DeNova Detect®

Smarter Gas Leak Safety

Propane Gas Alarm
Model DD720PV

User's Manual

Thank you for purchasing this DeNova Detect Propane Gas Alarm. Please thoroughly read and understand this User's Manual content before using this Gas Alarm and retain it for future reference. This Gas Alarm is intended for use in the home only. When propane gas is detected, alarm warnings will be activated. The alarm consists of a flashing red LED light, sounding of a warning alarm and a recorded message.

⚠ DANGER: ASPHYXIATION & EXPLOSION

PROPANE GAS LEAK ALARM INDICATES AN EMERGENCY SITUATION AND RISK OF EXPLOSION

- **Leave building immediately, open doors and windows as you leave. Take others with you. If you are outside when you hear the alarm, leave the area immediately.**
- **Avoid creating any sparks.**
- **Find a phone AWAY FROM THE AREA and immediately call 911 and/or your gas utility company.**
- **Do not re-enter the area until the source of the leak is found and corrected.**

Follow directions from utility employees or emergency responders on site.

⚠ DANGER: ELECTROCUTION

- **Do not subject this Gas Alarm to water or liquid by submerging it, spraying liquid on it or otherwise.**
- **Do not disassemble this alarm or attempt to remove the front cover.**

⚠ DANGER: FIRE & EXPLOSION

Improper Gas Alarm disposal may result in fire or explosion.

⚠ DANGER: HAZARDOUS CONDITIONS

Follow these instructions completely. Failure to do so may result in an undetected propane gas leak or other hazardous conditions that may cause serious injury or death.

⚠ DANGER: HEARING DAMAGE

Do not place ear directly against or in close proximity to Gas Alarm. Audible alarms may damage hearing.

⚠ WARNING

- **Do not use this Gas Alarm as a short-term testing device.**
- **Do not block, cover, obstruct or paint over Gas Alarm. The Gas Alarm can only detect propane gas that reaches Gas Alarm.**
- **This Gas Alarm will reach the end-of-service life in approximately 5 years after the installation date. Replace after end-of-service life signal is initiated.**
- **Test product regularly. Alarm battery must be properly connected at all times.**
- **Do not kick or strike Gas Alarm with moving objects. This may cause Gas Alarm to malfunction.**
- **Do not modify, disassemble, submerge, strike, crush, or expose Gas Alarm to high levels of volatile organic compounds. This may cause Gas Alarm to malfunction.**
- **Contact DeNova Detect for a replacement battery. Commercially available batteries will not work.**
- **Keep out of reach of children.**
- **For indoor home use only. Not intended for use in recreational vehicles (RV).**

⚠ NOTICE

- **This Gas Alarm only detects propane gas. It does not detect natural gas, carbon monoxide, fire, heat, smoke, flames or any other gas.**
- **This Gas Alarm is not a substitute for proper installation, use, and maintenance of propane gas sources. This Gas Alarm does not prevent propane gas leaks from occurring, nor can it solve any existing propane gas problems.**

General Description & Intended Use

⚠ DANGER

If you smell propane gas, evacuate the area right away, then call 911 or your gas utility company. Do not wait for alarm to sound.

⚠ WARNING

This Gas Alarm is designed to act as a continuous monitor of propane gas that reaches the sensor. This Gas Alarm should not be used as a short-term testing device to perform a one-time check for the presence of propane gas.

This Gas Alarm detects propane gas. Propane is stored as a liquid under pressure, so most likely sources of leaks are in the connections to propane tanks for propane-powered heaters, stoves, refrigerators, furnaces, and barbecues. When propane leaks, it becomes a gas and can be ignited by a spark or flame.

Propane gas is typically odorless and colorless, unless your gas supplier treats it with a chemical to make it smell. Individuals with a diminished sense of smell may not be able to detect even treated propane gas. Additionally, because propane is heavier than air, it may settle near the ground, and you may not be able to detect the smell as it fails to reach nose level. If you are not sure which gas your home uses, contact your utility company.

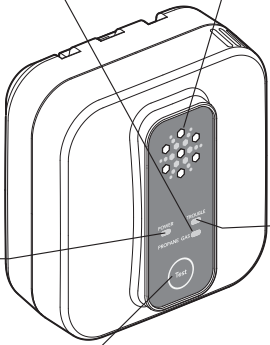
When this Gas Alarm detects propane gas at a concentration of equal to or greater than 10% LEL, it is designed to provide 2 long beeps and announce “Danger - gas leak explosion risk - evacuate, then call the gas utility company or 911” followed by 2 additional long beeps and announce “Peligro - riesgo de explosión por fuga de gas - evacúe, y luego llame a la compañía de gas o al 911.”

Gas Alarm Parts

- **Red LED- Propane Gas Leak Indicator**
  - This LED light flashes red when propane gas is detected.
  - This LED light is solid red when the test button is pressed.
- **Green LED - Power**

  This LED light flashes green when the test button is pressed.
- **Test Button**

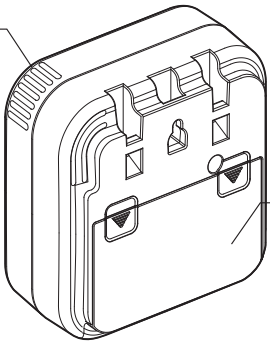
  Used to test power, alarm sounds.



- **Alarm Speaker**
  - Sounds an alarm when propane gas leak, Gas Alarm trouble, low battery, or Gas Alarm end-of-service life is detected.
  - Sounds when Gas Alarm power or audible alarm is tested.
- **Yellow LED - Trouble Error**
  - This LED light flashes yellow when there is an internal error detected. Gas Alarm must be replaced.
  - This LED light is solid yellow when the test button is pressed.

- **Internal Propane Gas Sensor**

  Detects a propane gas leak.



- **Battery Compartment Cover**

  This clear plastic cover slides off/ opens to install the battery.

Mounting the Gas Alarm

Battery Installation

⚠ DANGER : SHOCK HAZARD

Do NOT remove the plastic wrap surrounding the battery pack. Doing so may cause an electrical short or shock.

⚠ WARNING

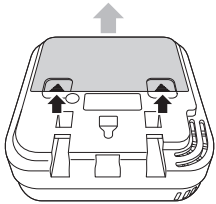
After installing or replacing the battery, always test the Gas Alarm to ensure it is operational.

⚠ NOTICE

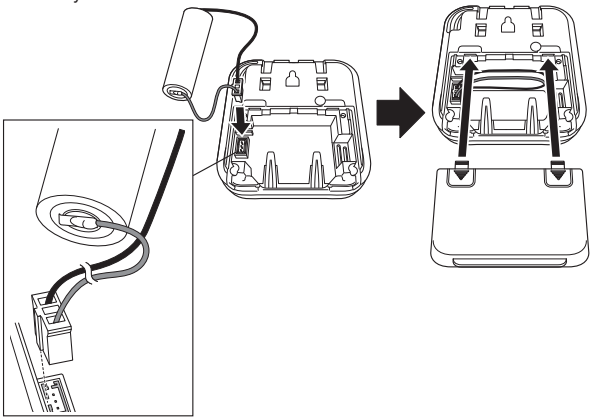
This Gas Alarm uses a type of battery that is not available in retail stores. Contact DeNova Detect for a replacement battery.

To install the included battery, or replace with a manufacturer-supplied replacement battery:

- Open the clear battery compartment cover on the back of the Gas Alarm. This cover slides out of place. To open, place both thumbs on the grooved arrows on the back of the battery cover where the battery cover hooks snap into place.
- Push down on the grooved arrows with your thumbs and slide the cover out. Some force is required.



- Connect the battery by inserting the battery harness plug into the Gas Alarm receptacle as shown in the diagram below. Do NOT use tools to insert the plug. Do NOT remove the plastic wrap surrounding the battery.



- The battery harness plug has a large notch on it that faces to the left away from the Gas Alarm when installed correctly. There is only one way in which the plug can be installed. A small portion of the plug will be exposed when connected properly. Ensure that the battery is firmly secured under the battery compartment hooks, then close the clear battery compartment cover on the back of the Gas Alarm. Avoid pinching the battery wires when closing the cover. The green LED will blink for approximately 30 seconds when the battery is first connected. The Gas Alarm will “Beep”, and the green LED will turn off once this initialization period is completed.

If replacing the battery, refer to “Gas Alarm Disposal” section for instructions on disposing of the old battery.

Selecting the Gas Alarm Location

⚠ WARNING

- **Mounting in an improper location can affect the sensitive electronic components in this Gas Alarm.**
- **Improper Gas Alarm location can prevent detection of propane gas.**
- **Improper location can prevent you from hearing the alarm. Install in a location where you can hear the alarm sound loudly from all sleeping areas.**
- **Under no circumstances should children be allowed to handle this Gas Alarm.**

Gas Alarms should be installed in all rooms where a gas leak may occur or a gas appliance is located. Examples are a kitchen (gas leaks from gas ovens and cook tops), laundry (gas leaks from a gas clothes dryer), and furnace area (gas leaks from furnace burners or boilers).
It is possible that gas leaks may migrate along pipes so consideration should be given to place Gas Alarms in multiple rooms. Consider placing a Gas Alarm in each bedroom where the occupant closes the door while sleeping.

Although it is important to install Gas Alarms in rooms where gas appliances exist, it is recommended Gas Alarms be placed at least 3 feet (0.9 meters) horizontally away and no more than 10 feet (3 meters) horizontally away. The placement recommendations are intended to keep Gas Alarms at a reasonable distance from a gas source, and thus reduce “unwanted” alarms, which can occur if a Gas Alarm is placed directly next to a gas source.

Avoid placing the Gas Alarm near a cooking appliance. If you must do so, install at least 5 feet (1.5 meters) horizontally from cooking appliance because cooking vapors or grease may contaminate the Gas Alarm.

Gas Alarm should be Mounted:

- Completely within 18 inches (0.45 meters) from the floor.
- At least 0.39 inches (1 centimeter) clearance between the right side of the Gas Alarm and the wall surface.
- At least 5 feet (1.5 meters) horizontally from cooking appliance.
- At least 3 feet (0.9 meters) horizontally away and no more than 10 feet (3 meters) horizontally away from gas appliances.
  - Where the existing space does not allow for installation at least 3 feet (0.9 meters) horizontally from a gas appliance, the Gas Alarm may be installed less than 3 feet (0.9 meters) horizontally from the gas appliance assuming the Gas Alarm will not be affected by heat or exhaust gas.
- If the above conditions cannot be met, the Gas Alarm can be installed not more than 30 feet (10 meters) from any gas appliance, for every 600 square feet (56 square meters) of contiguous floor space.

Gas Alarm should NOT be Mounted:

- Directly on a floor.
- In an area that will become obstructed by a curtain, hanging clothes or any other objects.
- Near sources of water or humidity such as a sink, cooktop, dishwasher or shower.
- Where it could be exposed to splashes of water or grease.
- Next to a door or window.
- Next to a ventilation fan.
- Near a room return or HVAC duct.
- In an area where the temperature will drop below 32°F (0°C) or exceed 122°F (50°C).
- In an area that is dusty or dirty.
- In an area where organic solvents exist or silicone vapors exist.
- In a damp or very humid location, such as a bathroom.
- Outside.

Mounting the Gas Alarm

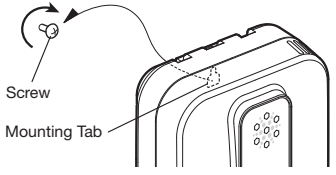
⚠ NOTICE

After mounting the Gas Alarm, test it following instructions in this User's Manual.

The Gas Alarm may be mounted to the wall in a location meeting the criteria discussed in the "Selecting Gas Alarm Location" section.

To Mount the Gas Alarm to a Wall:

(1) Tools you will need: Drill with 3/16" or 5 mm drill bit, Phillips head screwdriver.
(2) Tools supplied: A plastic screw anchor and screw have been provided in the box.
(3) Choose a location on the wall completely within 18 inches (0.45 meters) from the floor. Make a mark on the wall where you will drill the mounting hole.
(4) Use a 3/16" (5 mm) drill bit to drill the mounting hole approximately 1.4 inches (35 mm) deep and insert included plastic screw anchor into the hole until it is flush with the wall.
(5) Tighten the screw into the anchor until the screwhead is about 3/16" (5 mm) away from the wall, leaving enough space for the screw to insert into the keyhole slot on the back of the Gas Alarm as shown below.
(6) Hang the Gas Alarm on the screw.
(7) Test the Gas Alarm by pressing the test button. Refer to "Testing the Power" section of this User's Manual for additional information.

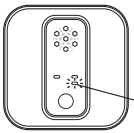


Gas Alarm Functions

This Gas Alarm is designed to activate an alarm in the event of a propane gas leak, Gas Alarm trouble, low battery, or Gas Alarm end-of-service life.

Propane Gas Leak Alarm Activation

A propane gas leak alarm activates when the concentration of propane gas in the area of the Gas Alarm reaches or exceeds 10%LEL. When activated, the Gas Alarm is designed to:



An alarm sounds “Beep Beep Danger - gas leak explosion risk - evacuate, then call the gas utility company or 911” followed by “Bip Bip Peligro - riesgo de explosión por fuga de gas - evacúe, y luego llame a la compañía de gas o al 911.”

Red LED (propane gas leak indicator)
Flashes once every 2 seconds

Provide 2 long beeps and announce “Danger - gas leak explosion risk - evacuate, then call the gas utility company or 911” followed by 2 additional long beeps and announce “Peligro - riesgo de explosión por fuga de gas - evacúe, y luego llame a la compañía de gas o al 911.” Notification will repeat continuously for 4 minutes, then sounds each minute, alternating between English and Spanish.
Red LED flashes once every 2 seconds.
In the event the propane gas leak dissipates to a concentration below the Gas Alarm’s alarm threshold, the gas alarm notification will automatically reset. The red LED will stop blinking, and the audible tone will stop.

Responding to Propane Gas Leak Alarm Activation

⚠ DANGER : ASPHYXIATION & EXPLOSION

Follow these instructions carefully in the event the propane gas leak alarm activates. Never ignore propane gas leak alarm.

When this Gas Alarm detects propane gas at a concentration of greater than or equal to 10% LEL, it is designed to provide 2 long beeps and announce, “Danger - gas leak explosion risk - evacuate, then call the gas utility company or 911” followed by 2 additional long beeps and announce “Peligro - riesgo de explosión por fuga de gas - evacúe, y luego llame a la compañía de gas o al 911. ” A red LED light will also flash on the Gas Alarm.

Leave the building immediately, opening doors and windows as you leave. Take others with you. If you are outside when you hear the alarm, leave the area immediately.

Any spark might cause propane gas to explode. Take all appropriate steps to avoid causing a spark near the affected property, including the following:

- **Do not unplug the lithium battery.**
- **Do not light a match or smoke.**
- **Do not turn appliances or lights on or off.**
- **Do not use a flashlight or phone.**
- **Do not start a car.**

Find a phone away from the area and immediately call 911 and/or your propane gas utility company. You can report leaks anonymously. Do not re-enter the area until the source of the leak is found and corrected. Follow directions from utility employees or emergency responders who are on site.

⚠ DANGER: EXPLOSION RISK

Do not reset Gas Alarm after propane gas leak alarm goes off, unless instructed to do so by emergency personnel.

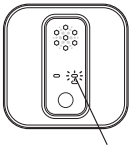
The resetting process can cause an explosion if conducted in an area with high concentrations of propane gas.

Emergency responders or trained personnel may reset or instruct you to reset the Gas Alarm after the leak has been corrected by removing and reinstalling the battery. This will turn off audible and visual notifications. After removing the battery, press and hold the test button for at least 10 seconds and leave the battery unplugged for at least 2 minutes. This will reset the Gas Alarm by turning off audible and visual notifications.

In the event the propane gas leak dissipates to a concentration below the Gas Alarm’s alarm threshold, the gas alarm notification will automatically reset. The red LED will stop blinking, and the audible tone will stop.

Gas Alarm Trouble Error Activation

A trouble alarm sounds when an alarm error occurs. When the trouble alarm first activates, the Gas Alarm will announce “Beep Beep Beep Detector error” and “Bip Bip Bip Error del detector.”



Yellow LED (trouble error)
Flashes 3 times every 10 seconds

A trouble alarm sounds each minute, alternating between the following messages: “Beep Beep Beep Detector error” and “Bip Bip Bip Error del detector.” By pressing and holding the test button for 3 seconds and releasing, a trouble alarm will sound stating “Beep Beep Beep Detector error” followed by “Bip Bip Bip Error del detector”.

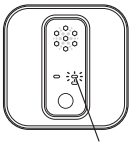
Yellow LED flashes 3 times every 10 seconds.
Refer to “Troubleshooting” section for more information on resolving alarm errors.

Low Battery Warning Activation

⚠ WARNING

This Gas Alarm uses a specialized battery not available at retail stores. Contact DeNova Detect for a replacement battery.

A low battery warning sounds when the battery is low. When the low battery alarm first activates, the Gas Alarm will beep 1 time and announce “Low battery” followed by an additional beep and announce “Batería baja”.



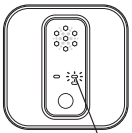
Yellow LED (trouble error)
Flashes once every 10 seconds

A low battery warning will sound “Beep” every 60 seconds. Once every hour, the Gas Alarm will announce “Beep Low battery” followed by “Bip Batería baja.” By pressing and holding the test button for 3 seconds and releasing, a low battery warning will sound announcing “Beep Low battery” followed by “Bip Batería baja.”
Contact DeNova Detect to arrange for a replacement battery.

Yellow LED flashes once every 10 seconds
Contact DeNova Detect for a replacement battery.

Gas Alarm End-of-Service Life Warning Activation

The Gas Alarm end-of-service life warning sounds when the Gas Alarm end-of-service life is reached to indicate it is time to replace the Gas Alarm. This Gas Alarm will reach the end-of-service life in approximately 5 years after the installation date. Replace after end-of-service life warning is activated. When the Gas Alarm end-of-service life warning first activates, the Gas Alarm will sound 2 short beeps and announce “Please replace detector” followed by 2 additional short beeps and announce “Por favor, reemplace el detector.”



Yellow LED (trouble error)
Flashes twice every 10 seconds

An end-of-service life warning will sound “Beep Beep” every 60 seconds . Once every hour, the Gas Alarm will announce “Beep Beep Please replace detector” followed by “Bip Bip Por favor, reemplace el detector.” By pressing and holding the test button for 3 seconds and releasing, an end-of-service life warning will sound announcing “Beep Beep Please replace detector” followed by “Bip Bip Por favor reemplace el detector.”

Yellow LED flashes 2 times every 10 seconds.
The audible Gas Alarm end-of-service life warning can be silenced by pressing and holding the test button for 3 seconds and releasing. The Gas Alarm will provide 2 short beeps and announce “Please replace detector” followed by 2 additional short beeps and announce “Por favor reemplace el detector” after releasing the test button, at which point the Gas Alarm end-of-service life warning will be silenced for approximately 8 hours. The yellow LED will still flash 2 times every 10 seconds during this time. After approximately 8 hours, the audible Gas Alarm end-of-service life warning will re-activate. This audible alarm can be silenced for up to approximately 10 days after its initial activation, at which point it can no longer be silenced. Replace the Gas Alarm immediately upon activation of the Gas Alarm end-of-service life warning.

Testing the Power

⚠ WARNING

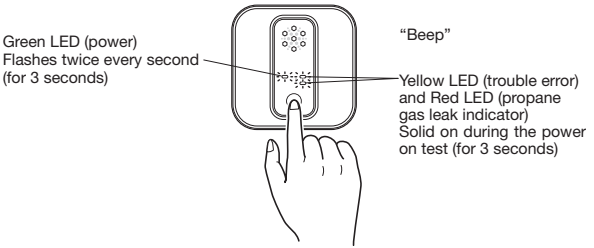
Do not test by exposing the Gas Alarm to actual gas.

⚠ CAUTION

Test your Gas Alarm's power at least once a week.

If the Gas Alarm does not operate properly, it cannot alert you to the presence of propane gas. If your Gas Alarm fails to test, replace your Gas Alarm immediately.

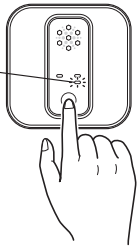
Press and hold the test button until you hear a "Beep" sound, then quickly release (within 3 seconds from when the button was pressed). If the Gas Alarm is properly powered, the green LED will flash twice every second for 3 seconds to indicate that the power is on, and the yellow and red LEDs will remain on until the test sequence is complete. These LEDs will not remain on during normal operation of the Gas Alarm to conserve battery power.



Checking the Gas Leak Alarm Notifications

Press and hold the test button for 5 seconds and the alarm notification will begin automatically.

Red LED (propane gas leak indicator)
Flashes once every 2 seconds



"Beep"
"Beep Beep"
When the button is released "Beep Beep Danger - gas leak explosion risk - evacuate, then call the gas utility company or 911." followed by "Bip Bip Peligro - riesgo de explosión por fuga de gas - evacúe, y luego llame a la compañía de gas o al 911." will sound.

If the Gas Alarm is operating properly, the red LED will flash once every 2 seconds until the test sequence is complete, and the following alarm message will sound: "Beep Beep Danger - gas leak explosion risk - evacuate, then call the gas utility company or 911. Bip Bip Peligro - riesgo de explosión por fuga de gas - evacúe, y luego llame a la compañía de gas o al 911."

Maintenance and Cleaning of Gas Alarm

⚠ WARNING

If the Gas Alarm is installed in dusty or dirty atmospheric environments, periodic cleaning of the Gas Alarm should be performed in accordance with these instructions. Dirt and dust can cause Gas Alarm malfunction or obstruct the entry holes in which gas needs to flow to reach the sensor in the Gas Alarm. After cleaning, always test the Gas Alarm to ensure it has not been damaged.

Clean the Gas Alarm to maintain proper operation, by vacuuming the exterior of the Gas Alarm using a household vacuum's soft brush attachment.

Never use water, cleaners or solvents since they may damage the Gas Alarm.

Do not use spray cleaning chemicals or insect sprays directly on or near the Gas Alarm. Do not use any household cleaning agents, ammonia-based cleaners, paints, varnishes, aerosol sprays including compressed gas dusters, or any other chemical on or near this Gas Alarm.

Troubleshooting

Symptom	Cause	Action
The green LED does not flash, and yellow and red LEDs do not turn solid on, when the button is pressed.	Battery plug not properly plugged in	Plug in the battery plug
	Battery is low	Contact DeNova Detect for a replacement battery
The yellow LED is flashing.	**Flashes three times every 10 seconds:** Gas Alarm trouble	Replace Gas Alarm
	Flashes twice every 10 seconds: Gas Alarm end-of-service life warning	Replace Gas Alarm
	Flashes once every 10 seconds: Low battery warning	Contact DeNova Detect for a replacement battery

Gas Alarm Disposal

⚠ DANGER

Prior to disposing of this Gas Alarm, remove the battery and wrap with tape or similar material as shown in the below image to avoid potential explosion or ignition that may result in injury or fire.

⚠ DANGER

Do not incinerate. Battery may explode.

When disposing of Gas Alarm, it is important to remove the battery and wrap with tape or similar, non-flammable material as shown in the below image.

Dispose of battery in accordance with local regulations relating to non-rechargeable (single use) lithium batteries. Dispose the Gas Alarm following your local regulations for solid waste disposal. Take the Gas Alarm to an electronics recycling facility (where such facilities exist) for disposal.



Specifications

Model number	DD720PV
Conforming standards	ETL Listed to UL standard (UL1484)
Detection principle	MEMS hot-wire semiconductor sensor
Target gas	Propane
Operating temperature range	32°F (0°C) to 122°F (50°C)
Operating humidity range	5% to 95% RH, no condensation
Power supply	3V Lithium battery (not available at retail stores)
Sensitivity	10% LEL*
Speaker output	Gas alarm: 85 dB at 10 feet
Product lifetime	Approximately 5 years
Dimensions	W 96 × H 96 × D 40.5 mm (3.8×3.8×1.6 in)
Installation	Wall mount with included hardware

* LEL, short for “Lower Explosive Limit”, is defined as the lowest concentration (by percentage) of a gas or vapor in air that is capable of producing a flash of fire in presence of an ignition source (arc, flame, heat).

FIVE YEAR LIMITED WARRANTY

Model DD720PV

Warranty Coverage: New Cosmos USA, Inc. (d/b/a DeNova Detect) warrants that this product will be free of defects in material and workmanship for a period of five (5) years from date of purchase. This warranty does not apply to a battery used in the product or to any damage which may be caused by such a battery. New Cosmos USA liability hereunder is limited to replacement of the product or repair of the product at their discretion. For the avoidance of doubt, this warranty shall not be construed to provide for damages related to loss of use of this product or for any indirect, special, incidental, or consequential damages, or costs, or expenses incurred by the consumer or any other user of this product, whether due to a breach of contract, negligence, strict liability in tort or otherwise. This warranty is void if the product has been damaged by accident, unreasonable use, neglect, tampering, improper maintenance or handling, storage, installation, testing, or use not in accordance with the user's guide, or other causes not arising from defects in material or workmanship. This warranty extends to the original purchaser of the product only and may be enforced only by the original purchaser. Proof of purchase required. This warranty is only valid for merchandise purchased from authorized distributors in the United States and Canada.

Warranty Disclaimers: NEW COSMOS USA, INC. SPECIFICALLY DISCLAIMS ALL IMPLIED WARRANTIES OTHER THAN THOSE DESCRIBED IN THE PRECEDING PARAGRAPH TO THE MAXIMUM EXTENT ALLOWABLE BY APPLICABLE LAW AND HAS PROVIDED FOR NO EXPRESS WARRANTIES BEYOND THOSE COVERED IN THE PRECEDING PARAGRAPH. TO THE EXTENT ANY TRIBUNAL OF COMPETENT JURISDICTION APPLIES ANY WARRANTY ARISING OUT OF THIS SALE BEYOND THOSE EXPRESSED IN THE PRECEDING PARAGRAPH, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF DESCRIPTION, MERCHANTABILITY, AND FITNESS FOR A PARTICULAR PURPOSE, ALL SUCH WARRANTIES ARE LIMITED IN DURATION TO THE ABOVE WARRANTY PERIOD. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

Returns Under Warranty: During the above warranty period, your product will be replaced with a comparable product if the product is returned shipping prepaid together with proof of purchase date to the following address: DeNova Detect, 650 Warrenville Rd, Suite 101, Lisle, IL 60532. Please include a note describing the problem when you return the product. The replacement product will be in warranty for the remainder of the original product's warranty period or for six months, whichever is longer. No charge will be made to replace the product. If you have questions, call DeNova Detect customer service department at 847-749-3064 or email us at support@denovadetect.com

Lithium battery is excluded from this warranty. New Cosmos USA makes no warranty, express or implied, written, or oral, including that of merchantability or fitness for any particular purpose, with respect to the included battery.

The above warranty may not be altered, except in writing, and signed by both parties hereto.

Contact Information

DeNova Detect
650 Warrenville Rd, Suite 101
Lisle, IL 60532 USA
Phone: 847.749.3064
support@denovadetect.com
denovadetect.com