

Hydra Air ... USER MANUAL v1.4

(Current Manual Updates can be found at NemesisUVC.com, please check for current version prior to install)

English

Table of Contents

Safety	3
General Guidelines	9
Unpacking	9
Customer Support	10
General Information	10
Installation Instructions	11
Wiring	15
Limited Warranty	15
Benefits of UV-C Technology	16
UV-C Disclaimer	16
Technical Specifications	17
Setting Up Your Hydra Air	18
App Use	21
Key Fob Remote Setup	22
Resetting the Wi-Fi Unit	22
Cleaning	23
Replacing Radiators	23

Safety



HIGH INTENSITY ULTRAVIOLET LIGHT RISK OF EXPOSURE TO ULTRAVIOLET RADIATION AVOID DIRECT EYE AND SKIN EXPOSURE



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



All Nemesis™ units are built and registered under our EPA™ registered facility #99690 as a Risk Group 3 UV-C product under 40 CFR 156

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS

a) This equipment is designed for use with germicidal UV radiation sources and must be installed in compliance with competent technical directions to prevent risk of personal injury from UV radiation .



b) UV radiation can pose a risk of personal injury. Overexposure can result in damage to eyes and bare skin. To reduce the risk of overexposure this equipment must be installed in accordance with the manufacturer's site planning recommendations. This may include instructions on the relative location of each germicidal system component, the minimum distances between UV-generating devices and other objects or surfaces, and protection from line-of-sight exposure to UV radiation in occupied spaces located above the equipment mounting area (e.g. upper floor balconies, open staircases, etc.)



c) UV and optical radiation can be reflected by surrounding surfaces such as ceilings and walls. Since the reflective properties of surfaces can vary widely, it should be considered as part of site planning. Follow the manufacturer's recommendations for selecting appropriate ceiling and wall finishes.



d) It is the responsibility of the installer to ensure that persons will not be exposed to excessive uv or optical radiation during equipment operation. This will require the installer to conduct an assessment of irrandiance or illuminance levels in the surrounding occupied spaces prior to occupancy.



e) Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.



f) Maintenance and servicing of this UV generating equipment shall be performed by authorized personnel. Service personnel must wear appropriate Personal Protective Equipment (PPE) if the equipment will be in operation during the maintenance or servicing work. Contact Nemesis UV-C for PPE recommendations and guidance.



g) When replacing lamps, replace them only with the lamps for which the equipment is marked and intended.



h) The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.



i) Do not use this equipment for other than intended use.



SAVE THESE INSTRUCTIONS

Never allow humans, animals or plants to have direct exposure of UV-C light without proper PPE. Since UV-C is not visible light, the fixtures have safety protocols built-in to avoid exposure. Many studies have been done on the effects of UV-C and the results show minimal effect in the short term. Studies have shown short term, temporary damage to the eye can be an effect of exposure to UV-C light. Long term exposure may produce fading or degradation of some materials. Amounts of degradation are completely dependent on types and quality of materials and if they have UV-C protection built-in. The FDA approved waivers on UV-A, UV-B and UV-C, more information is available from the FDA at: https://www.fda.gov/media/136533/download



For the proper, safe, and effective use of your device it is ESSENTIAL that the user follows all guidelines and instructions in this manual. Proper installation and use is essential for the effectiveness and safety of this product.



CAUTION

The airflow vents must remain unobstructed to allow for the best possible operating conditions and to ensure the longevity of your device.

Disconnect the device from power source before cleaning the device or replacing radiators (see page 24 for detailed instructions)



There are no serviceable parts inside the unit. DO NOT attempt to do any repairs beyond basic cleaning and lamp replacement. Any attempts to repair the unit will void the warranty. Nemesis is not responsible for any damages or harm caused by your repairs. Please contact Nemesis at: (972) 423-0075 for repair assistance.

WARNING: To guard against injury, basic safety precautions should be observed, including the following:

- 1. Read and save all notices, warnings and safety instructions received with equipment.
- 2. Avoid exposure to direct or reflected germicidal ultraviolet rays. Germicidal ultraviolet rays are harmful to the eyes and skin.
- 3. Always disconnect power to the equipment and unplug before performing any service or maintenance.
- 4. Do not operate without proper electrical ground.
- 5. To prevent the risk of severe or fatal electrical shock, special precautions must be taken.
- 6. Equipment is intended for indoor use only.
- 7. Do not alter the construction or design. Do not remove safety labels or devices
- 8. Do not use equipment for other than its intended purpose, as described in the equipment manual.
- 9. Keep inlet and outlet vents, clean and clear of objects.
- 10. Over time germicidal ultraviolet rays may break down plastic, rubber, or other non-metallic materials, can fade colors, and can be damaging to plant life. Shield all plastic, rubber, or other non-metallic parts, plant life, etc. which may be exposed to direct or reflected germicidal ultraviolet rays.
- 11. Do not operate equipment if the power cord and/or plug are damaged, or if any other damage to the unit is visible or suspected.
- 12. Utility power must match power requirements listed on the unit label.











AWARNING

CAUTION

- 13. Equipment should be protected from the elements and from temperatures below freezing.
- 14. Do not exceed equipment's maximum rated flow capacity and/or operating pressure.

Safety Warnings

All occupants and personnel should be alerted to the potential hazards indicated by the product safety labeling on this unit.

The following conventions are used to indicate and classify precautions and on product safety labeling. Failure to observe precautions could result in injury to people or damage to property.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



Danger indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.



Warning indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.



Caution indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.



Caution used without the safety alert symbol indicates a potentially hazardous situation, which, if not avoided, may result in property damage.



This symbol / pictorial is used to identify an ELECTRICAL SHOCK or ELECTROCUTION hazard.



This symbol / pictorial is used to identify an ULTRAVIOLET LIGHT hazard.

7



This symbol / pictorial is used to identify the need to wear approved ultraviolet resistant face shield.



The symbol / pictorial is used to identify the need to wear approved ultraviolet resistant eyewear.



This symbol / pictorial is used to identify the need to wear protective gloves.



*This symbol / pictorial is used to identify components which must not be disposed of in the trash.

Product safety labels should be periodically inspected and cleaned, as necessary, to maintain good legibility. Always replace illegible safety labels. Contact the factory to obtain replacement safety labels.

*WARNING - Hg - RADIATORS CONTAIN MERCURY, manage in accord with disposal laws; see: LampRecycle.org OR contact Nemesis: Email: support@nemesisuvc.com Phone: (469)-466-2UVC (M-F, 9AM-5PM CST) and ask about our lamp recycling program.

General Guidelines:

DO NOT attempt any repairs on the Hydra Air. Anything beyond replacing the radiators and basic cleaning must be done by a trained technician. Attempts to repair the device will void the warranty.

AWARNING

Avoid touching the radiators. Oils and moisture from the skin can cause the coating on the radiator to deteriorate. Take extreme care when replacing radiators. (See Page 24 for detailed instructions)





Check the fixture for dust and other contaminates monthly. Cleaning can be done with a fresh, dry, lint-free cloth or with an air compressor on very low psi. The included dust collectors also need to be cleaned periodically. See page 24 for more detailed instructions.

Take care when cleaning debris from broken radiators. DO NOT dispose with household waste, follow your local hazardous waste guidelines OR contact Nemesis at (469)-466-2UVC and ask about our Radiator Recycling Program.





For any questions or concerns, contact the Nemesis Customer Service Line 24/7 at:

P: (469)-466-2UVC E: support@nemesisuvc.com www.nemesisuvc.com

Unpacking

Your Nemesis Hydra Air has been sent out in perfect working order. Inspect packaging for any damages that may have occurred during shipping. If the packaging appears damaged, carefully inspect your Hydra Air. If you find any damage, contact customer support immediately before attempting to operate your unit.

Contents:

Nemesis Hydra Air

2 UV-C Radiators ("lamps")

Key Fob Remote

Installation / Operating Manual available on website

ATTENTION: Operator MUST READ ENTIRE MANUAL before attempting to operate or install the Hydra Air Extreme. Failure to follow instructions/guidelines laid out in this manual will void the warranty and could lead to physical harm or cause damage to product.



General Information

Offering incredibly powerful UV-C air recirculation for 24/7 disinfection. The Hydra Air fixture fits seamlessly into existing drop ceilings and disinfects the air you breathe.

- Nemesis Hydra DC 24/7 UV-C Air recirculation
- 232 Cubic feet of air per minute
- In a 2800 cubic foot space, the air is circulated 6 times an hour
- Hydra UV-C disinfection technology ensures efficacy and efficiency
- Ultra-quiet fans create no distracting noise
- All UV-C is contained within the fixture, allowing for a 24/7 runtime

Customer Support

The customer support line is available for any inquiries on your product. Visit https://www.nemesisuvc.com/ or call (469)-466-2UVC, 8am-5pm CST M-F

For 24/7 support, contact: support@nemesisuvc.com

For servicing or repairs, contact: (469)-466-2UVC, or go to: https://www.nemesisuvc.com/

Installation Instructions:

WARNINGS:

Before installing, servicing, or performing routine maintenance upon this equipment, follow these general precautions:

WARNING - To reduce the risk of death, personal injury or property damage from fire, electric shock, falling parts, cuts/abrasions, and other hazards please read all warnings and instructions included with and on the fixture box and all fixture labels.



WARNING - Risk of fire or electric shock. The electrical rating of these products is 120 or 277VAC, the installer must determine whether they have 120-277V at the fixture before installation.



WARNING - Risk of fire or electric shock. Hydra Air installation requires knowledge of electrical systems. Installation should be performed only by a qualified electrician in accordance with the National Electrical Code and relevant local code.

WARNING - DO NOT INSTALL DAMAGED PRODUCT! This fixture has been properly packed so that no parts should have been damaged during transit. Inspect to confirm. Any part damaged or broken during or after assembly should be replaced.

▲WARNING

WARNING - Only those open holes indicated may be made or altered as a result of troffer installation. Do not leave any other open holes in an enclosure of wiring electrical components.

CAUTION

WARNING - Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation.

WARNING - To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.

CAUTION

WARNING - The fixture is intended for mounting only in a covered ceiling where only the vent side of the fixture will be exposed to damp or dry locations.

CAUTION

WARNING - INSTALLATION SHOULD ONLY BE PERFORMED AFTER POWER TO THE FIXTURE HAS BEEN DISCONNECTED.

WARNING RISK OF ELECTRIC SHOCK:

- Disconnect or turn off power before installation or servicing.
- Verify that supply voltage is correct by comparing it with the fixture label information.
- Make all electrical and grounded connections in accordance with the National Electrical Code (NEC) and any applicable local code requirements.
- All wiring connections should be capped with UL approved recognized wire connectors.

11



WARNING RISK OF BURN:

- Allow radiator/fixture to cool before handling. Do not touch enclosure or light source.
- Do not exceed maximum wattage marked on label.
- Follow all manufacturer's warnings, recommendations and restrictions for: driver type, burning position, mounting locations/methods, replacement and recycling.

CAUTION RISK OF INJURY:

- Wear gloves and safety glasses at all times when removing fixture from carton, installing, servicing or performing maintenance.
- Avoid direct eye exposure to the light source while it is on.

CAUTION RISK OF FIRE:

- Keep combustible and other materials that can burn, away from radiator.
- Do not operate in close proximity to persons, combustible materials or substances affected by heat or drying.

CAUTION RISK OF PRODUCT DAMAGE:

- Never connect components under load.
- Do not mount or support these fixtures in a manner that can cut the outer jacket or damage wire insulation.
- Do not exceed fixtures maximum ambient temperature.
- Only use fixture in its intended location.
- Electrostatic Discharge (ESD): ESD can damage fixtures. Personal grounding equipment must be worn during all installation or servicing of the unit.
- Do not touch individual electrical components as this can cause ESD, shorten lamp life, or alter performance.
- Disconnect power at the source before installation, inspection or removal.
- Do not use if product is damaged.
- Do not alter, relocate, or remove wiring, power supply, or any other electrical component.
- Do not use abrasive materials, glass cleaners or other solvents on cover plate or lens. Use of these substances may damage fixture. To clean the faceplate, use a mild soap solution.
- This product must be installed in accordance with the applicable installation code by a person familiar with the construction and operation of the product and the hazards involved, as well as local, state and federal code requirements.

▲WARNING

ACAUTION





AWARNING

AWARNING



CAUTION

AWARNING



▲WARNING



CAUTION

AWARNING

• Maintenance of the fixtures should be performed by person(s) familiar with the fixtures' construction and operation and any hazards involved. Regular fixture maintenance programs are recommended.

▲WARNING

• It will occasionally be necessary to clean the interior of the fixture. Frequency of cleaning will depend on ambient dirt level and other working conditions. See page 24 for cleaning instructions.

CAUTION

These instructions do not purport to cover all details or variations in equipment nor to provide every possible contingency to meet in connection with installation, operation, or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's or owner's purposes, this matter should be referred to Nemesis Customer Service.

Failure to follow any of these instructions could void product warranties. For a complete listing of product Terms and Conditions, please visit www.nemesisuvc.com

Nemesis UV-C, LLC. assumes no responsibility for claims arising out of improper or careless installation or handling of its products.

Installation:

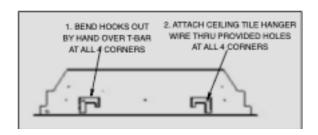
WARNING: MAKE SURE FIXTURE IS MOUNTED TO A SECURE STRUCTURE.

USE APPROPRIATE MOUNTING HARDWARE TO INSTALL FIXTURE RATED

AWARNING

FOR YOUR APPLICATION. FAILURE TO MOUNT FIXTURE CORRECTLY COULD

RESULT IN SERIOUS INJURY.







SAVE THESE INSTRUCTIONS

1. Remove fixture from packaging and inspect for damage. If damaged do not use; return your fixture to the supplier or contact your local sales rep for replacements.

CAUTION

2. Make sure the POWER IS TURNED OFF at the source to the location at which you are installing the product.



- 3. Remove existing troffer if applicable.
- 4. Place the fixture in the appropriate 15/16" T-Bar ceiling structure.
- 5. Bend, by hand, the built in T-Bar clips to secure the fixture to the T-Bar ceiling. (see Figure 1)

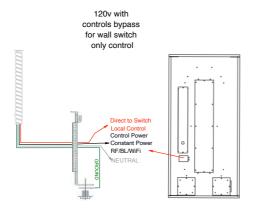
14

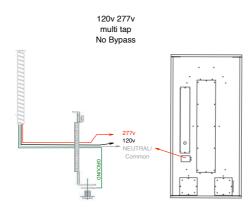
6. Remove access plate and make electrical connections from supply and properly ground as local codes dictate.



- 7. Reinstall access plate.
- 8. Return power back to the source and installation is complete.

Wiring





Limited Warranty

Terms and Conditions: This limited warranty is subject to the terms listed below.

For warranty service - Call: (469)-466-2UVC, M-F, 8am-5pm CST

- 1. This warranty is void if:
 - a. The product serial number and/or labels are altered or removed
 - b. The product is modified in any manner that affects the reliability of the product
 - c. The product has been repaired or serviced by anyone other than Nemesis
 - d. The product is damaged because it is not properly maintained as set forth in the product instructions, guidelines and/or user manual.
- This is not a service contract: this warranty does not include routine cleaning or periodic check-up.
- 3. Nemesis reserves the right to make changes in design and/or performance improvements upon its products without any obligation to include these changes in any products theretofore manufactured.
- This is the only written warranty applicable to this product and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published
- 5. Warranty is limited to one year from date of shipping.
- 6. Nemesis assumes no responsibility for removal, installation or shipping of any warranty repair product. All removal, installation and shipping is sole responsibility of the purchaser.

Activate Your Warranty:

Send the following information to: support@nemesisuvc.com

Name/Company Product Where Purchased

Model/Name/Serial # Physical Address

Date of Purchase Email Address

Activating your warranty signifies that you have read and understand the limited warranty listed above. **YOU**MUST ACTIVATE YOUR WARRANTY WITHIN TWO WEEKS OF THE PURCHASE DATE

Benefits of UV-C Technology:

- UVC radiation has been proven to be effective against waterborne and airborne pathogenic micro-organisms including those responsible for cholera, hepatitis, polio, typhoid, giardia, cryptosporidium and many other bacterial, viral and parasitic diseases
- UVC installations have low capital and operation cost
- UVC technology is environmentally friendly
- UVC installations are easy to operate and to maintain
- UVC radiation works instantly and the effectiveness does not depend on the temperature
- UVC disinfection is a physical process: no substances are added
- The UVC disinfection effect is directly related to the UV dose (which is the product of
 intensity and exposure time of the micro-organisms) so it's effectiveness can be simply
 measured once the system design is validated

UV-C Disclaimer



The products being sold pursuant to this Agreement must be installed correctly and used properly to be effective. Nemesis is not responsible for improper installation, usage or damages caused by the end user. Nemesis makes no representations, guarantees or assurances as to the final effectiveness of using a UV-C lighting system for sanitization. Nemesis warrants that with proper installation and usage, scientific evidence exists proving the efficacy of UV-C sanitation. Nemesis does not warrant that 100% of viruses, bacteria and germs shall be eliminated. Effective UV-C sanitation times are calculated by information provided by the specific radiator manufacturer. Times vary according to radiator, distance, dosage and type of viruses, bacteria, germ or mold to be eliminated. Customer understands and accepts that the use of UV-C lighting can cause fading and discoloration of some materials over extensive prolonged exposure and that Nemesis is not responsible for any damages whatsoever to any materials or equipment due to the use of the products.

Technical Specifications:

Features:

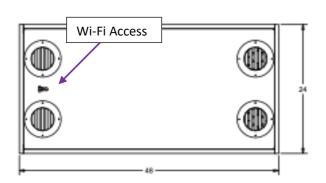
- Designed in USA. Ships From USA.
- Convenient Key Fob Remote or Web Application for setting timers and schedules
- Emits germicidal wavelength of 254nm
- Kills 99% of all viruses and bacteria
- All aluminum construction
- Standard fan ranges 60-220 CFM, with dB ranges from 38-68 operating at 12V (Contact your sales representative for your specific fan need based on cubic feet and height)

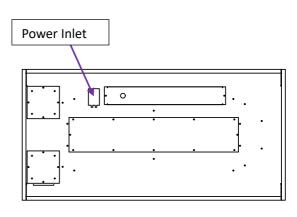
Lamp Source: TUV 55 W HO lamp technology

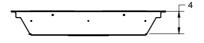
Dimensions: 48" x 24" x 5"

Input voltage: AC 95-120V, 50/60Hz 2 amps @ 120v

Rating: Indoor use only







17

Setting Up Your Hydra Air:

- 1. Ensure the power to the system is switched on.
- 2. Download the 'eWeLink' application to your Wi-Fi enabled device.



- 3. Turn the Wi-Fi unit to Hot Spot Mode:
 - a. Locate the Wi-Fi unit in your fixture:



- i. The Sonoff WiFi unit is on the front of the fixture, located next to the LED indicator lights, pictured above. The Wi-Fi unit is 'On' when the small blue indicator light on the Sonoff unit is blinking.
- b. Press and hold the black Wi-Fi button until the red indicator light on the Sonoff Wi-Fi unit blinks (7 seconds) this will put the blue indicator light into an inconsistent pattern. Press and hold the button until the red indicator light blinks (7 seconds). This will put the blue indicator light into a consistent blinking pattern.
- c. Your device is in Hot Spot Mode

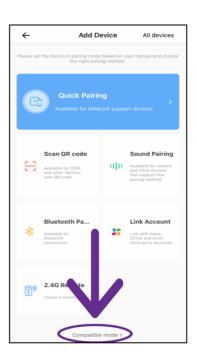
WARNING: Pressing the button on your Wi-Fi unit for less than 7 seconds will power the unit on.

4. Open the 'eWeLink' Application

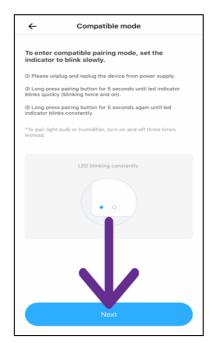


5. Tap the + button in the bottom center

6. Press 'Compatible Mode' at the bottom of the screen



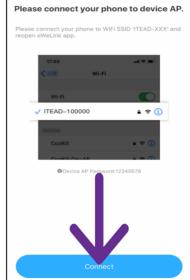
7. Ensure the blue LED maintains a constant blinking pattern, then press "Next"



8. Set the network you would like to control your Hydra from by entering it here. Then press Next.

NOTE: 2.4 GHZ Wi-Fi is required for these devices





9. Tap "Connect"

- 10. This will take you to your device settings. There, connect to the ITEAD-######### device. Password: 12345678
- 11. Once connected, return to the application. The "Connect" button should read "Next"

12. The device will begin to configure. After some time, you will be prompted to connect the device to the Wi-Fi network. Tap "Join".



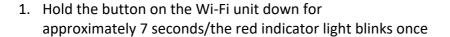
13. Your Hydra is now connected to the Wi-Fi network. Here you will be prompted to name your Hydra Air and assign it a room. After this you will be sent to the app's Home screen. The device will take a few minutes to fully configure into the network. Leave your Hydra Air connected to power for a few minutes after completing this step.



App Use

- 1. On the Home Screen, your newly connected Hydra Air should appear.
- 2. Tapping on the Hydra Air will open a second menu, from here you can
 - a. Power on your Hydra Air
 - b. Set a schedule
 - c. Set a Timer
 - d. Set a Loop Timer
 - e. If needed, you can update your device from here as well:
 - i. Press the "..." button in the top right of your screen
 - ii. From here you will open the settings, and an option to update to the current software version will be available.

Key Fob Remote Setup





- 2. Press and hold desired button on your 433mhz remote to program the key fob to the device
- 3. Your device will turn on during pairing setup, use your newly connected key fob to turn it off

NOTE: If pairing is unsuccessful, use the power switch to shut off your device. Restart and repeat the process. If problems persist, contact customer support 24/7 at: (469)-466-2UVC

Resetting the Wi-Fi Unit

1. Press and hold the button at the top of the Wi-Fi unit until the red indicator light blinks three times. (21 seconds) This will completely reset your Wi-Fi unit. It will be removed from the network and will no longer be paired to any key fob remote.

Cleaning:

- **WARNING:** Ensure fixture is off before cleaning. **DO NOT** clean fixture while the radiators are energized
- 4
- Check all dust collectors and fans on the Hydra Air monthly for dust buildup and other contaminates. The dust collector should be washed at least once every two months.
 - Using an appropriately sized hex bit to loosen the four screws on each of the silver vent covers on the face of the unit. Once the vent cover is loose, the filter can be removed.
 - o Dust collectors can be washed by hand using mild soap and warm water.
- Unplug fixture from AC power before performing any maintenance.
- Never use alcohol or solvents
- Use vacuum or air compressor (on low PSI setting) and soft brush to remove dust on fixture & vents
- Clean fixture with a moist, lint-free cloth
- Dust radiators lightly with a microfiber cloth, DO NOT touch the radiators with bare hands



Replacing Radiators:

- WARNING: Wear proper PPE (gloves, eye protection etc.) when replacing radiators.
- **WARNING:** Ensure fixture is off before replacing radiators. **DO NOT** replace radiators while the radiators are energized
- <u>DO NOT</u> touch radiators with bare hands, oils from the skin will deteriorate the coating on the outside of the glass, use sterile gloves and eye protection when working with radiators
- Push both of the metal posts located on the face of the unit towards the center of the unit to unlock the hinges and allow the face of the Hydra air to swing down.
- Remove the nuts and screws surrounding the inner tray in order to access the chamber for the radiators.
- Twist the top and bottom of the radiator ¼ turn to 'unlock' the radiator from the socket
- Remove the old radiator. DO NOT dispose with household waste, follow your local hazardous waste guidelines OR contact Nemesis at (469)-466-2UVC and ask about our Radiator Recycling Program.
- Place one end of the new radiator into the socket, gently apply pressure to depress the socket and allow the other end of the radiator to slide into place
- Twist the top and bottom of the radiator ¼ turn to 'lock' it into place
- Replace the nuts and screws in order to reinstall in the inner tray.
- Swing the face of the unit back into position, and push the two metal posts inward again to lock the hinged face of the Hydra™ Air back into place.
- For any issues, contact Nemesis Customer Support at: (469)-466-2UVC









User Manual - Version 1.4

Updated: 04-20-2021

www.nemesisuvc.com

(469)-466-2UVC