

# OWNERS MANUAL

## **SENTRY** SYNEXIS SYSTEM



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## About Dry Hydrogen Peroxide (DHP™)

Synexis® is the sole developer of hydrogen peroxide gas and Dry Hydrogen Peroxide (DHP™) Technology for occupied spaces. Using DHP, our patented microbial reduction technology allows for the natural and continuous reduction of microbial contamination in occupied spaces. Our microbial reduction systems are patented for use in the United States and around the world. By encompassing all areas of an enclosed space, DHP can reach the most important areas of a facility. The critical differentiator of DHP from other forms of hydrogen peroxide is that DHP can be safely delivered in occupied spaces.

Using ambient humidity and oxygen naturally present in your environment, our technology creates a safe level of hydrogen peroxide ( $H_2O_2$ ) gas, which reduces unwanted microbial contamination in the air and on surfaces. Because DHP is a true gas, it can reach the toughest and most out-of-reach areas of your facility. Dry Hydrogen Peroxide is effective because of its state of matter and method of action.

## Indications for Use

This product is not sold as a medical device and is not intended to be used to diagnose any disease or condition, nor should it be used in the mitigation, treatment, or prevention of any disease or condition. The Sentry device is a key component to the Synexis® Microbial Reduction System.

## Legal Notice

While every attempt is made to ensure the accuracy of the information contained in this manual, Synexis® accepts no liability for errors or omissions, or any consequences deriving from the use of information contained herein. This Sentry manual is provided “as is” and without any representation, term, condition or warranty of any kind, either express or implied. To the extent permitted by law, Synexis® shall not be liable to any person or entity for any loss or damage which may arise from the use of this manual. We reserve the right at any time and without any notice to remove, amend or vary any of the content which appears herein.

## Patent Information

8,168,122 | 8,685,329 | 9,034,255 | D744,627 | 9,370,592 | 9,808,013 | D814006 | 9,924,722 | 10,188,766 | 10,232,076 | 10,285,382 | 10,299,482 | 15/567,564 | 15/570,677 | 15/866,208 | 16/177,592 | 16/271,331 | 16/387,382 | 16/431,032 | 62/914,838 | 16/743,809 | 63/010,659 | 15/866,198

Additional patents pending.



Your Synexis®  
Sentry DHP System  
is Assembled in the USA!



# Welcome

Thank you for choosing Synexis, developers of Dry Hydrogen Peroxide (DHP™) and this Sentry device.

Before using the DHP system, please take a few minutes to:

- ✓ **Familiarize yourself with the Sentry device**
- ✓ **Familiarize yourself with the installation steps and required tools**
- ✓ **Inspect your system and parts**

Please contact your Account Representative for questions or additional information.

## Included Parts

- ✓ 1 Synexis® Sentry device
- ✓ 2 Custom UV-A Bulbs (already installed)
- ✓ 1 Filter Assembly (x1 Carbon Filter, x1 MERV 11 Filter)
- ✓ 1 Power Cord
- ✓ 1 Owner's Manual

After opening the box, unpack and inspect your device for damage.

DO NOT OPERATE THIS UNIT IF ANY DAMAGE IS NOTED. If the unit is damaged, contact your Synexis Account Representative.

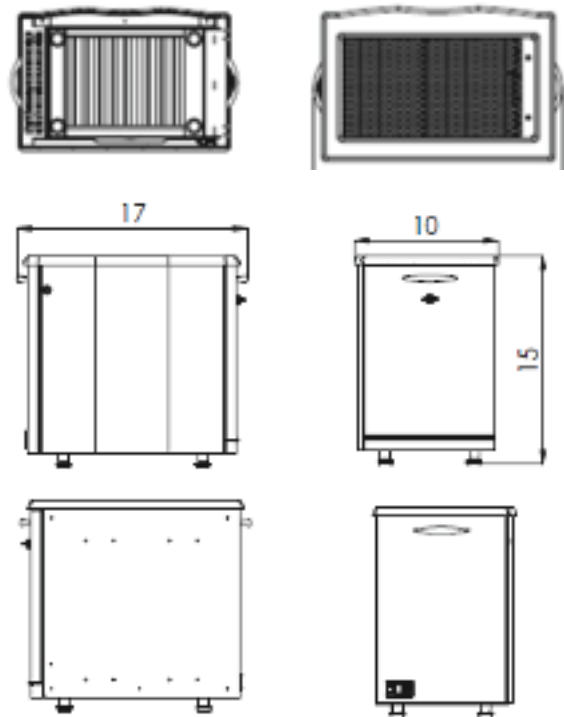
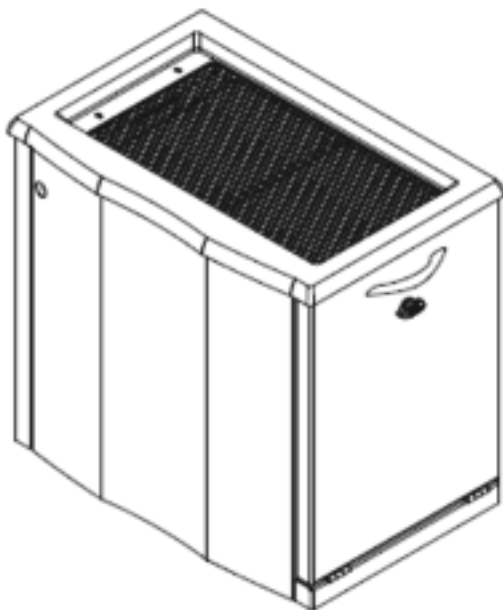
# SENTRY

## System Specifications

The Sentry is a portable device designed for deployment in industrial facilities with an inaccessible HVAC system. The Sentry has a rugged steel design for the most challenging environments. The Sentry can be mounted virtually anywhere and requires only a standard 120 VAC outlet.

Specifications	
<b>Weight</b>	42 lbs.
<b>Material</b>	18 Gauge Galvannealed Steel
<b>Color</b>	Black/White
<b>Mounting Options</b>	Floor (Shown), Wall Mount
<b>Dimensions</b>	Width: 17" (43.2 cm) Height: 15" (38.1 cm) Depth: 10" (25.4 cm)

Electrical Requirements	
<b>Input Voltage</b>	120 VAC / 60 Hz US
<b>Current</b>	1.7 Amps



# General Safety Instructions

The Sentry is an electrical device. Please read the safety instructions and considerations before use and take the necessary precautions to reduce the risk of fire, electric shock or injury. **The Limited Warranty applies only if the unit is used in accordance with these instructions.**

- ✓ Use the grounded three-prong power cable provided with your device. The plug fits securely into a grounded three-prong outlet. Do not alter the plug in any way.

**WARNING: Electrical shock can cause personal injury or death.**

**WARNING: This device is designed for indoor installation only.**

**WARNING: Do not allow the device to become clogged with dust or other debris. Check it regularly and replace the catalytic sail or filter if they become clogged.**

# Device Placement

- Select a location where the air intake and top grille are not obstructed.
- Do not block the air openings.
- Select a dry location. Do not use outdoors or in a wet environment.
- Do not submerge the device in water.
- Do not place fingers and/or objects into the inlet or supply vents.
- Do not allow children or pets to have unsupervised access to this device.
- Do not use any combustible or flammable items on or near this device.
- Do not spill or spray any liquids or aerosols into this device or on the Sail.
- Do not place this device near a heat source.
- Do not sit on or place any object on this device.

# Installation

- 1.** The Sentry device includes filters (carbon & MERV 11), fan, and two non-germicidal UV-A bulbs. On the front of the device is a rotary switch covered by a circular rubber cap that controls the speed of the fan. The power cord and power switch are located on the left side of the device.  
The installation slots for the filters and sail are accessible from the right side. The right side of the device has an access panel which is opened using a spring assisted latch.
- 2.** To access the installation slots, rotate the access panel latch 90 degrees counterclockwise. Grasp the handle near the top of the panel and pull it outward away from the unit.
- 3.** The Sail is inserted flat and horizontally into the slot near the top of the device, above the bulbs and below the top grille. It does not matter which direction the Sail is installed.
- 4.** To insert the filter cartridges, open the smaller access plate towards the bottom of the device using a similar spring assisted latch. The access plate should be completely removed while inserting or replacing the filter cartridges. Insert the filter cartridges into the filter slot using the details below and the picture to the right.
  - The pleated MERV 11 filter (white or blue) is placed on the bottom, and the carbon filter (black) is placed on top, closest to the fan.
  - The MERV 11 filter should have the arrows pointing toward the fan. The carbon filter can be installed in any direction.
- 5.** Replace the filter access plate by seating the notches back into their retaining slots and securing the spring assisted latch.
- 6.** Close the hinged access panel by securing spring assisted latch.
- 7.** Plug in and power the device on.
- 8.** The two UV-A bulbs will begin to glow. At any point, to turn the bulbs off, turn the power switch off.
- 9.** To adjust device airflow, use the rotary switch on the front panel.





# Troubleshooting

If the bulbs do not light up or the fan does not operate, contact your Account Representative or Synexis directly at **844-352-7680** for assistance.

## Maintenance

To keep your device(s) in top condition, we recommend routine cleaning. *If your purchase of the Synexis® Microbial Reduction System includes a maintenance contract, the following recommendations are handled by Synexis Field Engineers during regular scheduled visits.*

- **Bulb Replacement:** The UV-A bulb should maintain the same intensity no matter the speed of the fan. Bulb is warranted for 2 years.
- **Filter Cartridge and Sail Replacement:** Filter cartridges and sails are replaced using the typical schedule below. Each sail comes pre-packaged in a food-grade plastic bag to maintain quality before use. For best performance, the sail should not be removed from the bag until it is time to insert it into the device. The filters and sail can be disposed of in regular trash or as recyclable fiber and plastic (frame and polyester fabric). No special handling conditions are required.

### Sail Replacement

- First 7-14 days after first turning device on. This is called the Control Phase and is when a Synexis System is first introduced to a new environment and level of bioburden.
- Every 3 months\* (once per quarter)

### Filter Replacement

- **MERV 11 filter:**
  - First 7-14 Days (MERV 11 filter ONLY) after first turning device on. This is called the Control Phase and when the Synexis System is first introduced into a new environment and new level of bioburden.
  - Every 3 months\*\* (once per quarter)
- **Carbon Filter:**
  - Every 6 months\*\*

\* Complex environments might require a more frequent sail change. This is identified on the front-end of a project and would be detailed in the agreement.

\*\* Complex environments (such as industrial applications) involve higher levels of particulates in the air. Under such conditions, filters may need to be changed on a 'as needed basis'.

Do not try to repair or adjust any of the electrical components in your Sphere device. Contact Synexis for assistance.

**WARNING: UV-A bulbs contain a small amount of mercury similar to any fluorescent bulb. Check with your local waste management authority for disposal or recycling requirements. Additional disposal and recycling information can be found at: [www.lamprecycle.org](http://www.lamprecycle.org).**

# Getting the most from your DHP System

It is important to work with your Account Representative to determine the proper number of units for the size and configuration of your space. In some cases, multiple Synexis devices will be necessary. Be sure to change the sail according to the recommended replacement schedule. Leave unopened sails in their plastic bag and store them in a dark, dry location until you need to replace the current sails in your device.

## Close your windows and outside doors

The Sentry is designed for enclosed space, so it is important to keep all external windows and doors closed as much as possible. Open windows and/or doors can significantly reduce the efficiency of your system by allowing the DHP to dissipate out of the facility.

## Run your Synexis System 24 hours a day

The Sentry is designed to operate 24 hours a day, 7 days a week. DHP is meant to be a continuous clean technology as opposed to a temporary clean technology. The DHP molecule is delicate and safe at low concentration. Producing it continuously ensures a proper equilibrium concentration in your space for effective decontamination.

*\*DHP is deployed at less than 20 parts per billion. This produces extremely effective microbial reduction at incredibly safe levels of  $H_2O_2$ . A single Synexis device would have to run continuously for 2.5 years to reach the concentration of 1 droplet of a 3% aqueous solution of  $H_2O_2$ . DHP concentrations fall far below acceptable safety limits for human exposure established by the Occupational Safety and Health Administration (OSHA).*

# Safety Considerations

Please read, understand, and follow all the safety information contained in these instructions prior to use of the Sentry device. Retain these instructions for future reference.

## To reduce the risk associated with hazardous voltage, fire, and/or explosion:

- Plug the power cord correctly and tightly into a properly rated electrical outlet.
- Do not use the device if the power cord is frayed or otherwise damaged.
- Do not touch the power cord with wet hands.
- Do not use outdoors or in a wet environment. This device is for indoor, dry location use only.
- Do not submerge the DHP system in water.
- Do not use any combustible or flammable items on or near the DHP system.
- Do not spill or spray any liquids or aerosols into the device or on the Sail.
- Do not block any air vents during use.
- Do not place the DHP system near a heat source.
- Do not modify or attempt to modify this device.
- Do not disassemble the device beyond filter and sail replacement as part of regular maintenance.

## To reduce the risk associated with various hazards:

- Read and understand the operating manual before using the device.
- Do not allow children or pets to have unsupervised access to this device.
- Do not sit on or place any object on this device.



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