VIOGUARD DEFENDER
UVKB50 V2.0 Self-Sanitizing Keyboard

PRODUCT USER MANUAL

P/N: 110-00202-01 Rev. B
Thank you for purchasing the Vioguard Defender (UVKB50 V2.0). This user manual contains important safety and device information that should be read prior to use.

The above symbol indicates safety and device use messages in this manual.

Failure to properly set up, use and care for the UVKB50 V2.0 can increase the risk of serious injury or death, or damage to the unit. Read this manual for important safety and health information.

Keep manual for future reference. For a replacement user manual, or to see the most updated version, go to vioguard.com/manuals, or contact Vioguard customer support at 425-318-7900.

Read the complete manual for important safety and device use information.
TABLE OF CONTENTS

Setup Instructions ................................................................................................. 4
Product Specifications ............................................................................................ 5
LED Status Indications .......................................................................................... 5
Back Panel Description ......................................................................................... 6
Keyboard Tray and Touchpad ............................................................................... 6
Getting Started ..................................................................................................... 7
Manually Initiating a Disinfection Cycle .............................................................. 8
Automatic Initiation of a Disinfection Cycle ....................................................... 8
Test Mode ............................................................................................................ 8
Position Definitions ............................................................................................. 9
Cleaning Procedures ............................................................................................ 10
Limited One Year Warranty .................................................................................. 10
No Other Warranties ........................................................................................... 11
Warranty Service ................................................................................................. 11
How to Obtain Warranty Service .......................................................................... 12
Changes to Warranty Service ............................................................................... 12
Limitations on Warranty Service ......................................................................... 12
Limitation of Remedies ....................................................................................... 13
Limitation of Liability .......................................................................................... 13
Mounting Compatibility ....................................................................................... 14
SETUP INSTRUCTIONS

1. Open the Vioguard Defender packaging and inspect the product visually to make sure there is no damage.

2. Read the user manual carefully to avoid harm to the product or to yourself and to understand how to use the product properly (see safety instructions on page 2).

3. Unpack the provided USB Cable and AC Power adapter.

4. Insert the square-shaped end of the USB cable into the USB socket of the Vioguard Defender (see image A).

5. Insert the flat-shaped end of the USB cable into a compatible USB port on a PC or laptop. The USB indicator light on the front left side of the panel will illuminate blue when the USB cable is plugged into a powered USB port (see image B).

6. Plug the AC power Adapter into the back panel AC power socket of the Vioguard Defender and then plug the other end into an AC power source (see image C).

7. The enclosure of the Vioguard Defender is designed to support up to a 50lb CRT or LCD monitor. This is to help increase desktop space.

8. Wait for the yellow LED light to illuminate and remain solid. The unit is now ready to use (see image D).

9. A yellow LED status indicator light will illuminate and flash to indicate the start of a disinfection cycle. The light will turn to green once the cycle is complete. If the LED status indicator turns a color other than green, refer to the “LED Status Indications” on page 5.
PRODUCT SPECIFICATIONS

Weight: 15.6 lbs, excluding cable and power adapters.
Dimensions: 3.25”H x 20.0”W x 10”D.
Slide Extension: 6.5” (the distance the keyboard slides out of the unit).
UV-C Disinfection Lamp Life: 10,000 hours.
Power Input: 100-240 Vac, 50-60hz.
Power Consumption: 50w maximum during disinfection cycles.
Keyboard: Low profile, UV-resistant, 88 keys laptop keyboard with high-quality scissor-key mechanism.
Include: Enclosure with keyboard, USB cable, power adapter, user manual.
Disinfection Cycle Time: 90 to 120 seconds, depending on dosage.

LED STATUS INDICATIONS

The status LED shall indicate the following states of the keyboard.

<table>
<thead>
<tr>
<th>LED Status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid Blue</td>
<td>Keyboard is connected to the computer via USB port.</td>
</tr>
<tr>
<td>Solid Green</td>
<td>Keyboard tray is disinfected and ready for use.</td>
</tr>
<tr>
<td>Solid Yellow</td>
<td>Keyboard is contaminated.</td>
</tr>
<tr>
<td>Flashing Yellow</td>
<td>Disinfection cycle is in progress.</td>
</tr>
<tr>
<td>Solid Red and Flashing</td>
<td>When this occurs during a disinfection cycle, it means there is a hardware failure.</td>
</tr>
<tr>
<td>Solid Red and Steady Yellow</td>
<td>Hardware failure.</td>
</tr>
<tr>
<td>Flashing Red and Solid</td>
<td>When this occurs after a cleaning cycle, it means the light plate needs to be changed.</td>
</tr>
<tr>
<td>Green</td>
<td>Cleaning failure (interrupted cleaning cycle). May require a light plate change.</td>
</tr>
</tbody>
</table>
Power AC/DC Adapter: Turns the keyboard on/off.
USB Socket: Socket for USB cable is included.

KEYBOARD TRAY AND TOUCHPAD

Keyboard: Traditional 88 keys.
Status indicators: For number lock, scroll lock and caps lock.
Touchpad: Laptop touchpad for use in place of mouse.
Sanitize button: Push and release the “sanitize” button to make the keyboard tray retract and initiate a disinfection cycle.
Function Key (Fn): Like a standard keyboard, additional key functions are accessible by pressing the (Fn) button.
GETTING STARTED

After completing the setup instructions, the Vioguard Defender is ready for use.

1. Wave your hand 1-2 inches from the “hand-wave” icon on the front of the keyboard to eject it. Once the keyboard tray is out, the keyboard and touchpad are ready for use.

2. When you are finished using the keyboard and touchpad, press the “sanitize” key to retract the keyboard and begin the disinfection cycle.

3. The green LED light will illuminate when the keyboard is disinfected and ready to use.

Note: The red LED will illuminate if the disinfection process is interrupted or if an error occurs. Repeat step 2 to reattempt disinfection cycle. If error persists, please contact Vioguard.
Keyboard tray should not extend beyond the edge of the desk or work surface.

**MANUALLY INITIATING A DISINFECTION CYCLE**

Once you are done using the keyboard and/or touchpad, push the “sanitize” button located on the top of the right side of the keyboard tray to initiate a disinfection cycle. This means the keyboard tray will retract, the door will close and the keyboard tray will be disinfected.

**AUTOMATIC INITIATION OF A DISINFECTION CYCLE**

When the Vioguard Defender is untouched for 2, 5 or 10 minutes (amount of time depends on mode setting), the Vioguard Defender will automatically close and initiate a disinfection cycle.

**Note:** The disinfection cycle can be interrupted at any time by simply activating the sensor on the front of the Defender.

**TEST MODE**

If the unit is in “Test Mode,” the unit will cycle through ejecting and retracting the keyboard. Follow the instructions below to take it out of this mode.

1. Gather a small phillips-head screwdriver, size #1 or #2 will work best.
2. Unplug the unit.
3. Locate the rotational switch on the back of the unit.
4. Use the screwdriver to move the selector so the arrow points to “Position 5.”
5. Position the unit back so you can use it.
6. Plug everything back in.
7. Test to confirm it is working properly.
POSITION DEFINITIONS

The position switch matrix is as follows. Please see the back of the unit to see the rotational switch.

Position 0: Demo mode, normal operation with 30 second cleaning cycle, but without turning lights on and writing in the EEPROM.
Position 1: Sets the machine at the standard, 2 minute untouched wait time for pull in.
Position 2: Extends the untouched wait time to 5 minutes.
Position 3: Extends the untouched wait time to 10 minutes.
Position 4: Standard Mode with manual pull-in only (no wait time set for auto-cleaning).
Position 5: Test Mode where system cycles through in-out to test mechanical components.
CLEANING PROCEDURES

The Vioguard Defender should be cleaned when visibly dirty.

1. Turn the Defender off using the AC power switch located on the back panel.

2. Clean the outer surface of the Vioguard Defender and keyboard tray by wiping or brushing.

   **Note:** Use pre-moistened wipes, soft cloths, sponges or a soft bristle brush only.

3. Wipe with a dry cloth or allow to air dry.

4. Turn the Vioguard Defender on using the AC power switch located on the back panel.

**WARNING**

DO NOT pour any liquid cleaner or disinfectant directly on any surface of the Vioguard Defender.

**Recommended Cleaners/Disinfectants:** Chlorine-based (max 10% solution), alcohol-based, quaternary ammonium, soap and warm water.

**Note:** Use manufacturers’ recommendations for concentrations.

**Do not use the following:** Petroleum-based cleaning fluids (such as gasoline, turpentine or oil), acetone, bleach solutions with over 10% bleach, temperature or pressure sterilization, buffing or scrubbing pads.

**LIMITED ONE YEAR WARRANTY**

**Limited Warranty:** Vioguard warrants the Vioguard Defender will be free from faulty workmanship or defective materials and conform to Vioguard’s applicable specifications or data sheets provided with the product for a period of one year from the date of purchase.

**Note:** Disinfection lamps used in the Vioguard Defender are excluded from warranty due to their variable life expectancy.

**Exclusions:** The limited warranty is given only to the original purchaser of the Vioguard Defender and may not be transferred.
The warranty does not cover any cosmetic defects, problems or malfunctions not caused by the manufacturer. This includes issues stemming from power surge, misuse (including outdoor use), abuse, negligence, accidents, wear and tear, mishandling, misapplication, unreasonable intrusion or exposure to liquids, shipping or transit, improper or faulty installation, operation in a manner contrary to documentation provided to you with the Vioguard Defender, operation on incorrect power supplies, third-party products, modification, alteration, improper servicing or tampering. The warranty does not cover wear from the use of disinfection lamps in the Vioguard Defender. In addition, the limited warranty will not apply for any Vioguard Defender: that is opened, disassembled, maintained (other than routine maintenance done by or in behalf of the user as described in this manual) or modified by anyone other than Vioguard or any Vioguard-authorized third-party without Vioguard’s prior written approval; or whose serial number is defaced, altered or removed.

NO OTHER WARRANTIES

The above warranty is exclusive and in lieu of all other representations or warranties, whether written or oral, express, implied or statutory, except where such limitation of warranties is prohibited by law and can be amended only by written instrument signed by an officer of Vioguard. Except where such limitation of warranties is prohibited by law, Vioguard disclaims all other warranties to the maximum extent permitted by warranty information-applicable law, including, but not limited to, any implied representations or warranties of merchantability or fitness for a particular purpose, title or non-infringement, quiet enjoyment, and any other representation or warranty obligation on the part of Vioguard. Any implied warranties that cannot be disclaimed by law, shall only be in effect for a period of three months from the date and time of purchase. The above warranty gives you specific legal rights and you may have other rights which vary by jurisdiction. Some jurisdictions do not allow waiver of implied warranties, so the above limitation may not apply to you. Where any term of this Limited Warranty is prohibited by such laws, it shall be null and void, but the remainder of the Limited Warranty shall remain in full-force and effect.

WARRANTY SERVICE

If the Vioguard Defender you purchased fails to perform as warranted and you notify Vioguard of the failure within the applicable warranty period and otherwise comply with all of the requirements below (“How to Obtain Warranty Service”), Vioguard or its authorized reseller will replace or repair the product(s) or,
if the product(s) cannot be repaired or replaced, Vioguard will refund the price paid for the defective product. Such repairs or replacement will be made at no charge to you for parts or labor, provided that you shall be responsible for any transportation cost. If Vioguard elects to repair or replace such products, Vioguard shall have a reasonable time to make such repair or replacement.

**Note:** Repairs have a 90-day warranty. If the Vioguard Defender sent in is still under its original warranty, the new warranty is 90 days or to the end of the original one-year warranty, whichever is longer.

**HOW TO OBTAIN WARRANTY SERVICE**

To obtain Warranty Service, you must do the following:
1. Promptly notify Vioguard (1-866-910-0471 or info@vioguard.com) upon discovery of the product(s)’ failure to perform as warranted, with a detailed explanation of the problem and proof of the date and time of purchase.
2. Receive a Return Material Authorization (“RMA”) number from Vioguard.
3. Notify Vioguard of the intended shipment date to allow Vioguard to arrange for shipment should Vioguard so desire.
4. Return the product(s) to Vioguard with the RMA number as directed by Vioguard.

**CHANGES TO WARRANTY SERVICE**

Warranty service conditions are subject to change. For the latest warranty service terms and conditions see: vioguard.com/warranties.

**LIMITATIONS ON WARRANTY SERVICE**

Vioguard will not provide warranty service if Vioguard’s examination of the returned product discloses that problems with the product do not exist or were caused by accident, misuse, abuse, mishandling, neglect, alteration, negligence, unauthorized repair or alteration by anyone other than Vioguard. Specifically, and without limiting the preceding, warranty service will not be provided and the limited warranty shall be void if anyone other than Vioguard replace (or attempt to replace) the disinfection lamps or use the Vioguard Defender with any lamps other than those specified by Vioguard. If warranty service is declined for any of the above, Vioguard will return the product to you at your expense. Any replacement or repair shall fulfill all of Vioguard’s responsibility to you under any legal theory, including, but not limited to, contract, tort, indemnity, statutory provision or otherwise.
LIMITATION OF REMEDIES

Except where prohibited by law, liability of Vioguard for an alleged defective product shall be limited to the replacement of the product or a refund of the purchase price, at Vioguard’s sole option. The foregoing constitutes buyer’s sole and exclusive remedy, in lieu of all other remedies, for Vioguard furnishing defective or nonconforming products, materials, parts or service.

LIMITATION OF LIABILITY

Except where prohibited by law, Vioguard’s total liability to the buyer or any other third-party for all types of losses or damage, whether on account of negligence, strict liability in tort, breach of contract, breach of warranty or otherwise, at law or in equity, shall in no event exceed the total contract price for any product with respect to which losses or damage occurred and shall not exceed the price you paid for the Vioguard Defender. No consequential damages except where prohibited by law, in no event, including late delivery or failure to deliver, shall Vioguard be liable to anyone for special, collateral, indirect, exemplary, incidental, consequential or punitive damages arising from any breach of any of the provisions of this agreement, including without limitation, provisions regarding warranties, guarantees, indemnities and patent infringement (such excluded damages to include but not be limited to, costs of removal and reinstallation of products or items, loss of goodwill, loss of revenue, loss of actual or anticipated profits, loss of use, loss or corruption of data or loss of privacy, any inability to use all or part of the Vioguard Defender, personal injury or any failure to meet any duty (including any duty of reasonable care or of workmanlike effort) or any claim under contract (including any claim for fundamental breach and for any rights conferred by any sale of goods act). These limitations and exclusions shall apply notwithstanding any failure of any essential purpose of any limited remedy and shall apply even if Vioguard or any supplier or agent has been advised of the possibility of such losses or damages or in the event of fault, tort (including negligence), strict or product liability, misrepresentation or other reason. This clause will survive the termination of this contract by the provisions contained therein or through the operation of law. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.
MOUNTING COMPATIBILITY

The Vioguard Defender is compatible with a variety of mounts including Workstations on Wheels (WOWs), wall mounts and under desk brackets.

Contact Us for more detailed information about mounts.