



CONTINUOUS HVAC DISINFECTION TECHNOLOGY

# **OWNER'S MANUAL**

**Specifications • Installation • Maintenance** 

Caution: Read manual carefully for proper procedures and operation.

## Congratulations

on your purchase of the CASPR MEDIK continuous disinfection Solution. This unit is designed to be installed into an existing HVAC system and used as a virtually maintenance free enhanced system for providing low levels of oxidizing molecules that will reduce microburden on all the surfaces of the targeted area.

Please read and follow all service procedures outlined in this manual.

#### **Contents**

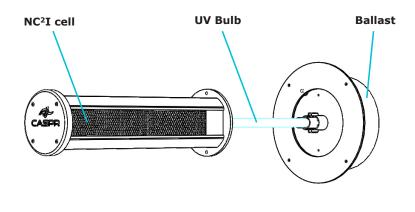
Indications of Use $\hdots$
Product Contents
Installation Hardware
Replacement Parts
About CASPR MEDIK
Specifications
Recommended Installation Tools
$In stallation \ Requirements \ \dots \ \dots \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $
Installation
Maintenance/UV Lamp Indicator
Changing the NC2I Cell
Warranty Information

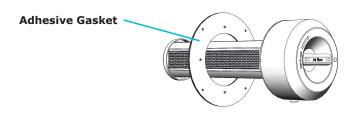
#### **Indications of Use**

CASPR MEDIK is an innovative no-touch disinfection technology-based device that works without an operator to provide continuous reduction of micro-burdens facility-wide. Proven in independent lab test to effectively reduce clinically relevant pathogens like MRSA, Norovirus, Aspergillus Niger, VRE, C. difficile and more, before they spread. Moreover. it has been found to be:

- Safe to use in occupied spaces
- Works on all surfaces, including floors
- No operator or maintenance required
- Affordable for facility-wide use
- Strategic enough for unit specific targeting
- Easily & affordably installed in the existing HVAC

#### **Product Contents**





### **Installation Hardware**

- (4) Self-tapping Screws
- (2) Cell Mounting Screws

# **Replacement Parts**

Bulbs:

9" Bulb Part Number: BULB-HV-9-002-CASPR 14" Bulb Part Number: BULB-HV-14-002-CASPR

Cells(which includes bulbs):

9" NC<sup>2</sup>I Cell Part Number: CELL-HV-9-002-CASPR 14" NC<sup>2</sup>I Cell Part Number: CELL-HV-14-002-CASPR

#### **About CASPR MEDIK**

CASPR MEDIK is an enhanced "no touch" continuous disinfection device designed to supplement normal cleaning and disinfection protocols.

CASPR MEDIK uses Natural Catalytic Conversion (NC<sup>2</sup>I) to generate safe, low levels hydrogen peroxide. NC<sup>2</sup>I technology of replicates purifying processes by using a high intensity light to activate a proprietary metal catalytic coating, converting water vapor into hydrogen Hydrogen peroxide acts as an oxidizer inactivating surface and pathogens. It can compromise cellular integrity by disrupting cell walls, or internal molecular structures, rendering contaminants harmless.

# **Specifications**

#### **FEATURES:**

• Replaceable NC2I Cell

ELECTRICAL: 120-277 VAC	SIZE: (HxWxD)	Weight
• 6" Unit - 35W (start-up), 28.3W (Operation)	• 6" Unit: 9" x 9" x 10.5"	• 6" Unit: 3.5lbs
• 9" Unit - 47W (start-up), 36.8W (Operation)	• 9" Unit: 9" x 9" x 13"	• 9" Unit: 3.70 lbs
• 14" Unit - 73W (start-up), 59.5W (Operation)	• 14" Unit: 9" x 9" x 18.5"	• 14" Unit: 4.08 lbs

#### **MECHANICAL:**

· Distribution via air handler

## **Warnings**





**WARNING!** - UV light in operation. Disconnect unit from power supply before servicing. Failure to follow warnings may result in severe eye damage.



**WARNING!** - Unit should be mounted at least 24 inches from the heat exchanger or heating element. Placing the photocatalytic cell too close to the heating element can cause the photocatalytic matrix to combust.



To reduce the risk of electric shock, this equipment may have a grounding type plug that has a third (grounding) pin. This plug will only fit into a grounding type power outlet. If the plug will only fit into a grounding type power outlet. If the plug does not fit into the outlet, contact qualified personnel to install the proper outlet. Do not alter the plug in any way.

#### **Recommended Installation Tools**

A B C D E F

A - 4.5" Hole Saw Bit

**D** - Utility Knife

**B** - 3/8" Drill Bit

E - STET

C - Drill/Power Driver

F - Phillips Head Screwdriver

# **Installation Requirement**

- Unit may be installed up or down stream of the air handler in the HVAC system as long as it is behind the filter.
- The ductwork around the installation area should be cleaned and dry to insure proper adhesion of the gasket materials and any tape used.
- One circular opening, measuring approximately 4.5", will need to be cut into the existing duct work to install the unit properly.



# **Electrical Requirement**

To use the 120V plug, be sure to locate the unit within 6 ft. of a standard 120V grounded outlet. Long term use on an extension cord is not recommended due to safety considerations.

# **Hardwiring Requirement**

Permanent wiring of the unit into your HVAC system should be done by a licensed HVAC Installer or Electrical Contractor only.

For 110-277V:

Black = L1, White = Neutral, Green - Ground

For International Applications:

Brown = L1, Blue = L2, Green/Yellow = Ground

### **Installation**

1. Find a suitable location to mount your CASPR MEDIK Unit.



2. If necessary, cut away insulation for your plate to adhere to the duct.



3. Using the Adhesive Gasket Plate, trace the hole location onto the duct.



4. Use the Hole Saw and Drill to cut out the marked hole.



# **Alternative Cutting Method**

1. Using the Adhesive Gasket Plate, trace the hole location onto the duct.



2. Drill holes around the outside edges of the prviously marked hole but inside the outer holes of the Adhesive Gasket Plate.



3. Use the Tin Snips to cut out the space around the marked hole.



### **Installation**

5. Remove the plastic backing on your Adhesive Gasket Plate.



6. Press the Adhesive Gasket Plate onto the duct. Secure with the (8) Self-Tapping Screws.



7. Connect the Cell to the Ballast using the two (2) cell mounting screws.



8. Place the unit and cell through the opening and align the four studs with the four holes in the ballast. Secure the unit by twisting clockwise to lock into place.



 Plug the Unit Power Cable into the receptacle or have a Licensed Electrician or HVAC Installer hardwire the unit directly into the HVAC system.



### Maintenance / UV Lamp Indicator

Your CASPR MEDIK requires no periodic maintenance beyond normal replacement of the bulb at 18 months and the NC<sup>2</sup>I cell with bulb every 3 years.

**Note:** Proper Operation of the unit is shown with a Red or Green LED light on the face of the unit (color variants do not affect Functionality of Unit). If the Ballast fails, or if power to the unit has been powered off/ disconnected, the UV light will be off. If the UV lamp fails, the Red or Green LED light will also be off.

### Disposal Of The NC<sup>2</sup>I Cell

Please do not throw the used NC<sup>2</sup>I Cells in the garbage.

The special germicidal UV bulb used in the CASPR MEDIK contains some insignificant amount of mercury. Contact your local Waste Management Center for a proper disposal procedure.

# Changing The NC<sup>2</sup>I Cell

1. Remove the Unit Power Cable from the receptacle or ensure the unit isn't powered.



2. Twist the Ballast Housing counter-clockwise to unlock the unit from the mounting plate. Pull the unit from the duct.



3. Remove the (2) Screws holding the NC<sup>2</sup>I Cell in place and remove the NC<sup>2</sup>I Cell from the Unit Cover.





WARNING: While removing the old bulb, be cautious about "rocking" it back and forth as that may damage the ceramic bulb socket. To avoid damage, pull the bulb straight out without any lateral motion.

# Changing The NC<sup>2</sup>I Cell

4. Exchange the Old NC<sup>2</sup>I Cell with the new NC<sup>2</sup>I Cell and replace the (2) Screws that hold it in place.



5. Replace the Unit in the duct and turn clockwise to lock in place.



6. Place the Unit Power Cable back into the receptacle or repower your unit.



#### **Warranty Information**

NDS Sales LLC d/b/a CASPR Technologies (as "Seller") offers the following Express Limited Warranty to a buying customer (a "Buyer") of a CASPR product (the "Product"):

Seller warrants to Buyer that (a) the Product will be free from defects caused by faulty workmanship or materials for three years from date of purchase when operated under normal conditions and in accordance with Seller's recommended use (the "Product Warranty Period)," and that (b) the Components (comprised of a bulb and a cell) will be free from defects caused by faulty workmanship or materials for one year from date of purchase when operated under normal conditions and in accordance with Seller's recommended use (the "Components Warranty Period)."

# SELLER EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED.

Should Buyer discover a covered defect within the Product Warranty Period or the Components Warranty Period, Seller will repair or replace (at Seller's cost) the Product and/or the Components. Buyer's sole and exclusive remedy for Product or Components defects is limited to repair or replacement.

To confirm coverage or to schedule repair or replacement under this Express Limited Warranty, Buyer should contact Seller at www.casprtech.com/warranty and provide the serial number located on the Product and proof of purchase. Absence of a serial number or proof of purchase may void the Express Limited Warranty.

This Express Limited Warranty does not extend to or cover Product damage caused by accident, fire, flooding, exposure to temperature extremes, abuse, misuse, improper or unauthorized installation, modification, misapplication, or repairs performed by persons other than Seller. Repairs performed by persons other than Seller or Seller's authorized representative will void the Express Limited Warranty.

This Express Limited Warranty does not extend to or cover incidental or consequential damages incurred by Buyer arising from, related to, or in connection with, any Product or Components defects, including but not limited to downtime costs, loss of use, loss of revenue, and/or loss of profits.

#### SALES THROUGH DISTRIBUTOR OR RESELLER

To the extent the Product is purchased by Buyer from an authorized CASPR distributor or reseller, this Express Limited Warranty passes through to Buyer.

#### FOR U.S. APPLICATION ONLY

Product warranties are governed by state and federal laws and may vary from state to state. This Express Limited Warranty provides Buyer with specific assurances regarding repair or replacement of the Product. Other warranties are expressly negated.

#### FOR CANADIAN APPLICATION ONLY

Canadian, provincial, and territorial sales laws may govern implied warranties. This Express Limited Warranty provides Buyer with specific assurances regarding repair or replacement of the Product. Other warranties are expressly negated. Should there be a difference between this Express Limited Warranty and Canadian law regarding implied warranties, Canadian law will control.



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