





WARNING: This product emits ultraviolet (UV) radiation. Exposure to UV radiation can cause serious personal injuries, including damage to eyes and skin. Avoid direct exposure to the UV light. For more safety instructions, please refer to page 5 of this instruction manual ("UV Safety Rules").

# **Directions for Use and Operations**

The ULTRA offers a patent-pending system, incorporating a Module of LEDs emitting ultraviolet-C (UV-C) invisible light and a powerful fan, which can reduce the concentration of active pathogens, including the SARS-CoV-2 virus, in the air of the room where the system is operating.¹ The module also includes indicator LEDs emitting violet-color visible light to indicate that the UV-C Module is on.

To enable the UV-C technology in ULTRA to substantially reduce the concentration of active pathogens in the breathable air zones of the room where it is operating, keep the UV-C Module on for at least 30 minutes in a room of 8'x8'x10' and longer for a larger room.¹ For larger spaces, it is recommended to install multiple ULTRA fans. Once installed and powered on, the fan circulates air through the upper-room, the air passes above the UV-C Module, which acts to reduce the active pathogens.¹²

The ULTRA can be operated only using the remote control supplied with the fan or the free downloadable Modern Forms app. The UV-C Module can be turned on and off from the remote. The UV-C Module **cannot** be operated independently of the ceiling fan, but the ceiling fan can be operated independently of the UV-C Module. The rotation of the fan can be increased or decreased by 6 speed levels. The direction of rotation of the fan can also be reversed. The fan also has a Breeze Mode function which fluctuates the fan speeds.

The ULTRA is Damp Location Rated and can be operated indoors or in covered outdoor locations that have no direct exposure to water, rain, or snow.

### **UV-C Module Indicator Lights**

The ULTRA comes with violet-color indicator LEDs so the user knows when the UV-C Module is operating. The indicator LEDs **cannot** be turned off separately from the UV-C Module.

#### **Performance**

The UV-C Module in ULTRA operates at a UV-C range (peak wavelength of 275 nanometers<sup>3</sup>) to reduce active pathogens in the air in the room. Research shows that UV-C radiation, 100-280 nanometer (nm), can damage microorganisms' deoxyribonucleic acid (DNA) and ribonucleic acid, leading to the inactivation of bacteria or virus.<sup>4</sup>

<sup>&</sup>lt;sup>1</sup> Based on tests conducted by an independent CAP and CLIA accredited lab, Innovative Bioanalysis. The report is available at modernforms.com/ultra. The effectiveness of the ULTRA will vary based upon application and surroundings, including but not limited to room dimensions and air flow.

<sup>&</sup>lt;sup>2</sup> Ko G, First MW, Burge HA. The characterization of upper-room ultraviolet germicidal irradiation in inactivating airborne microorganisms. Environ Health Perspect. 2002;110(1):95-101. doi:10.1289/ehp.021109

<sup>&</sup>lt;sup>3</sup> Test Report IEC (Photobiological safety of lamps and lamp systems), Report No. 4789851496.2-1a, WAC Lighting, Issued May 21, 2021

<sup>&</sup>lt;sup>4</sup>Reed NG. The history of ultraviolet germicidal radiation for air disinfection. Public Health Rep. 2010;125(1):15-27





Third-party lab tests conducted on the the UV-C technology used in ULTRA have shown a 99.99% reduction of collectable active pathogen in the air and that the active SARS-CoV-2 virus, specifically, was not detectable in the breathable air after 30 minutes of operation in an 8'x8'x10' test room. For larger spaces, it is recommended to install multiple ULTRA fans. Whole room pathogen concentrations will vary between installation locations, and the number of ULTRA fans installed.

#### **UV-C Module Maintenance**

The ULTRA ceiling fan does not need frequent maintenance. A dry or lightly dampened cloth will be suitable for most cleaning needs. Make sure you follow all safety rules contained in the instruction manual when cleaning. DO NOT operate the ULTRA, including the UV-C Module, while performing any maintenance, repair or replacement servicing the unit.

The UV-C Module (UVF7IN-120V-R1-MOD) has a 6,500-hour lifespan. The fan is equipped with a timer that automatically tracks how much time the UV-C Module has been used. When there are approximately 80 hours remaining in the module's life, the UV-C Module will flash when the ULTRA is turned on indicating that you should replace the UV-C Module to ensure efficacy. Track and monitor use of the UV-C Module, avoid unintended extended operation, to preserve the lifespan of the UV-C Module. See replacement module instructions at modernforms.com for more information.

## **Troubleshooting**

Please read the back of the instruction manual, visit modernforms.com, or contact our Fan Support team at: 1-866-810-6615 option 1 or fansupport@modernforms.com.

**WARNING:** Ultraviolet (UV) Radiation Hazard. The lamp in this The unit produces UV light. Skin or eye damage may result from direct exposure to UV light. Avoid direct exposure to UV light. Always turn off and disconnect power before servicing the unit. See Instructions for UV Safety Rules in the instruction manual.

**WARNING:** This product should be installed by a licensed electrician. This product should be mounted to an outlet box UL-listed marked "Acceptable for fan support" of 15.9 kg (35 lbs) or less and should use mounting screws provided with the outlet box and/or support directly from building structure. Most outlet boxes commonly used for the support of luminaires are not acceptable for fan support. Consult a licensed electrician.

For further safety instructions, please refer to page 5 of the fan's instruction manual ("UV Safety Rules").

**Disclaimer:** While there may be information here or on our website relating to the effectiveness of the UV-C technology incorporated in the ULTRA in reducing SARS-CoV-2 and other pathogens in the air, Modern Forms makes no claims that its products can cure, treat or prevent any conditions, including COVID-19 or other conditions that may be caused by airborne pathogens. Always consult your healthcare provider with any health-related questions.

Whole room pathogen concentrations will vary between installation locations, and the number of ULTRA fans installed, and it is not possible to predict the extent of reductions that will be achieved by the ULTRA in whole room air in any particular room or environment. The ULTRA is not a substitute for good building air exchange practices or manual cleaning and disinfection practices.

Based on tests conducted by an independent CAP and CLIA accredited lab, Innovative Bioanalysis. The report is available at modernforms.com/ultra. The effectiveness of the ULTRA will vary based upon application and surroundings, including but not limited to room dimensions and air flow.



