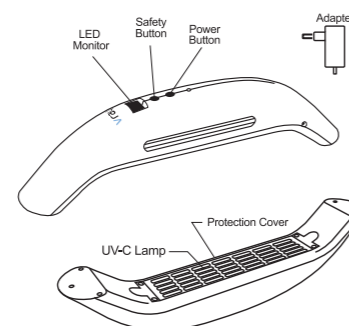# HB Hamilton Buhl

HYGENX™ Vray
High Intensity Cordless, Portable UV-C Sanitizer

Instruction Manual

1. Product

HamiltonBuhl's Vray is a cordless UV-C Sanitizer that is safe, convenient, easy to use and keeps everyone healthier by killing the bacteria and viruses that cause diseases. Vray sanitizes 99.9% of common virus and bacteria and 99.997% of Human Coronavirus. See chart for sanitization times below. With its safety auto shut-off feature for avoiding direct exposure to UV-C radiation, Vray is the safe and easy way to sanitize items, such as: pens/pencils, scissors, desk/chair surfaces, books, staplers, laptop PCs, iPads, smartphones, door handles, faucets, keypads, instruments, toys, and more. Vray is convenient, cordless, portable, hands-free, lightweight and rechargeable.
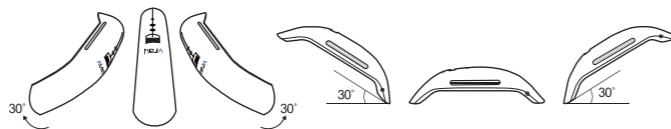
2. Components

LED Monitor · Safety Button · Power Button · Adapter · Protection Cover · UV-C Lamp

3. Specifications

Model Number: HYGENX-VRAY
Safety Features: Safety sensor, Timer, Overcharge Protection Circuit, Over Discharge Protection Circuit, Overcurrent protection circuit, Anti-Shatter UV-C Lamp: Anti-shatter coating prevents glass from shattering and keeps pieces of glass inside the coated lamp tube.
Size: 19"W x 2.7"L x 4.3"H
Weight: 1.11 lbs.
Lamp: 8W UV-C Lamp, at 253.7 Wavelength
Battery: Li-Ion Rechargeable
Adapter: 100-240V, 50-60Hz, 12V 2.0A
Charging Time: Approx. 2 hours
Operation Time: Approx. 3 hours
Please fully charge the unit before first usage.

Test Result Assessments between Strain Samples and HygenX™ Vray

Strains	5 Seconds at 2" from Sample (% of Reduction)	10 Seconds at 8" from Sample (% of Reduction)	2 Minutes at 2" from Sample (% of Reduction)	5 Minutes at 8" from Sample (% of Reduction)
Escherichia Coli (E-Coli)	99.9%	99.9%		
Pseudomonas Aeruginosa	99.9%	99.9%		
Staphylococcus Aureus	99.9%	99.9%		
Kiabsiella Pneumoniae	99.9%	99.9%		
MRSA	99.9%	99.9%		
S. Typhimurium	99.9%	99.9%		
B. Subtilis	99.9%	99.9%		
V. Paraheamolyticus	99.9%	99.9%		
Human Coronavirus			99.997%	99.997%

4. Safe Mode Safety Sensor

A safety sensor has been added to this unit to detect the proper angle of the Vray, and protect from accidental exposure of UV-C light. Equipped with this safety sensor, Vray can detect when there is danger of light being exposed towards the user. Safe mode is the default status when Vray is turned on. In safe mode, Vray will automatically turn off when tilted 30 degrees in either direction. For the user's convenience, safe mode can also be turned off with the click of a sensor button for 2 seconds. When safe mode is off, the light will stay on, even if Vray is held at an angle.

For more instructions and test results, visit https://www.hamiltonbuhl.com/content/Vray-App-Instructions.pdf

5. How to use

When using Vray in portable mode, the most effective distance to use is 2-8 inches from the item.
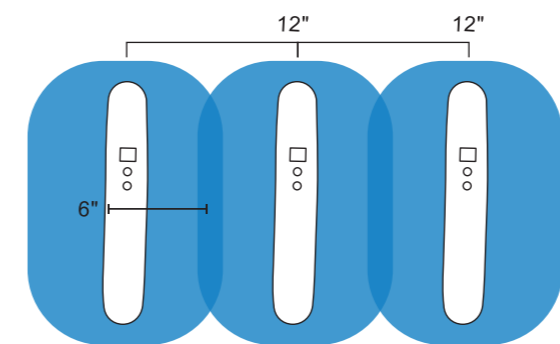
Safe Mode ON

1) Push the power button for 2 seconds to turn the unit on. (Safe Mode is the default.)
2) Set the timer you want. 5, 10, 15 minutes. Default time is 5 minutes.
3) Place Vray over the area you wish to sanitize. (It will beep every 10 seconds during use.)
4) After using, push the power button for approximately 2 seconds to turn off.

Safe Mode OFF

1) Push the power button for 2 seconds to turn on.
2) Push the safety button for 2 seconds to deactivate the safe mode. The light on the button turns off.
3) Place Vray over the area you wish to sanitize. (It will beep every 10 seconds during use.)
4) You can sanitize bulky items (desks, chairs, rugs, etc.)
5) When you are done, push the safety button to activate the safe mode or push the power button more than 2 seconds to turn off.

Charging the Battery

1st Alarm of Low Battery: 'Lo (Low battery)' appears on the LED monitor and the power button turns red.

2nd Alarm of Low Battery: If the battery is running down after 1st alarm, the 'Lo' and red color on power button will blink.

Charging: Beep to let you know the beginning of charging and the power button is red during charging.

Charge Completion: Beep to let you know the finish and the light of power button is turned off.

12" · 12" · 6"

- **A single Vray, when placed on a surface, can sanitize an area 6" to the left and 6" to the right, measured from the center.**
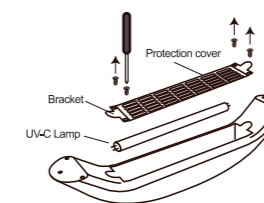- **To sanitize a wider area (shown above), move Vray 12" center to center.**

- Do not expose directly onto any person or animal.
- Do not expose directly to eyes or skin. Overexposure of UVC induces skin erythema and keratoconjunctivitis.
- Keep out of reach of children.
- When using Vray in overhead areas such as on tables, shelves, etc., please make sure children are not within UV-C ray range.
- Avoid direct sunlight and store indoors.
- Vray is not a waterproof product. If it is exposed to humidity or gets wet, it may cause the unit to break down. Do not use with wet hands.
- When cleaning this product, Do NOT use water or chemicals. Please wipe gently with a soft cloth.
- Please charge the unit regularly, when not in use.
- Do not disassemble the Vray except to replace the UV lamp, when needed. Disassembling the unit further will void the warranty.

6. How to Change the UV Lamp

1) Loosen the screws of the bracket both sides of the protection cover and lift it up by using both hands.

2) Turn the lamp 90° to the right and remove. Insert a new lamp, and then turn 90° to the left.

3) Cover the protection cover and tighten the screws.

4) We highly recommend you use the Anti-shatter 8W UV-C Lamp provided by HamiltonBuhl/ PRIMETECH. Using another lamp may cause breakdown.

Protection cover · Bracket · UV-C Lamp

7. FAQ

1) If Vray does not turn on:
- Lightly press the power button and hold for 2 seconds or more. This is part of a safety feature for children.
- Fully charge the unit and try again.

2) If the lamp doesn't turn on:
- Please charge the unit.
- As a safety feature, the lamp will automatically turn off when the main body is tilted more than 30°.
- Try placing the unit on the floor, and try again.

3) If you hear a noise inside when you shake Vray:
- This sound is normal. The safety sensor makes that sound.
- There is an amalgam piece inside the lamp. This is normal.

✔ Effective Design

✔ High Quality

✔ Safe and Easy to Use

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