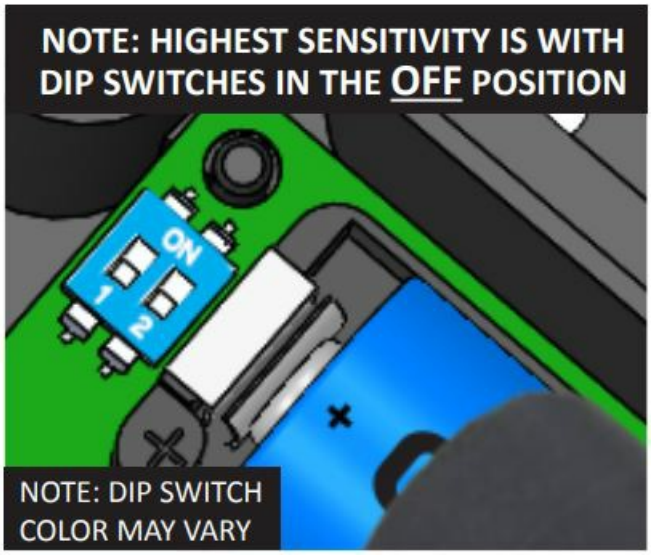
To test range:

1. Put the sounder near its final installation place in the home.
2. Put the sensor in test mode (see #4 above).
3. Listen for sounder to sound. If it doesn't, move the sensor closer to the sounder.
4. Be sure to test again with puck installed in the ground (see #8 below).
5. You may need to add a repeater inside the home by changing the sounder mode to "Repeater." Do this by pushing sounder buttons together to enter menu, scroll to mode menu, and select repeater mode (see #11 & #12 below).

SETTING SENSITIVITY

ONLY ADJUST (LOWER) SENSITIVITY IF PUTTING IN MIDDLE OF DRIVEWAY (see #7 below). IN ALL OTHER CASES USE DEFAULT.





INSTALLING SENSOR PUCK

NOTE: SENSOR PUCK DETECTS A VEHICLE GOING 5 MPH AFTER IT PASSES.
The sensor puck can be installed in the driveway, in the ground, or on an immovable object (post, tree, etc.).

ON AN OBJECT (see illustration below)

1. When the range has been tested (see #5 above), the seat lid securely on the puck with screws provided. Be careful not to strip screws with a screw gun. There should be no gap between the lid and the puck.
2. Find a tree, post, or other object directly beside the driveway.
3. Make sure the object is IMMOVABLE or false alarms will occur.
4. Use the holes on the bottom tabs to screw the puck to the object.

IN THE GROUND (see illustration below)

1. When the range has been tested (see #5 above), the seat lid securely on the puck with screws provided. Be careful not to strip screws with a screw gun. There should be no gap between the lid and the puck.
2. Find a spot directly beside the driveway.
3. Dig a hole big enough for puck and auger screws, allowing the puck's lid to be level with the surface of the dirt.
4. Secure the puck in the ground with auger screws, overlapping the bottom tabs of the puck. If you fail to secure the puck, lawnmowers, etc. will pull/suck it up.
5. Pack and tamp dirt around puck, ensuring lid is clean of dirt and all debris.

IN THE DRIVEWAY (see illustration below)

1. When a range has been tested (see #5 above), the seat lid is securely on the puck with screws provided. Be careful not to strip screws with a screw gun. There should be no gap between the lid and the puck.
   Note: If close to cross traffic, consider turning the sensitivity down (see #6 above)
2. Use a 4.5″ diameter masonry hole saw to bore a hole for the puck. Bore at least 3" deep so the puck lid will be 1/2″ below the driveway surface (so it cannot be pulled up by snow plows, graters, etc.).
3. Pour loop sealant in the hole, careful not to overfill, and put the puck in the hole.
4. Hold the puck down with weight until the sealant becomes firm.
5. DO NOT pour sealant over the puck lid or bosses so as to gain access to batteries.

WARNING: SENSOR PUCK AND LID ARE KEYED. WIPE THE SENSOR BRIM, SENSOR LID, & LID GASKET WITH A CLEAN CLOTH AND KEY CORRECTLY BEFORE SNUGGING SCREWS. DO NOT OVER-TIGHTEN.

SENSOR PUCK INSTALLATION DIAGRAM

WARNING: INSTALL SENSOR PUCK IN A PLACE THAT ALLOWS EASY ACCESS TO ITS BATTERIES.

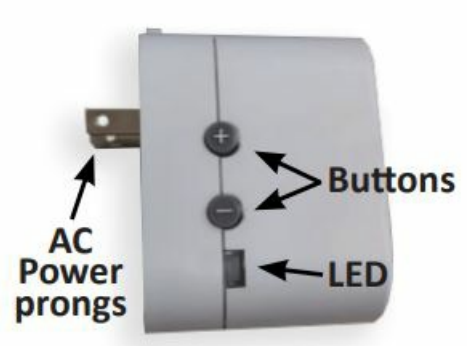
TECHNICAL SPECS – SENSOR

Technical Specifications - Sensor "Puck"	
Power Required	2 - CR123A batteries (6 V)
Stand-By Current	22 Microamps (µA)
Alarm Current	130 Milliamps (mA)
Radio Range	Above ground, no obstructions, to 2,500 ft.* Flush with ground, no obstructions, to 1,000 ft.* Increase range by turning sounder into repeater (see #13 on back)
Battery Life	1–3 years*
Enclosure Rating	IP68
Strength Rating	9.39 ton-force (8514 kgf)
Temperature	-25° F. – +140° F. (-32° C. – 60° C.)
Dimensions	4.5" dia. x 2.5" H (11.43 cm x 6.35 cm)
Weight	2 lbs. (.90 kg)

Estimate only. Radio range & battery life depend on many variables. No guarantees.
WARNING: This product can expose you to chemicals including Acrylonitrile, which is known to the State of California to cause cancer. For more information, go to **www.P65Warnings.ca.gov**.

SOUNDER INTRODUCTION

The sounder plugs into a standard Type A North American outlet. If part of a system, one sounder comes factory-paired to one sensor. An infinite number of sounders can be paired with up to 30 sensors. A different sound for each sensor can be set by the user.



PAIRING

YOUR SYSTEM HAS BEEN PAIRED AT THE FACTORY. THESE INSTRUCTIONS APPLY WHEN PAIRING ADDITIONAL SOUNDERS.
You can pair an unlimited number of sounders with up to 30 sensors.

1. Power up the sensor by installing both batteries and battery clips.
2. Plug the sounder into an outlet. The closer you bring the sensor to the sounder, the better, but it's not necessary.
3. If a sounder has not been paired to a sensor, the sounder automatically enters pairing mode and says, "There are no sensors paired, pairing enabled."
4. Press and release the red test mode button on the sensor board (see #4 above).
5. The sounder will pair to the sensor and say, "Enrollment, Driveway Sensor 1 (or some other #). Sensor is now paired," and enters normal operation mode.

To pair more than one sensor to a sounder (see #11 below)

1. While the sounder is on, press **-+** buttons together to enter menu mode.
2. Use the **–** button to scroll to the pairing menu. Press **+** to select pairing.
3. The sounder will say, "Pairing menu selected. Pair sensor now." Assign and choose the sensor number you want to pair with. Each sensor has a number.
4. Power up the sensor to be paired, or if powered, push the red test mode button. It will pair automatically with the sounder and the sounder will exit pairing mode.
5. Scroll to the sound menu and choose the sound for that sensor.

Erase all paired sensors from the sounder

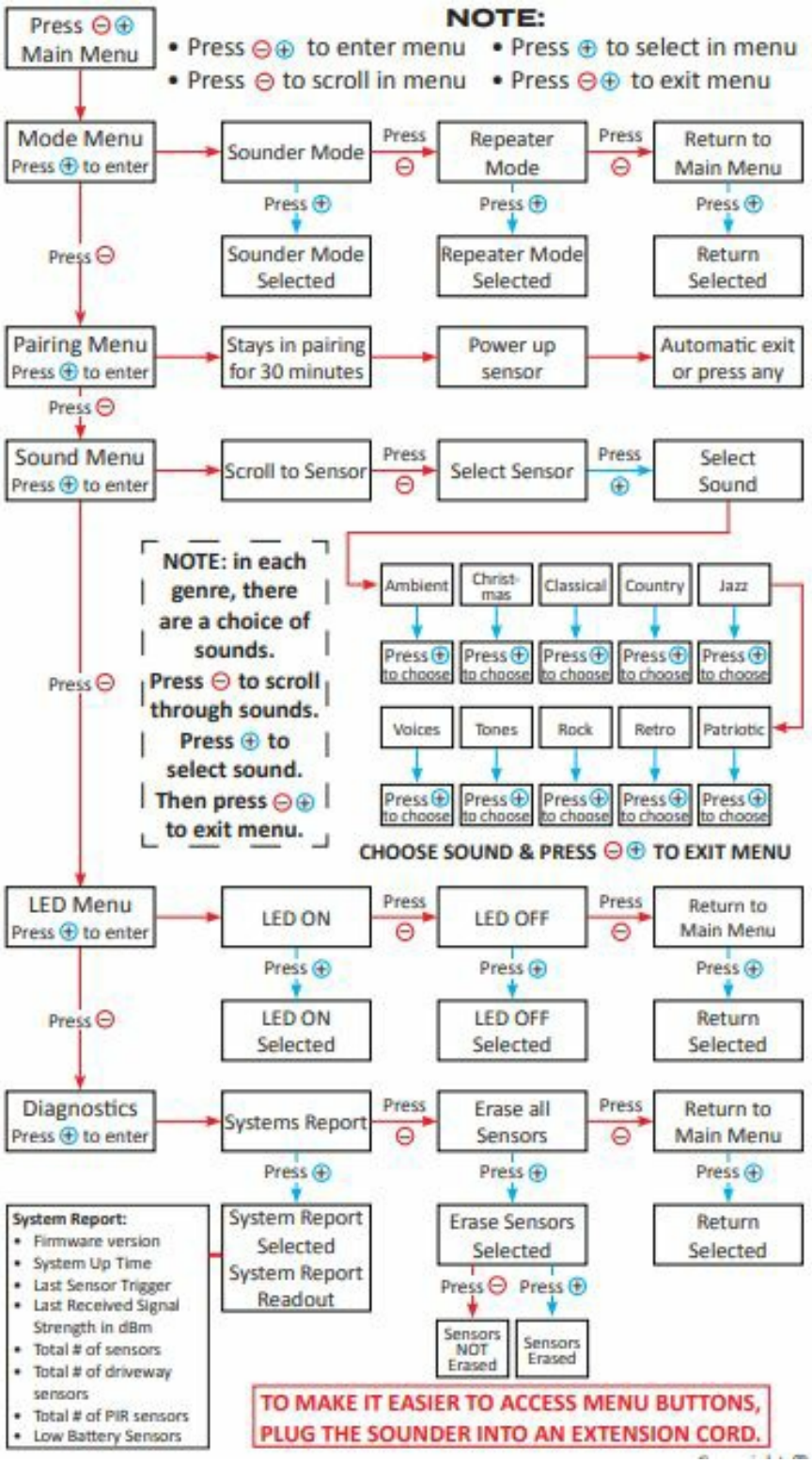
1. In menu mode, scroll to the diagnostics menu. Scroll to "Erase all sensors."
2. Follow the prompts and confirm your request with the **+** button

SOUNDER INTERFACE

NOTES:

- Press **–** to decrease volume
- Press **+** to increase volume
- Press **–+** together to enter main menu mode

- **–** button cycles through menu options when in menu mode
- **+** button selects an option
- Menu mode times out after 2 minutes of inactivity
- Press **–+** together to exit menu mode
- In menu mode, all sensor activity is ignored



SOUNDER & REPEATER MODES

- See #11 above. There are two modes of operation: sounder mode and repeater mode.
- In sounder mode, the sounder listens for sensor events. When it receives an event, the sounder will play the

specified sound associated with the sensor. When there are no sensor events, the green LED will blink every five seconds to indicate sounder mode.

- In repeater mode, the sounder does not make sounds when a sensor event is received. Instead, it repeats the event to another sounder or the CW-SYS Integrator. The green LED will blink every 1 second to indicate repeater mode.

TECHNICAL SPECS – SOUNDER

Technical Specifications – Sounder	
Input Voltage Range	85–230 VAC
Input Voltage Frequency	47–63 Hz
Temperature	-13° F. – +140° F. (-25° C. – 60° C.)
Dimensions	2.5” H x 2.5” W x 2.75” D (6.35 cm x 6.35 cm x 6.99 cm)
Weight	.30 lb. (.14 kg)

THREE YEAR WARRANTY

All Cartell products are warranted against defects in material and workmanship for three years. This warranty does not cover defects caused by, but not limited to acts of God, improper installation, abuse, fire damage, electrical surges, integrated system failures, improper lid/gasket/battery installation, over-tightening screws, and stripped screw holes. For more information, visit our website.

TROUBLESHOOTING/TECH SUPPORT

NOTE: DO NOT UNINSTALL PRODUCT BEFORE CALLING TECH SUPPORT.
Before calling, do the following:

1. Be at the installation site
2. Have serial number available
3. Be able to explain symptoms
4. Have the Cartell app displayed on your phone (if applicable)
5. Call 717-532-0033, option 2
   We will troubleshoot over the phone. Business hours are Monday – Friday,8:30 a.m. – 5:00 p.m. Eastern time.

WARNING: DO NOT SHIP BATTERIES WHEN RETURNING PRODUCT TO CARTELL

FCC WARNING

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,
2. this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that of the receiver.
- Consult the dealer or an experienced radio/TV technician for help.

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with a minimum distance between 20cm of the radiator and your body: Use only the supplied antenna.
IC Caution (Canada): This device complies with Industry Canada license-exempt RSS standard(s).

Operation is subject to the following two conditions

1. this device may not cause interference;
2. this device must accept any interference, including interference that may cause undesired operation of the device.

The device has been evaluated for portable device RF exposure requirements. The device is kept at least 5 mm away from the user's body.

- **FCC ID #:** 2AUXCCWSOU & 2AUXCCWSN (U.S.)
- **IC#:** 25651-CWSOU & 25651-CWSN (Canada)

WARNING: This product can expose you to chemicals including Acrylonitrile, which is known to the State of California to cause cancer. For more information, go to **www.P65Warnings.ca.gov**.

SCAN FOR VIDEO

CONTACT INFORMATION

- **TECH SUPPORT/SALES:** 717-532-0033, option 2
- **EMAIL:** info@cartell.com
- **ADDRESS:** 510 West King Street Shippensburg, PA 17257
- **WEBSITE:** www.cartell.com

Documents / Resources

	CW-CON 2023 DIY Wireless Driveway System [pdf] User Manual 2023 DIY Wireless Driveway System, 2023, DIY Wireless Driveway System, Wireless Driveway System, Driveway System